

Report on social vulnerability indicators

Analytical framework and methodological considerations

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Executive summary

This report was written for the RE-InVEST project – *Rebuilding an Inclusive, Value-Based Europe of Solidarity and Trust through Social Investments* – part of a European H2020 project designed to evaluate the European Commission’s 2013 social investment strategy and offer new insights to inform public policymaking in response to the social damage done by the crisis.

The RE-InVEST project started its work by assessing the social damage caused by the crisis in the project’s 13 European partner countries and regions through the lens of human rights and capabilities. All the country analyses were conducted locally by 19 European institutional partners from civil society (NGOs, trade unions, etc.) and a range of academic and research institutions. They focused in particular on clearly identifying the vulnerable groups hardest hit by the crisis.

This report presents information on the indicators that can be used to observe, assess and monitor people’s levels of vulnerability, especially the categories that have borne the brunt of the social damage caused by the 2008 financial crisis and the following decade’s austerity policies. The crisis started in the United States in 2007-2008, triggered by households and financial institutions in debt overload (housing and oil prices). It spread to Europe through the banking sector a few weeks later, forcing national governments to intervene directly and add to their own debt. Austerity policies were subsequently put in place to reduce this public debt, with budget cuts made in public spending. The harsh socio-economic impacts of these measures and corresponding rise in unemployment in the manufacturing sector hit people hard. Standards of living plummeted in the face of rising unemployment and the need to find new work, for employment is a cornerstone of self-respect and social recognition. The loss of that recognition increases people’s sense of vulnerability (Nicaise, 2017b).

A specialised methodology was developed to address this issue taking a bottom-up approach. Called PAHRCA, the methodology combines the principles of Participatory Action-research (PA) with Human Rights (HR) and the Capability Approach (CA). This qualitative, participatory research did not set out to generate statistically representative results, but rather to give vulnerable people a direct voice in order to deepen our understanding of the economic, social, cultural and political impacts of the crisis on their lives. Focus groups and biographies were then put together to identify how the crisis has marked individual life courses and the alternative choices people had to make to be able to cope with the current situation and get over the effects of the crisis.

The crisis actually hit each country differently, some sooner and harder than others. Countries with social protection networks appeared to be hit later and not so hard. Yet these same countries also struggled the most to recover from the crisis in the face of the austerity measures imposed by the European Union (see Lehwess-Litzmann, 2017).

This setting raises the following key questions. How can people’s level of vulnerability be assessed? What are the best indicators to identify the population categories most vulnerable to the current crisis and its damage? Could relevant policies and suitable public action make these people more resilient ?

As advised by the European Commission, and in keeping with the founding principle of subsidiarity, three levels of analysis call for consideration when seeking to identify relevant indicators: i) the EU-wide macro-level, ii) the partner country national and regional level, and iii) the micro-local household and individual level. This implies first cross-checking indicators from existing data sources – such as secondary data from Eurostat and national statistical institutes and existing censuses and household surveys – with the focus groups’ participatory research. Second, it entails referring to quality benchmark criteria such as the SMART label (Specific, Measurable, Achievable, Relevant and Time-bound) and SPICED (Subjective, Participatory, Interpreted, Communicable, Empowering and Disaggregated) in order to set appropriate thresholds to establish indicator relevance.

This report focuses on social vulnerability and how to assess it using suitable indicators. Chapter 1 opens with a brief presentation of the theoretical framework based on a combination of the Human Rights framework and the Capability Approach. The Human Rights framework identifies all the basic needs that should be guaranteed, and the Capability Approach ensures that people can effectively satisfy their needs or at least have the freedom to do so. Chapter 2 then uses a “top-down” process to present the key indicators chosen by the European Commission, starting with the seminal Laeken indicators and extending them to the measurement of vulnerability. Chapter 3 discusses the “bottom-up approach” promoted by the RE-InVEST project’s operational PAHRCA methodology (*Participatory Action, Human Rights and Capability Approach*). Sets of specialised indicators then track the impact the crisis has had on people’s different vulnerability dimensions.

Lastly, the top-down and bottom-up approaches are combined to capture the micro-macro subsidiarity linkages and select a set of priority indicators for presentation in a Social Vulnerability Monitoring Board to be regularly updated to monitor people’s levels of vulnerability and social protection.

Preface

A globalising world increasingly marked by environmental, economic and social uncertainty raises a question about the vulnerability of territories and populations, and the individuals and social groups within them. What is vulnerability and how can its different forms and expressions be identified to determine its magnitude and trends? Such is the purpose of this report, which recommends putting in place specific indicators at both the micro social and economic levels of agents and the macro social and economic levels of territories and institutions. A focus on vulnerability, and the measurement and monitoring of this vulnerability, particularly its social dimension, hence becomes a necessity.

To this end, a historical review of the definition and creation of existing officially recognised indicators is accompanied by methodological thinking and then proposals of suitable statistical instruments to be able to answer the more general questions as to “the vulnerability of who?” and “the vulnerability of what?” The answer to the “vulnerability of who?” can be found by identifying the actors, agents and territories confronted with these situations of vulnerability. The answer to the “vulnerability of what?” is found by accurately pinpointing the different forms of vulnerability, the areas directly concerned and the drivers of these situations.

The pioneering Laeken indicators were originally developed in the early 2000s on the basis of the idea of being “at risk of poverty”. This already raised the question of vulnerability. Since then, the range of available indicators has burgeoned, produced by an array of institutional and statistical sources, to meet the many priorities concerning certain areas of intervention.

Building on this momentum, the RE-InVEST project decided to adopt a participatory approach as the best way to find out what people in situations of vulnerability feel in order to better inform public policies whose measures are designed to improve their situation. This approach is called PAHRCA (*Participatory Action, Human Rights and Capability Approach*) and it relies on trust between actors. PAHRCA has proved extremely informative. Based on multiple mixed investigative techniques (qualitative interviews, life stories, survey and census data, etc.), it has generated a list of targeted indicators presented in scoreboard form, using appropriate investigative and monitoring methods (surveys, interviews, observatories, etc.).

We are extremely grateful in this to all our colleagues, researchers and participants in the different national and regional focus groups for identifying the priority areas addressed during the interviews, and thereby evaluating the level of household vulnerability and recovery (or resilience) capabilities at local level. This laid the groundwork for thinking on the characteristics of vulnerability, the relevance of the indicators currently used, and their interactions.

However, it has to be said that this analysis has grown much more complex in recent years due to the plethora of indicators that have become available to evaluate vulnerability. These indicators cover both micro and macro levels, objective and subjective aspects, and actors at different decision-making levels in different areas of analysis. This indicators deemed relevant will need to be regularly updated if they are to properly monitor the different forms and levels of vulnerability in a given context.

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Introduction

Global environmental and economic changes and their related social risks have triggered a dramatic rise in uncertainty in the world. The reasons for this are many: they are ecological (climate change with more extreme weather) and technological (with the digital revolution and more automation to come), but they are also economic (neoliberal supply policies bringing fierce competition and a lack of solidarity), financial (globalisation of trade and banking deregulation), and social (growing inequalities, poverty traps and risk of exclusion).

The effect of this convergence of events, with some of their impacts felt only in the long term (communications revolution, climate change, etc.), while others are shorter term (increasing job, income and housing insecurity, political and social instability, natural disasters, etc.), has been to raise the populations' level of vulnerability. It has created situations of insecurity that raise the risk of poverty traps. The growth, or resumption, of these situations of insecurity has driven the emergence of a “precariat”, a kind of new social class of all those who feel stuck in their situation, a situation that could ultimately become explosive (Standing, 2011) as seen from the Five Star Movement in Italy and the “Gilets Jaunes” in France. The situation therefore needs to be tackled as a matter of priority, by seeking ways to reduce this vulnerability.

The effects of the 2008 global financial crisis and the priority placed on macroeconomic stabilisation policies have effectively overshadowed the agreed ten-year objective to reduce poverty in Europe by 20 million individuals. Instead, unemployment and poverty have reached new record levels, accompanied by a sense of vulnerability in the face of growing inequalities and social exclusion. A divide prevails between the rising numbers of millionaires and the starving children found in certain districts. Other alarming symptoms are appearing such as soaring homelessness and youth unemployment and emigration in search of jobs (Nicaise & Schepers, 2013). A gulf is growing, in terms of economic, social, cultural and political impacts, between those who are protected by the institutions and those who remain vulnerable or in increasingly insecure situations.

In response to this situation, the European Commission launched a major undertaking in 2013, the Social Investment Package (SIP), to rebalance the effects of economic and social progress. The first stage of this initiative assessed the situation with a diagnosis of the social damage caused by the crisis. The RE-InVEST project's purpose is to take this work forward. Its working assumption is that such an integrated diagnosis can build on the idea of the widespread erosion of fundamental human rights, social disinvestment in people's actual or potential abilities, reduced collective capabilities and agency, and overall loss of trust.

This means that all experiences of insecurity, poverty, downward social mobility and, more generally, social degradation, can be reanalysed from the angle of human rights and capabilities. Human rights, and basic economic, social and cultural rights in particular, can be seen as the cornerstone of European values and therefore an essential part of our European heritage (Hart, 2010). The fragmentation and weakening of public services and civil society organisations, unions and other associative structures undermines solidarity and constrains the capability-building role of collective action. In this context, the RE-InVEST project set out to give vulnerable persons a voice by opting for a participatory research approach, whereby researchers

and participants jointly analysed the impact of the crisis on capabilities and human rights in a number of countries.

However, measuring the impact of the crisis on different population categories calls for appropriate indicators, especially as regards vulnerability. These indicators must be able to answer key questions about the dimensions and levels of vulnerability, identification of vulnerable people and their characteristics, their capacity for collective action to overcome insecure situations, etc. The purpose of this report is to identify a set of key indicators that can be regularly monitored at the macro and micro levels using appropriate survey instruments.

The report is therefore structured as follows. Chapter 1 discusses the concept of social vulnerability. It briefly presents the theoretical background based on a combination of Human Rights and the Capability Approach, hence relating to sustainable human development. It examines the linkages between vulnerability, poverty and exclusion, and between inequality and vulnerability. These interactions help understand the causes of vulnerability and identify the information required to set up and monitor vulnerability indicators.

Chapter 2 looks into the institutional history of the social indicators in use in the European Union. It takes a top-down approach to summarise the key macro indicators selected by the European Commission, starting with the original set of Laeken indicators and extending them to the measurement of vulnerability in its different dimensions. This calls for a review of the institutional set of EU initiatives (e.g. the European Semester, the European Pillar of Social Rights and the European Social Observatory) and the sets of priority indicators that they collect for their focus objectives. It also entails a review of the methodologies used by the different investigative instruments (statistical surveys, observatories, focus groups, etc.) and their associated analytical processes (typologies to identify vulnerable groups, definition of indicators, modelling, etc.). The entire indicator selection process is validated by recognised quality criteria such as the SMART and SPICED indicators.

Chapter 3 takes the bottom-up approach developed by the RE-InVEST project based on its PAHRCA (*Participatory Action, Human Rights and Capability Approach*) methodology. A range of specific indicators is defined to address the impact of the crisis on people's vulnerability. Their definition is based on focus groups bringing the micro dimension of vulnerability to the table by giving the people themselves a voice to express their priority needs. Five priority areas are therefore chosen to evaluate the impact of the crisis on peoples' vulnerability.

The conclusion points up the complementarity of the top-down and bottom-up approaches, and the need for them to be closely articulated to monitor the micro-macro linkages in compliance with the principle of subsidiarity. The outcome is a set of relevant, priority indicators suitable for the regular monitoring of levels of vulnerability and social protection. This paves the way for the development of a "Social Vulnerability Monitoring Board" to present indicator trends.

1. The social vulnerability issue

This first chapter addresses the issue of social vulnerability. What exactly is social vulnerability? It is where certain categories of people are at risk of falling from a well-perceived state of well-being to a lower state of well-being. Such a loss of well-being might apply, for example, to categories of the working poor, unemployed, lone-parent families, homeless, migrants, people with disabilities, ex-prisoners, residents of certain areas, and so on. It is expressed in two forms: “actual”, objectively measurable vulnerability and more subjective, qualitatively perceived vulnerability. Both forms feed into thinking on adaptive strategies to offset the situation with specific vulnerability reduction policies (Garrau, 2018).

Any situation of vulnerability effectively makes the individual more fragile, to the extent that any new random shock is likely trigger a break due to the additional negative impacts it brings. Such is the case, for example, when individuals fall into a poverty trap following job loss and, hard put to find another job, lose their home and have to consider migration. Other cases can arise of difficulties accessing social services due to a lack of information, a family bereavement, a natural disaster, etc. Although individuals in a situation of vulnerability have the option to try to adjust to recover and move on, ways need to be found for those in a more severe position of fragility to overcome the shock. This requires resilience processes to be put in place to drive qualitative recovery (Dubois & Ouattara, 2014), but also the establishment of institutional social protection mechanisms.

In Europe, despite its ranking as the world’s number two economy with a number of very high-income countries (particularly in Western Europe), a not-inconsiderable percentage of people still live below their countries’ national poverty lines. The situation is such that Eurostat reported that 16.9% of the EU population was at risk of monetary poverty in 2017. So the reduction of poverty, and inequalities, remains an issue that needs to be solved. Although the majority have managed to break out of poverty in recent centuries, most still dread an adverse event that could cause a loss of well-being, if not, by means of downward social mobility mechanisms, plunge them into new poverty traps or even exclusion. Such was the case in 2008 and the years that followed the latest major global economic crisis. The national austerity policies widely introduced in response to the crisis cut public spending and raised taxes and social security contributions, sending unemployment rates soaring to 26.1% in Spain and 27.5% in Greece in 2013 (Eurostat figures).

At the same time, a certain number of events brought further uncertainty, such as the string of destabilising terrorist attacks, the migrant crisis triggered by geopolitical instability in the Middle East, the rise of populism in a number of countries, Brexit, and the insidious effects of climate change. These factors have combined to heighten the sense of vulnerability. Fear, if not distrust, is consequently particularly widespread among the disadvantaged.

1.1 Why address the issue of social vulnerability?

These patterns call for consideration of the issue of vulnerability and the associated issue of social protection as new priorities to be added to the more usual priorities of reducing poverty and social exclusion. This

could find expression in the implementation of specific social policies designed to build people's capabilities and thereby reduce their vulnerability and enable them to avert or overcome consequent breaks. Hence vulnerability is also closely related to the question of resilience, which expresses the capacity to recover from a shock and includes the agency process put to use to overcome the repercussions of the shock.

Social vulnerability has therefore become an important issue in Europe, as shown by the European Commission's 2013 launch of the Social Investment Package (SIP). The SIP contains proposals for priority investment in the social sectors using Member States' public expenditure to curb the increase in inequalities and hence create the conditions for a more inclusive Europe. The European RE-InVEST project is directly associated with the implementation of the SIP. The project works with researchers, NGOs and different vulnerable groups of people, assigning the latter a leading role in the scientific analysis of the causes of vulnerability and the solutions that need to be found.

The choice of vulnerability as the focus for analysis is recommended by one of the first RE-InVEST project documents, which presents in brief the impact of the financial, fiscal and economic crisis on different population groups seen as among the most vulnerable in Europe (Nicaise, 2017a). This document, based on national reports from the 13 European countries and regions taking part in the project, condemns the rise in inequalities and the lack of solidarity that preceded and exacerbated the economic crisis. Hence, as the author puts it, the obligation for European governments to make priority investments in social cohesion by improving public services, guaranteeing access to fundamental rights and doing more to promote social dialogue with civil society organisations.

In the second half of 2016, Europe started to show signs of slow economic recovery, which *Benchmarking Working Europe* (2017) reported in the form of positive signals such as slight GDP growth and a downturn in unemployment rates, government deficits and public debt in the euro area. By early 2018, the euro area was moreover posting a record level of optimism in the business climate and consumer morale, associated with an upturn in consumption. Nevertheless, income and asset inequalities have steadily grown, as plainly shown by the recent *World Inequality Report 2018* (Alvaredo, Chancel, Piketty, Saez & Zucman, 2018). It is the first report to clearly stipulate that although income and asset inequalities increased, at different rates, virtually everywhere in the world from the neoliberal watershed of the 1980s to 2016, it is nonetheless in Europe¹ that the growth rate in inequalities has been the lowest (and the highest in the Middle East). For example, the richest 10% accounted for 37% of national income in Europe in 2016 as opposed to 32% in 1980. The 50% at the bottom of the distribution received just 22% of national income in Western Europe in 2016. Worldwide, from 1980 to 2016, the 1% at the top of the distribution captured twice as much global growth as the bottom 50%. Along the same lines, in early 2019, the NGO Oxfam found from data published by *Forbes* magazine and the Crédit Suisse Bank that the 26 richest billionaires held as much money as the 3.8 billion poorest people on the planet (i.e. half of humanity).

The *World Inequality Report 2018* adds that inequalities will continue to rise if current global trends hold. Yet global inequality could be reduced slightly if all the world's countries were to take the same moderate growth path in income inequalities that the EU posted from 1980 to 2016, as the share of income of the poorest half of the world's population would increase from 2017 to 2050. It therefore recommends investments in education, healthcare and environmental protection in order to restore equality of opportunity and thereby prevent further increases in inequalities. This comes down to the priority to invest in the social sectors to combat inequalities, which would moreover help alleviate the sense of social vulnerability felt so sorely by the disadvantaged.

¹ Russia, Ukraine and Belarus are not taken into account.

1.1.1 Definition of social vulnerability

The theme of people's economic vulnerability first emerged in development studies in the early 2000s and was taken up by poverty analyses (Bidou & Droy, 2012). Vulnerability expresses a state whereby a particular agent (person, household, social group, institution, geographic area, etc.) is hit and impacted by a random event that, in the form of a disruptive shock, causes functional breaks and loss of potential. This assumes that the agent presents a certain ex-ante internal fragility, which only reveals itself when the shock and consequent break occur. In economic terms, it is referred to as the probability of a loss of well-being (social stake) following the materialisation of a particular risk that, in the form of a more or less intense shock, causes this loss of well-being (Dubois & Rousseau, 2008).

This ex-ante risk of a negative shock can take the form of a range of random events: economic (loss of income, redundancy and inflation), environmental (earthquakes, floods and storms), social (civil war, riots and social upheaval), political (coups d'état and revolutions), cultural (waves of immigration and Islamist terrorism), and personal (illness, divorce and family bereavement). The plausibility of these risks, of more or less high frequency and more or less strong intensity, create situations of uncertainty, objective and perceived, for those at risk. Without any personal insurance against the risk, without family assistance or a social network, and without a system of social protection, the actual occurrence of such risks results in loss of well-being, if not poverty traps and social exclusion. This makes for a long and complicated return to a new, stabilised situation following a resilience process.

The state of having a weak structure of abilities, what Ricoeur (2005) calls "power to do" and "power to be", in the face of the array of plausible risks consequently sustains a strong sense of vulnerability. This feeling of vulnerability in the face of risk can be passed on, in the same way as poverty, from parents to children down through the generations, especially if there is no preventive public policy for the disadvantaged, since rising inequalities weaken people and make them feel more vulnerable in society. This has the effect of fuelling feelings of injustice, bitterness and revolt. In the face of this situation, any provision of resources and potentialities aims to reduce the sense of vulnerability where the effective capabilities of those likely to convert these resources into adequate functionings are developed (Dubois, 2009). Nevertheless, an adverse event can, via an unpredictable shock, cause the standard of living to deteriorate from middle to lower class, and ultimately poor, and create an impression of social slide. A way is therefore needed to assess the extent of individuals' vulnerability and their possibilities for adjustment, if not resilience, to adverse events in life. This ties in with the question of the resilience capacities of the agents concerned.

Moving on from "vulnerability" in its most general sense, a definition is now needed as to what is meant by associating it with the adjective "social". This use of the word "social" can cause confusion in everyday language if a clear distinction is not made between the two adjectives "social" and "societal". The adjective "social" refers to the sectoral components of well-being (health, nutrition, education, employment, housing, etc.), alluding to the social sectors for which inadequate access and deprivation raise issues of poverty, inequalities, unemployment and exclusion. The term "societal" concerns the internal quality of society, as measured by its level of social cohesion. It is based on the extent of personal networks and the intensity of social interactions between the different actors of the society (Ballet, Dubois & Mahieu, 2011).

In this context, the cross-disciplinary concept of "social vulnerability" proves more focused and precise than the concept of vulnerability alone, because it refers to all the forms of vulnerability relating to a given individual or group of individuals. Social vulnerability can therefore be categorised as an issue applicable to all social categories. As such, in the current European context, it requires a cross-cutting analysis: as a multidimensional and as a multi-social group phenomenon. On the one side, it is exacerbated by accelerating

capitalist globalisation, and on the other, by individualisation of consumerist behaviour in a fiercely competitive world. Certain social categories can hence suddenly find themselves without any guarantee of resources or protection. What is needed to manage this socially growing vulnerability and attenuate the sense of it is work on three fronts to strengthen people's resilience, build bastions of protection, and ensure the quality of institutions. Yet all this calls for a more systematic conceptualisation of the raft of possible actions and measurement of the actual level of vulnerability across social groups to inform the implications for public policy (Naudé, Santos-Paulino & McGillivray, 2009).

1.1.2 Link with the universal human rights approach

A situation of social vulnerability implies constrained choices for the people concerned, because their lack of means makes it hard for them to exercise their rights. In this regard, a link can be made between the notion of social vulnerability and human rights.

Human rights relates to a list of rights of entitlement that are universally recognised for certain population categories, since they are understood to meet needs deemed essential for life. This universal recognition guarantees that the relevant populations' needs are met by appropriate policy measures, reducing their vulnerability to those needs accordingly and contributing to their protection. This concerns ways of being, the ideas in which we believe, goods and services, aspirations and so on, to which entitlement should be universal and inalienable.

Generations of rights have been established in turn to form a large body of entitlements: civil and political rights, social and economic rights, specific rights, etc. National governments, institutions, citizens and citizens' groups are bound to respect them and have them respected. These basic rights are defined by official documents and provide a framework for public intervention.

For example, 70 years ago, the Universal Declaration of Human Rights (UDHR) was adopted in Paris by the United Nations General Assembly, with 58 Member States at the time, and was signed on 10 December 1948. It contains 30 articles listing those human rights and fundamental freedoms. Its first article is the most well-known: "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood." Even though the UDHR is merely a declaration and has no legal force, it is translated into over 500 languages, making it the most translated document in the world. Its list of entitlements provides everyone with the means to be treated with dignity and respect. These rights are generally taken up, on a legal basis, in international and regional treaties and in national legislation. As local needs arise, other more specific rights can be added to the most fundamental rights, generally civil and political, if not socio-economic, to better protect certain categories of persons considered among the most vulnerable. Such is already the case for women, children, people with disabilities, lone-parent families, asylum seekers and other minorities.

In general, the more governments do to guarantee and enforce individual human rights, the greater the well-being and capabilities of the people and social groups. This in turn facilitates access to the resources and the promotion of the capabilities needed for self-actualisation and fulfilment in life. This places us at the opposite end of the scale to authoritarian states, which use fear and repression to suppress any aspirations to empowerment and initiative with such measures as restrictions on freedom of opinion and expression, dysfunctional justice systems, and discrimination against and persecution of minorities. It is this relationship between the, more theoretical, framework of human rights and the empirical observation of capabilities that forms the basis for the PAHRCA approach (*Participatory Action, Human Rights and Capability Approach*) developed by the RE-InVEST project and used as a reference in this report on social vulnerability indicators.

The approach is detailed by Hearne and Murphy (2019) and referred to in the brief analysing the impact of the 2008 crisis on vulnerable populations (Nicaise, 2017a).

In 2012, to help governments assess their progress with respect for fundamental human rights, the United Nations (2012) published a guide proposing a series of both objective (fact-based) and subjective (based on judgements and feelings) quantitative indicators (equivalent to statistics) and qualitative indicators (articulated as a narrative or in a “categorical” form). Also presented are structural indicators (including state-ratified international human rights treaties), process indicators (such as the proportion of public spending allocated to education), and outcome indicators (such as the literacy rate).

Fasel (2018), Adviser on Human Rights Measurement to the Office of the High Commissioner for Human Rights, feels that, to date, we still do not have a universal composite indicator capable of evaluating the level of compliance with human rights for all countries, despite a number of attempts to produce one. The diversity and complexity of the different countries’ specific rights certainly makes it no mean task to capture what a satisfactory situation might be for all countries concerned. For example, a situation may be found to be acceptable at the overall economic level while including population categories where certain human rights are not respected.

1.1.3 Reference to Amartya Sen’s capability approach

So human rights are not always properly enforced in a given country, even though official texts guarantee their respect and recognition. Hence the need to compare the available rights of entitlement with what people are effectively capable of achieving and, more precisely, what they have the power to achieve.

The “capability” approach was put forward by Professor Amartya Sen at a conference entitled *Inequality of What?*, as part of the Cambridge Tanner Lectures in 1979. On the basis of his work for the FAO on the relationship between poverty and famine, and then on women’s associations’ activities and achievements, he proposed for the sake of social justice to address the issue of inequalities by referring, not to people’s utilities (or levels of satisfaction), incomes and resources, but rather to their capabilities to do and be. A person’s capability is the result of the transformation of the resources and potentialities that person has into effective and potential abilities to do and be. An “effective ability” is found in “functionings” in terms of the person’s quality of life and behaviour. It can be observed and measured by indicators. A “potential ability” (also termed “freedoms” to do and be) is a function of the opportunities and choice alternatives a person has.

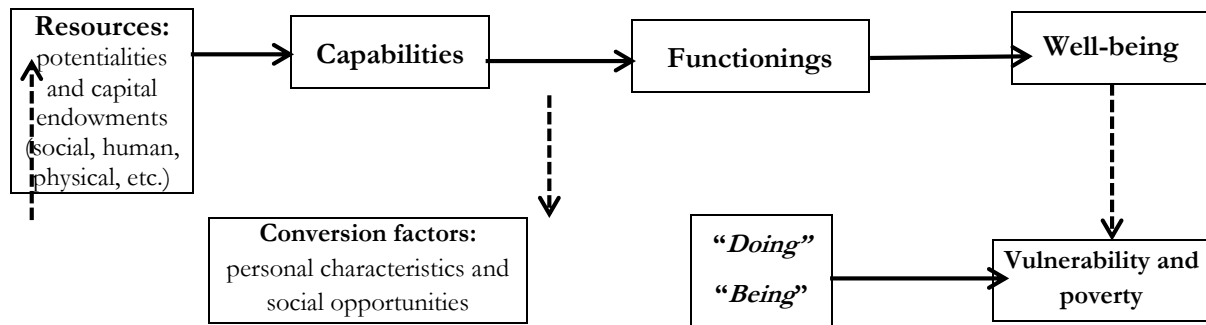
So capabilities are the result of the transformation of a person’s resources and potentialities (social and cultural capital endowments) based on their personal characteristics and social opportunities: age, aptitude, income, available goods and services, level of education, quality of social environment, etc. These conversion factors² enable these two types of resources to be transformed into “doings” and “beings”, producing achieved functionings that express what the person can actually do (feed oneself, house oneself, care for oneself, etc.) and that contribute to that person’s well-being. By combining the different functionings, the person becomes capable of achieving individual or collective actions, attaining certain states to which the person aspires, and becoming what the person wants to be (Rajaona Daka & Dubois, 2008). Therefore, it could be said that capability covers a combination of effective and potential abilities. Although effective

² Conversion factors differ from one person to the next, as a variable ability to convert a given resource into equivalent achievements (Bonvin & Farvaque, 2008).

ability observed through functionings is easily measurable by household surveys, potential ability is much less easily measurable as it expresses what the person could accomplish if the opportunities were there.

All the capability approach's analytical elements are presented in **Figure 1** below.

Figure 1: Sen's analytical equation of capabilities



Sources: Rousseau (2003), Robeyns (2005), Bonvin & Farvaque (2008).

Sen (1999) states that, to lead a fulfilling life, any person will use the different resources to which s/he can gain access to convert them into freedoms of choice of different alternatives. Yet the poor and the most vulnerable have difficulties accessing resources and often have no battery of alternative choices. The link can be made here with poverty by considering that any lack of capability corresponds to a situation of extreme poverty (Sen, 1999). This reduces the possibilities for well-being when it depends on a person's ability to do and be (i.e. functionings and their effective achievement), and on that person's ability to freely choose from among different combinations of functionings. Yet poor people's sets of capabilities are often highly concentrated on a small number of abilities, which limits their substitution possibilities (Dubois, Huyghebaert & Brouillet, 2010). This is why public policies have a duty to extend people's capabilities (Bonvin & Farvaque, 2008) and reinforce them (in reference to the notion of "empowerment"). So human development, on the basis of A. Sen's work, therefore aims to promote people's capabilities.

In the tradition of Sen, Martha Nussbaum (2008) identifies a set of ten "central human capabilities"³ to be promoted to lead a free life in dignity. This list could be likened to the list of human rights, with the addition of the idea that a threshold exists for each of the chosen capabilities, a sort of social minimum, below which people do not have access to truly human functioning. She argues that greater sums should be spent for the poor and vulnerable, women, children, persons with disabilities, etc., by developing targeted programmes to improve their capabilities.

The link with vulnerability, while remaining within the framework of the capability approach, was formally introduced in Cambridge in 2001 (Rousseau, 2003; Dubois & Rousseau, 2008). Vulnerability fits in here as a lack of protection and a deficit of capabilities, which can be combated by reinforcing capabilities ex ante or taking public action ex post. In this context, the link can be made between vulnerability and poverty by considering it as a lack of capabilities that diminishes the possibility to act to protect one's well-being. In this case, any lack of capability can be analysed as a situation of extreme poverty (Sen, 1999).

³ Life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment.

The notion of agency, as the actor's power to do or capacity, supplements the capability approach by placing the emphasis more on doing (Crocker, 2008). This brings into the equation cases where the action considered is not solely personal, but collective, and therefore targets other objectives than purely personal interest. Agency can therefore be related to a development ethic that is based on other philosophical foundations than utilitarianism. We could, for example, cite the case of the ethics of responsibility, in reference to philosophers Kant (role of intention and duty) and Ricoeur (2005, phenomenology of the responsible person), which plays an important role in the development of the social and solidarity economy.

1.2. How does this tie in with sustainable development?

We have seen in the previous paragraphs how social vulnerability, by its very definition, can relate to the combination of human rights and capabilities. The question is now to see how it ties in with the sustainable development paradigm and, more precisely, the socially sustainable development paradigm, which serves as a benchmark for social and societal policymaking.

The notion of sustainable development emerged gradually through the 1960s to the 1980s. It is officially defined by the Brundtland Report (entitled *Our Common Future*, 1987) as being, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” With the concept of sustainable development, the Brundtland Report takes up the work of the Meadows Report commissioned by the Club of Rome in 1970 and entitled *The Limits to Growth* (1972), the first major report to state the environmental dangers associated with economic and demographic growth. The Stockholm Conference, the first major international conference on the environment (adopting 26 principles and a vast action plan to combat pollution), was held that same year in 1972. It was during this conference that the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) were created.

In 1992, the Rio Conference (or Earth Summit) attended by 179 countries really put the sustainable development concept on the map and adopted a number of official documents (including the Rio Declaration on Environment and Development, Agenda 21 and the United Nations Framework Convention on Climate Change, which appended the Kyoto Protocol on limiting the developed countries' greenhouse gas emissions in 1997). Ten years later, the Johannesburg Summit (2002) set out to galvanise the states to renew their political commitment to sustainable development (as noted in Rio) and achieve a more stable partnership between the countries of the North and the South. Last in line came Rio+20 in 2012, whose main achievement, in addition to the adoption of the final document *The Future We Want*, was to launch the process that led to the 2015 establishment of the Sustainable Development Goals (SDGs) as successors to the Millennium Development Goals (MDGs).

1.2.1 Toward socially sustainable development

Since 1992, sustainable development has been defined as the outcome of the interconnection of three interdependent dimensions: economic, environmental and social. In the context of the *Social Investment Package*, a RE-InVEST project focus, the question is to find how to adequately invest in vulnerable persons to increase their security from inherent risks and broaden their set of capabilities so that they can build the mechanisms they need to break out of the poverty situations, both chronic and transient, that have been exacerbated by the 2008 financial, banking and economic crisis.

This makes the social dimension particularly important, at both individual and social group level, since the concern is to study people's social vulnerability, assess the different social and economic impacts of the systemic crisis and the recovery policies, and improve their standards of living with adequate social investments.

The social dimension of sustainable development, formerly marginalised and underestimated academically and operationally in public policy actions (Ballet, Dubois & Mahieu, 2011), has gradually gained traction driven by quality multidimensional analyses and consideration of social interactions at different reference levels. The notion of socially sustainable development was hence conceptualised by Ballet, Dubois and Mahieu in their books (2004, 2005), which focus on the social dimension of development without sidestepping the other two dimensions. It could be defined as, "development that guarantees present and future generations improved capacities for well-being (social, economic and environmental) for all by means of the pursuit of equity in the intra-generational distribution of these capacities and in their intergenerational transmission." This definition therefore places the emphasis on the improvement and equitable transfer of people's "abilities to do and be" (Sen, 1985), in addition to which the authors recommend that development strategies (i.e. public policies) preventively assess their social impacts (in terms of extreme poverty, social exclusion and social conflicts) which, if poorly developed ex ante, risk affecting people's capabilities and hence increasing their social vulnerability. Socially sustainable development conceptualised in this way results from the combination of two concerns: that of sustainable development with equitable transfers from one generation to the next, and that of reducing poverty and exclusion by improving people's sets of capabilities (Dubois, 2009). These two concerns can be found, intersecting and mutually reinforcing, in the MDG (2000-2015) and SDG (2015-2030) context.

1.2.2 Measuring human development: from MDGs to SDGs

The structural adjustment programmes that the World Bank and the IMF imposed on the Southern countries in the 1980s and 1990s, based essentially on neoliberal reforms (market deregulation, fiscal discipline, privatisation of public enterprise, etc.), did not often generate the economic growth sought. Instead, they brought a downturn in household living conditions (Kobiané, 2001), both socially and economically (increase in unemployment, inequalities and poverty). These neoliberal programmes finally tailed off in the Latin American and African countries in the 1990s. The same decade saw the rise of the human development approach, introduced by the UNDP in the shape of the Human Development Index, a composite indicator of a country's quality of life, driven in part by Amartya Sen's capability approach. The approach made such a mark that, by the turn of the 2000s, the social development paradigm was no longer based solely on growth, but included poverty reduction, and was no longer measured one-dimensionally (monetary criterion), but multi-dimensionally (deprivation of essential goods, lack of access to basic social services, insufficient freedoms, etc.).

This led the 189 UN Member States to set eight global MDGs in 2000 to end poverty and exclusion. These priority goals for 2015, predominantly halving extreme poverty (threshold of less than \$1.90 per person per day) and eradicating hunger in the world, were set to accomplish a range of universal economic and social rights, essentially concerning human capital dimensions (education, health and nutrition). Although few of the goals were achieved by 2015 (United Nations, 2015), the MDGs' rallying power and public resources from the donors funding the social programmes and projects made for significant progress toward them. For example, the number of people living in extreme poverty fell from 1.75 billion in 1999 to some 736 million in 2015, or 10% of the world population (latest available estimate from the World Bank). Yet behind this progress, observed mainly in Eastern Asia with China and India, lay disparities between regions (with

most of the world's poor concentrated in Sub-Saharan Africa) and persistent inequalities, such that official assistance efforts had to give precedence to the most fragile countries.

To scale up the poverty reduction progress made, a new framework of goals took over from the MDGs in 2015: the SDGs, to be achieved by 2030. These 17 SDGs expanded on the human development MDGs and added planetary preservation goals (sustainable land-use management, climate action, land and aquatic biodiversity conservation, clean water and energy, and sustainable consumption and production). Whereas the MDGs were broken down into 20 targets and 60 quantitative monitoring indicators, the SDGs have 169 targets and 229 indicators. This inflation in the number of targets and indicators between 2000 and 2015 prompted Jacquemot (2015) to criticise the UN 2030 Agenda as overly ambitious (diluted priorities and excessive financial cost) with goals that are sometimes too vague and timeframes that are impossible for certain targets (such as 7% growth per year in the least developed countries). An analogy can be drawn here with the Laeken social indicators (discussed in Chapter 2) used to measure European social exclusion and poverty. These indicators were expanded from their initial number of 18 in 2001 to a much greater number today, revealing, here too, the profusion of existing indicators at the risk of creating a catalogue of indicators confusing to European actors. The mushrooming indicator and sub-indicator syndrome appears to seek to leave out no population category, cover all social areas and attain exhaustiveness, even if it means losing in clarity. Still, the European post-2020 agenda, alongside the SDGs, resolutely targets more sustainable development by 2030, as shown by the European Commission's reflection paper (2019).

1.2.3 Links between concepts: vulnerability, capabilities and resilience, sustainability

The origin of our approach is obviously the notion of vulnerability and, specifically, social vulnerability such as we have explained it. It forms the link with the capability approach, since reinforcing a person's capabilities helps reduce that person's vulnerability.

In this regard, note that fragility is not the same thing as vulnerability, although the two concepts are similar (Dubois, Huyghebaert & Brouillet, 2010). Fragility could be seen as a personal characteristic describing a break that has occurred due to a particular shock: something breaks for the person. Fragility in effect expresses a person's inability to cope with particular events or shocks, resulting in an ultimate break that makes it impossible to get back to the situation that prevailed before. Vulnerability, on the other hand, implies a capacity for resilience to these same shocks.

Let's look at this particular capacity associated with the level of vulnerability and leading to resilience: it is the capacity to recover (Dubois & Ouattara, 2014). Whereas the concept of vulnerability spread in the 1990s, the concept of resilience emerged in the 2000s, mainly from physics, ecological and psychological studies, before being taken up by the social science disciplines (Koffi, 2014). Etymologically referring to the idea of resistance and recovery following a shock, resilience has become a multidisciplinary polysemous concept in danger of becoming a portmanteau in the social sciences and subject to metaphors (Lhomme, Serre & Laganier, 2013). We adhere to the definition of resilience as a person's capacity to resist a drop in well-being (following a shock), using his or her potentiality (Dubois & Rousseau, 2008) to ultimately get back to the initial level or a higher level than before the shock.

In a European, and especial global, context where different kinds of risks hang over people, especially the most vulnerable who are the most negatively impacted in their functionalities, and in an economic environment with interdependent institutional sectors (governments, business, banks and households), the ability to demonstrate resilience when risks materialise is a strength. Preventive ex-ante public policies could be put in place to strengthen people's resilience (with the emphasis on risk prevention and building potential

capacities), as could ex-post public actions designed to trigger a resilience process (Dubois & Ouattara, 2014). Resilience could actually be seen as agency, that is a multistage process, i.e. the capacity to define goals and take appropriate action to achieve them, whether individually or in interaction with others (collective action).

This paves the way for new study focuses for more in-depth work and additional reports on forms of governance, in particular the concept of “Alliance”, which introduces a dimension of sharing and solidarity into decision-making. There is also the broader focus of the social and solidarity economy, some of whose initiatives and achievements are touched on in this document. This chapter has clarified the definition of social vulnerability as the study focus for this report and seen how it ties in with the current sustainable development paradigm with its different economic, environmental, social and human considerations, and associated public policies and actions. This chapter links through to **Appendix 1**, which presents a glossary of useful terms to round out and understand the concept of social vulnerability. In the following chapter, we pursue this investigative approach by identifying the expressions of this social vulnerability at European macro level and potential measurements of it in the form of indicators.

2. Evaluating social vulnerability at European level

The previous chapter defines social vulnerability, in connection with the human rights approach, as referring to all forms of vulnerability associated with a given person or group of people that place constraints on their ability to be and do. Social, and hence societal, interaction between individuals risks passing on social vulnerability down through the generations if no adequate national or supranational public policy is put in place.

In a context where the issue of vulnerability is becoming paired with the issue of poverty, the question arises as to how to measure social vulnerability. This could be done using suitable tracking indicators to monitor people's level of social vulnerability in different key dimensions (health, housing, employment, income, etc.). A set of what are called Laeken indicators could be used to measure vulnerability in the sense that poverty is equated with a risk. These indicators are the result of political compromise and consensus-building. They are essentially macro indicators designed at European level by a series of processes and associated steps in keeping with the principle of subsidiarity.

2.1 An egalitarian view of decision-making scales and levels

Vulnerability can be measured at different levels. First, there is macroeconomic vulnerability, which refers to the risk of exogenous shocks (natural and external) hindering the development of poor countries, as measured by Guillaumont (2006) with the Economic Vulnerability Index (EVI).⁴ Second, comes meso-economic vulnerability (sectors, industries, trades and regions), which is less often measured (Hugon, 2013). Lastly, there is microeconomic vulnerability, as defined by Dercon (2006), with the relationship between household risk, vulnerability and poverty. This is the level on which we focus in this report. Adopting a top-down approach to measuring vulnerability necessarily raises the question as to the decision-making scales and levels. One of the European Union's key principles is to guarantee participation, parity and equality of rights for all. This echoes the ethical principle of the Alliance to fight poverty. We will now define the top-down approach.

2.1.1 Taking a top-down approach

The top-down approach, a form of top-down analysis, can be understood as applying to different hierarchical decision-making levels: European level with the European Union's supranational specifications to Member States by means of rules to be respected (e.g. with the Maastricht criteria), national level with the national policies required for all the countries' institutional sectors (banks, business and households),

⁴ The EVI is a composite indicator proposed by the Committee for Development Policy in 1999 and produced by the UN. It is used to identify low-income countries by means of indicators of exposure to shock and shock indicators.

regional level⁵ via autonomous public policies (decentralisation and central government circumvention), and even local level with particular responsibilities tasked to certain entities. These different decision-making levels imply the principle of subsidiarity, which is addressed in the following sub-section. Yet the top-down approach in a European context is more commonly understood as the influence or impact of EU Community institutions and decisions on the different national policies, referred to as Europeanisation defined by Radaelli (2003, p. 30) as, “the processes of (a) construction (b) diffusion and (c) institutionalization of formal and informal rules, procedures, policy paradigms, styles, ‘ways of doing things’ and shared beliefs and norms which are first defined and consolidated in the making of the EU public policy and politics and then incorporated in the logic of domestic discourse, identities, political structures and public policies.” This Europeanisation is seen at play particularly when new countries join the EU and have to comply with certain Community requirements, with institutional transfers (Saurugger & Surel, 2006). However, distrust of European and national institutions has been growing since the 2008 crisis and the subsequent increase in unemployment in European countries, combined with the migrant crisis ongoing since 2015 (Shamaeva & Nicaise, 2016). These institutions are accused of being powerless and lax in the face of financial globalisation, a charge that has fuelled the worrying rise in nationalist and populist rhetoric in a number of Member States (Italy, Poland, Hungary, Austria, Slovakia, Czech Republic and Greece, if not France, Sweden and Germany) and the move to replace submission to Brussels’ orders with a principle of national sovereignty.

2.1.2 Based on a principle of subsidiarity

The main levels identified (supranational, national, regional and local), based on which political decisions can be taken, imply the principle of subsidiarity,⁶ i.e. seeking the relevant hierarchical decision-making level at which to design a public action for the citizens. In the case of shared powers between the EU and Member States, the EU has a priority of action over the Member States, but if Member States are in a position to take action more effectively, the principle of subsidiarity grants them a certain degree of independence from the higher authority that is the EU. Although the principle of subsidiarity is problematic due to its manifest vagueness (Joyeux, 2012), reference is often made to it in European texts. In terms of combating social vulnerability, a number of the identified decision-making levels can be engaged depending on the issues addressed and the extent of their information on the current socioeconomic reality. Collecting data on vulnerability and choosing the institutional level capable of action and social investment to build the capabilities of vulnerable people and households, when they themselves do not always make the most effective decisions (bounded rationality, information asymmetry, procrastination and errors of expectation), entails knowing exactly which decision-making level is the most relevant to take action and prevent a situation of vulnerability.

2.2 Vulnerability indicators at European Union level

⁵ Recent calls for independence in Europe, such as in Scotland and Catalonia where referendums were held and, to a lesser extent, the issue of the Flemish region in Belgium and Basque Country in France, illustrate aspirations to find a way around central government. Note also that the European Commission, ever seeking to involve the regions more in the process of European integration, has sub-divided the European Economic Area into regions on the basis of three NUTS categories (common classification of territorial units for statistics) defined by their average number of inhabitants in the corresponding country.

⁶ Principle initially introduced in Community legislation by Article 3.8 of the Maastricht Treaty, and endorsed by the Lisbon Treaty (2007). It is one of the three fundamental principles of the EU, alongside the principles of attribution and proportionality.

2.2.1 The Laeken indicators and their extension: scoreboard

At European level, the first common indicators to try and capture the notion of vulnerability inherent in poverty were the Laeken indicators, following the work launched by the Social Protection Committee Indicators Sub-Group (SPC-ISG) in February 2001. The European Council adopted the indicators at the Laeken Summit⁷ in December 2001. A list of 18 indicators of poverty and social exclusion was drawn up (see **Box 1** below) and included in the Lisbon Strategy.⁸ It contains ten primary indicators and eight secondary indicators, which are not composite indicators, but seek to show the European social outcomes achieved. The ultimate aim of these indicators is to measure the different dimensions of poverty and social exclusion in terms of monetary poverty, labour market access, education, housing, health, material deprivation and the specific situation of vulnerable groups. These indicators were made available to each Member State to shed light on the particularities of specific fields. Likewise, the poverty indicators are based on national poverty thresholds, which are determined on the basis of the national income distribution with, for example, the conventional threshold of 60% of national median equivalised income. However, Caussat, Lelièvre and Nauze-Fichet (2006) argue that the Laeken indicators are indicators of very general outcomes not easily associable with specific measures or social policies. Moreover, these indicators born of consultations and political compromise are rarely used due to their intrinsic limitations and, in particular, do not reflect all the components of the quality of employment (Davoine & Erhel, 2007). The different types of Laeken poverty indicators, measured as “at risk of poverty” rather than as a poverty line,⁹ translate the risk in the form of a probability of falling below a poverty threshold, and therefore entirely reflect the concept of vulnerability as expressing an individual’s probability of loss of well-being following the materialisation of a risk, such as job loss. An “at risk of poverty” indicator hence expresses the feeling of insecurity and the fear of falling (or falling back) into poverty.

In 2003, the European Council subsequently endorsed a revised, supplemented list of Laeken indicators containing 20 indicators of social inclusion. It was also on this occasion that the EU’s SPC, which plays a key role in the social dimension of Europe 2020, adopted the new common indicator designed to estimate the percentage of working poor¹⁰ in the EU, combining an individual approach to workers’ links with the labour market with a household approach to the measurement of income. Alongside these indicators, the 2001 European Framework introduced the presentation of an action plan¹¹ against poverty and social exclusion by each European country, in keeping with the main objectives and main strategic lines defined at Community level. Yet since 2005, although certain countries have pursued this approach, it is no longer the rule to present an action plan, since the national reform programmes focus mainly on growth and employment. In June 2006, following regular discussions and meetings, the ISG proposed a new framework of common social indicators, consisting of a portfolio of 14 overarching indicators meant to reflect the refocusing of the Lisbon Strategy on growth and employment, accompanied by 12 context indicators and three other portfolios on social inclusion, pensions and healthcare. The portfolio on social inclusion, largely based on the Laeken indicators, contained 11 primary indicators, 3 secondary indicators and 11 context indicators. Since, investing in children has been added to the four portfolios of indicators, and all these European social indicators have been further improved, as shown by the detailed inventory taken by the

⁷ Laeken is a suburb of Brussels.

⁸ Defined by the Lisbon European Council (23-24 March 2000).

⁹ The World Bank measures poverty instead in terms of thresholds: extreme poverty (or absolute poverty) threshold: less than \$1.90 per person per day.

¹⁰ Individuals in work for over half of the year and living in a household whose equivalised income is below a poverty threshold of 60% of the national median equalised income (European definition endorsed by the SPC in 2003).

¹¹ The National Action Plan on Social Inclusion (NAP incl.), which includes a statistical appendix containing dozens of indicators, including the Laeken indicators. For example, France’s 2003-2005 NAP incl. contains over 160 monitoring and evaluation indicators on the Community social cohesion objectives.

SPC-ISG (2015) in its latest update: the European Commission website¹² moreover presents all the current indicators, numbering some 173, and their definitions. These indicators and their statistical bases, which continue to be refined by Eurostat, form a key element of the EU's Open Method of Coordination (OMC), and track the progress made by EU Member States to reduce poverty and social exclusion. However, the lists of indicators produce a juxtaposition of information that does not capture accumulation and interaction between the different dimensions of poverty (Combat Poverty, Insecurity and Social Exclusion Service, Brussels, 2004).

Box 1: The Laeken Indicators (2001)

The Laeken Indicators (2001)

Primary indicators (10):

- Indicator 1a: At-risk-of-poverty rate by age and gender
- Indicator 1b: At-risk-of-poverty rate by most frequent activity and gender
- Indicator 1c: At-risk-of-poverty rate by household type
- Indicator 1d: At-risk-of-poverty rate by tenure status
- Indicator 1e: At-risk-of-poverty threshold (illustrative values)
- Indicator 2: Inequality of income distribution S80/S20 quintile share ratio
- Indicator 3: At-persistent-risk-of-poverty rate by gender (60% median)
- Indicator 4: Relative at-risk-of-poverty gap
- Indicator 5: Regional cohesion (dispersion of regional employment rates)
- Indicator 6: Long term unemployment rate
- Indicator 7: Persons living in jobless households
- Indicator 8: Early school leavers not in jobless households
- Indicator 9: Life expectancy at birth
- Indicator 10: Self defined health status by income level

Secondary indicators (8):

- Indicator 11: Dispersion around the at-risk-of-poverty threshold
- Indicator 12: At-risk-of-poverty rate anchored at a moment in time
- Indicator 13: At-risk-of-poverty rate before social transfers by gender
- Indicator 14: Inequality of income distribution Gini coefficient
- Indicator 15: At-risk-of-poverty rate by gender (50% median)
- Indicator 16: Long term unemployment rate
- Indicator 17: Very long term unemployment rate
- Indicator 18: Persons with low educational attainment

2.2.2 Different institutional levels and different categories of indicators

The European Union has three different categories of indicators based on the level of analysis chosen: European level, national level and local level:

- At European level, often-aggregate indicators are used for a comparative analysis of Member States' progress with the common goal of social protection and social inclusion. Macro indicators are available on the European Union as a whole (such as the updated Laeken indicators). These are generally produced by Eurostat.

¹² <https://ec.europa.eu/social/main.jsp?catId=756&langId=en>

- At national level, indicators are often based on common definitions and hypotheses to provide information that serves to assess each Member State's progress with the objectives, such as reducing vulnerability. These are national macro or meso indicators produced by the national statistics institutes in association with Eurostat.
- At local level, the informational context is used to better capture the national context. These are mostly micro indicators relevant to evaluate the impact of policies on people's well-being and behaviour, and to meet the needs and aspirations of the targeted categories of people. These indicators are generally produced based on data from surveys and interviews with focus groups.

These different decision-making levels are obviously subject to the abovementioned principle of subsidiarity. And, precisely to take stock of poverty and social exclusion at European level, recommendations and/or current indicators are produced by established organisations such as Eurostat, the Social Protection Committee, the European Social Observatory (OSE), the European Semester, which provides a framework for economic policy coordination between EU countries, the European Pillar of Social Rights approved in 2017, which delivers new and more effective rights for citizens built upon 20 principles, and the Eurydice network on education in Europe, in addition to the OECD, UNESCO and WHO/Europe. Major surveys also provide specific data, such as the EU-SILC survey on income and living conditions, the European Social Survey (ESS) to measure the attitudes, beliefs and behaviour patterns of the European populations, the European Labour Force Survey (EU LFS), Eurofound's European Working Conditions Survey (EWCS), the European Health Interview Survey (EHIS), the SHARE panel survey of health, ageing and retirement in Europe, the Eurobarometer European public opinion survey, the European Quality of Life Survey (EQLS), and the Programme for International Student Assessment (PISA).

In connection with the Europe 2020 strategy adopted by the European Council in 2010, the composite indicator AROPE (At Risk of Poverty or Social Exclusion), also known as the EU2020 indicator, builds upon the Laeken indicators and is designed to monitor the number of people at risk of poverty or social exclusion in EU 27 countries. This indicator ranks the persons concerned in at least one of three groups: persons at risk of monetary poverty (below the relative threshold of 60% of national median income), severely materially deprived persons (at least four deprivations out of a list of nine), and persons living in households with very low work intensity (20% of annual work potential). The EU-SILC survey¹³ is the source used to monitor progress with the key objective to reduce the number of people at risk of poverty or social exclusion by 20 million in the EU27 countries between 2008 and 2018. This European Council objective is associated with different national objectives depending on the Member States, based on the indicators they judge the most important from among those that make up the composite poverty and social exclusion monitoring indicator. However, this composite indicator was developed more on the basis of political compromise than sound methodological bases and a participatory approach (Peña-Casas, 2012). In another critical analysis of this indicator, Maître, Nolan and Whelan (2014) consider that the intersection of monetary poverty and material deprivation is the most relevant to identify the target population at risk of poverty or social exclusion, rather than the intersection of the three chosen groups.

Identifying the disadvantaged calls for robust databases, such as those mentioned above, and adequate indicators, i.e. able to capture social vulnerability in its different dimensions. Exhaustive individual data are thin on the ground here, and composite poverty indices are more often the rule. For example, the EPICES score is an individual measure of insecurity in France, calculated from 11 binary questions with scores ranging from 0 for the least deprived to 100 for the most deprived. Labbé et al. (2007) show how interesting findings can be obtained from this score using a multiple correspondence analysis. A composite indicator

¹³ European Union Statistics on Income and Living Conditions. The EU-SILC survey is a coordinated survey of a community panel of households headed by Eurostat in over 30 European countries since 2003.

could, therefore, capture personal feelings of vulnerability, albeit methodologically subject to caution (choice and weighting of sub-indicators). A multitude of social indicators are currently available, judging from the European Commission's different portfolios of indicators (at-risk-of-poverty rate, unemployment rate, healthy life expectancy, pensions, etc.) generally presented by age, gender and type of household. However, no available set of variables specifically addresses personal vulnerability, or respect for human rights, despite its importance. Steps should be therefore be taken to build a latent variable model,¹⁴ albeit complex and context-variant, from a database of manifest personal indicators of vulnerability that could better capture vulnerability (or resilience).

This points up a greater need for operationality in this area. In the presence of different levels of analysis, these levels need to be articulated so as to link up the macro and micro levels with mixed methods combining both national survey data produced by the leading national statistics institutes and more qualitative data obtained locally by civil society organisations and research centres. This calls for further thinking and more consideration of the operational aspect if we are to make strides in improving knowledge of the level of social vulnerability among the different populations of Europe.

¹⁴ This type of model contains unobservable, latent, variables that cannot be measured directly (like vulnerability and resilience capacity), but whose effects can be observed or measured from observed variables (such as level of income, type of housing, state of health, level of qualifications, etc.). This is therefore very similar to factor analysis or a multiple linear regression model.

3. Measuring vulnerability at the personal level

Eurostat estimates the number of people in the EU “at risk of poverty after social transfers”¹⁵ at 85.3 million in 2017 (as opposed to 80.9 million in 2007), representing one in six Europeans living below the risk-of-poverty threshold, albeit with large disparities between countries.¹⁶ The individuals concerned consequently risk, as Giraud (2018) puts it, falling into a form of inutility, which the author sees as a particularly severe and resistant form of inequality, resulting from inequalities of access as might be experienced by the long-term unemployed in rich countries, the working poor and underemployed young people in situations of vulnerability. Note that this proportion is even higher when using the extended definition¹⁷ of poverty at European level, accordingly estimated by Eurostat at approximately 113 million people, or nearly one in four Europeans at risk of poverty or social exclusion in 2017. Yet the Europe 2020 strategy’s social inclusion objective is to reduce the number of persons at risk of poverty or social exclusion in the EU27 countries by at least 20 million between 2008 and 2018. In an environment of steadily rising inequalities, this ambitious goal will not be achieved (see the 2018 SPC Annual Report for the state of progress), especially since a new social class is in the making in Northern industrial societies. This class, dubbed by English economist Standing (2011) as the “precariat”,¹⁸ is subject to economic and social insecurity, debt, an uncertain future and fear of precarity, and inclined to anger and revolt. The precariat can be equated in France with the “Gilets Jaunes” social movement, which burst forth in late 2018 demanding immediate and massive purchasing power measures. The movement is sociologically represented primarily by the working and middle classes, and more often than not rallies insecure workers, jobseekers, single mothers and low-income pensioners distrustful of the democratic institutions and MPs. These different categories of people, who sometimes feel they are victims of globalisation’s effects and have been weakened by the 2008 financial crisis, have in common the fact that they are both economically and socially vulnerable. What, then, is the extent of this social vulnerability at microeconomic household level?

In this chapter, and to tie in with this document’s European framework, we use the information provided by the different groups of co-researchers on the RE-InVEST project’s 13 national teams. These groups represented as much the poor as the precariat, and the information obtained from the use of a qualitative participatory methodology highlighted the issues created by the 2008 crisis. By focusing on the key areas addressed in the different national reports – i.e. poverty and unemployment, housing, education, mental health and migration – and remaining steadfastly within the conceptual framework of human rights and the capability approach, we are able to target the factors that reduce people’s capabilities and increase their vulnerability. In so doing, we address these questions taking a bottom-up approach, which we explain in the following section.

3.1 A bottom-up approach to analyse micro-level vulnerability

15 European AROP indicator (*At Risk of Poverty*).

16 Eurostat (2017) calculates France’s at-risk-of-poverty rate (threshold of 60% of median income) at 13.3%, which is one of the lowest in Europe alongside the Netherlands (13.2%), Denmark and Slovakia (12.4%), Finland (11.5%) and the Czech Republic (9.1%). The highest rates are found in Romania (23.6%), Bulgaria (23.4%), Lithuania (22.9%), Latvia (22.1%) and Spain (21.6%).

17 The AROPE indicator (EU2020) covers persons who are at-risk-of-poverty and/or severely materially deprived and/or living in households with very low work intensity (index addressed in Chapter 2).

18 Contraction of “precarious” and “proletariat”. Standing (2011) estimates that the precariat concerns at least 25% of the adult population of many industrialised countries.

In general, a bottom-up approach, unlike a top-down approach, focuses on the micro-economic level of people and households to identify and understand their feelings, aspirations and issues using such techniques as questionnaire surveys, individual and group interviews (focus groups), participant observations, and analyses of content and narratives, i.e. classic, mainly qualitative, social science study techniques. Once translated into operational results, the knowledge derived from these techniques can be used to develop better monitoring indicators for the people studied. A bottom-up approach therefore directly polls the statistical unit, i.e. the person, to give that person voice and collect authentic information. This is an essentially qualitative analytical tool. In the particular case of RE-InVEST, over a long period (2015-2018), the innovative qualitative approach chosen made for a more democratic and inclusive knowledge form based on “merging the knowledge” of vulnerable persons living in poverty, academic researchers and professionals (civil society organisations), and all co-researchers involved in an iterative process of action, mediation, dialogue and thinking. This type of approach, with the transformative aspect of the research that co-produces the knowledge, moreover makes sense in view of the development watchwords that underlie best practices since the MDGs were set in 2000, and which abound in development practitioners’ reports and rhetoric, such as “ownership”, “participation”, “capacity building” and, more recently, “resilience”. These terms centre on social service users, showing that the bottom level counts and that public policies designed upstream will be all the more effective if they take into account the needs expressed and preferences revealed by people using bottom-up approaches. In this sense, we note the growing role played by civil society organisations, including NGOs, which have the support of the populations, making for greater ownership of the actions and the responsibility (Rhazaoui, Grégoire & Mellali, 2005), which even further legitimates the bottom-up approaches.

3.1.1 The importance of the bottom-up approach to understanding the issues encountered by vulnerable persons

The interviews conducted by the different national teams during the focus groups collected a set of local information on the vulnerability felt by people using the PAHRCA¹⁹ “knowledge merging” approach. The information gleaned from the different subjects concerns specific categories of positively discriminated people who have been profoundly affected by the latest crisis: long-term unemployed, people with disabilities or health problems, newly settled migrant women, etc. The previously defined bottom-up approach was taken here, in the form of co-research based on merging the knowledge of the three abovementioned types of actors. The participants’ main concerns were identified in key areas that affect their everyday, personal lives, hence painting a picture of their main issues, even though these were generally small samples²⁰ of voluntary interviewees (mainly women) who were not randomly sampled. Yet here, in this qualitative analysis, the validity criteria are the depth of the analysis and the authenticity of the merged knowledge and, despite the limitations of all methodological approaches, quality approach-produced knowledge generates plausible approximations (Olivier de Sardan, 2008). The results obtained by the RE-InVEST project should therefore serve to shed light on how vulnerable persons in different European regions have resisted the effects of the crisis, whether they benefit from national public policies implemented to improve their access to education, healthcare, housing, etc., their level of satisfaction with these policies, and the measures to be taken to increase their well-being and reduce their sense of exclusion. As Schmidt (2009) argues, the Member States’ bottom-up influence on the EU has to do with the European integration

¹⁹ Note that PAHRCA involves seven steps: 1. identify and meet partner NGO/gatekeeper; 2. preliminary ‘meet ups’ (for trust building if necessary); 3. first meeting with participants–trust building; 4. developmental: implement developmental human rights & capability approach; 5. inquiry/data gathering; 6. identifying patterns (key issues and themes of concern to the group); and 7. undertake action/outcome using one or combination of approaches.

²⁰ 8 to 26 volunteers, who agreed to take part in the research, were interviewed per country.

process, but also by the same token with the principle of subsidiarity. The point here is that, although a public policy is conducted in the collective interest, there is always the risk that the socially vulnerable populations supposed to be protected by these national and supranational policies do not see the benefits of them, or too little, too late, constraining their capabilities and thereby reinforcing their vulnerability. By way of an example, in the French social crisis triggered by the “Gilets Jaunes” movement and driven by a sense of social vulnerability among people, the solution chosen has been to hold a two-month national public Great Debate in the towns and cities to hear French citizens’ grievances on four subjects.²¹ An inclusive, participatory approach has hence been put in place, supposed to convey the participants’ expectations and proposals to the government level: but is this kind of bottom-up approach mere window dressing or will it actually lead to effective concrete measures?

Taking the information from the focus groups, our purpose is to propose indicators that can capture the level of vulnerability of the different categories of persons studied. Each indicator needs to be designed to express individual “ability to do and be” to reduce personal vulnerability. For example, the French report on migrant women from West Africa (Droy, Ricardou, Rabemalanto & Dubois, 2017) identifies priorities with the following ranking of preferences: adequate housing, decent work, assurance of security, and respect for socio-cultural relations. Where indicators are identified, a dynamic three-stage process can then be launched:

- The first stage addresses the main objective of each targeted group, such as people suffering from mental health problems, the homeless, the long-term unemployed, etc. This step is taken by asking a simple question: “What is the main focus for the targeted group?” A list of main subjects for consideration can then be drawn up.
- The second stage consists of identifying each subject’s key issues, which emerge during the focus groups. For example, these may concern such issues as access to own housing, finding a job, the ability to feel secure and the assurance of healthcare. This is done taking a two-sided, but relatively straightforward, question: “What are the problems raised in the focus groups, and can they be ranked in order of priority?”
- The third stage seeks to identify a few relevant indicators at local level for each priority area. This entails suggesting a plausible indicator for each issue that might indicate a “capability attitude” associated with vulnerability. These local indicators would then express the presence or absence of the “ability to do something” or the “ability to be someone”.

These indicators need to be identified or proposed for each of the priority issues. For example, if access to work is seen as a priority issue, indicators could be selected such as the average time taken to find work, travel-to-work time, and so on. In the case of housing issues, the indicator could be security of the environment surrounding the place of residence, housing quality, etc. In the case of education, indicators could be the literacy rate, the level of education attained, and so on. Common benchmarks, such as SMART for quality and SPICED for participation, can be used as final selection criteria for the local indicators. The following section outlines these criteria.

3.1.2 Criteria for the use of relevant micro indicators

The initial question that can be put is: “How to select the local indicators?” This leads to a further question: “Which criteria should be used to ensure that the selected indicator is entirely appropriate?” An indicator is

²¹ Ecological transition, taxation and public spending, government organisation, and democracy and citizenship.

relevant when it reflects vulnerability directly or indirectly, but also when it expresses the ability or deprivation of the ability “to do and be”. Through this notion, we raise the question of the people’s level of vulnerability, which may be real or perceived, and, by the same token, the question of its measurement, which is always subject to methodological caution. As regards the measurement of poverty, given that it is well-established that poverty concerns more than merely a monetary dimension since it is multidimensional (Razafindrakoto & Roubaud, 2005), should a simple and generally significant indicator such as a monetary poverty threshold be used to measure it or should a composite indicator be chosen for a better representation of the different dimensions of poverty, but one that would consequently be more debatable due to the methodological choices made (theoretical framework, weighting and aggregation)?

In general, two sets of complementary quality criteria are considered to choose the indicators used to evaluate a project/programme, even though they are somewhat theoretical: one is based on the indicators’ quality characteristics (SMART) and the other on their selection by effective participation (SPICED). The European Commission’s Social Protection Committee Indicators Sub-Group recommends a minimum set of criteria when selecting any indicator if it is to be considered as “SMART”, even though the authors do not always agree on the definition of each of the following required criteria:

- It captures the essence of the problem (i.e. *Specific*),
- It is simple, robust and statistically validated (*Measurable*),
- It enables a sufficient level of comparison between countries, with the use of applied international definitions and standard data collection (*Achievable*),
- It makes a clear, appropriate and accepted normative interpretation (*Relevant*),
- It is constructed from available data, contains a timeframe and can be revised in a timely manner (*Time-bound*).

A “SPICED” indicator, more suited to participatory approaches, has to comply with the following qualities:

- It must be based largely on the experience and judgement of experts (*Subjective*),
- It must be developed in cooperation with experts and local actors (*Participatory*),
- It must be easily understood and communicable to other stakeholders (*Interpreted*),
- Its validity must be checked by different methods and experts (*Cross-checked*),
- Its consolidated development process must enable the indicator to be improved by critical thinking (*Empowering*),
- It must capture the different points of view of a change (*Diverse*).

The following step is to link these local-level indicators with national- and European-level indicators to articulate the micro and macro levels, and also to combine the top-down and bottom-up approaches with a view to “merging knowledge”.

3.2 Proposal of vulnerability indicators for the project’s 13 regions

The purpose is now to propose a dozen indicators capable of measuring the vulnerability of the categories of people studied at local level. The work hypothesis common to the 13 national reports was that the crisis and the policies developed to counter it gave rise to the erosion of basic social rights and disinvestment in the capabilities of EU individuals and groups of individuals. In order to guarantee the fundamental rights of all their fellow citizens, the Member States put in place public services in the form of systems: a health system to provide healthcare, a system of education at different academic levels to provide education, a social housing system to provide low-income households with decent housing, and a benefit system for the

different situations encountered (unemployment benefit, disability and old age). However, these systems are highly heterogeneous across the countries, and population groups are sometimes excluded from them: either because they do not meet the entitlement conditions or because they do not have access to them (lack of information, administrative difficulties, refusal to resort to a system of assistance, etc.). Five main areas were addressed by the national focus groups' co-researchers in regular meetings and discussions. These subjects covered poverty, employment, housing, healthcare and education, and migration (see **Appendix 2** for a summary of the subjects addressed by each country). For each of these subjects, local level outcome indicators were proposed for each of the issues raised in order to measure poverty-induced phenomenon trends.

3.2.1 The main areas of vulnerability studied

a). Solve poverty issues

Poverty reduction is a key objective in European post-war history. Tackling social exclusion was added to the European agenda more recently, and addressing vulnerability is still a fairly new objective. Although this key area underlies all the national reports, the reports from Scotland (McHardy & Kelly, 2017) and the Netherlands (Haffner, Elsinga & Mariën, 2017) raised this issue as a fully-fledged subject with their focus groups, respectively focusing on lone parents in financial difficulty and households with chronic financial difficulties. The Scottish report states, for example, that children living with a lone parent are twice as likely to live in poverty as children living with both their parents. And what emerges from the thirteen reports, also across the board, is that the social and economic crisis has driven austerity measures (public spending cuts by governments), the erosion of social rights, a greater risk of poverty and precarity, creating payment difficulties (rent, food, water, energy, and health and education costs), deterioration in living conditions and human rights, uncertainty and difficulty planning for the long term.

b). Solve employment issues

Insecure, involuntary part-time and undeclared work already constitute a situation of vulnerability. Unemployment, which distances a person from the labour market for an indeterminate and sometimes long period of time, further accentuates the situation of vulnerability with its potential to give the impression of social downgrading, increase uncertainty and create a sense of loss of self-worth causing mental distress. Following the 2008 crisis, it became perceptibly harder to enter the labour market, especially for young people, and some countries posted high rates of unemployment (over 25% in Greece and Spain in 2013). The national teams that addressed this fully-fledged subject were Germany (Mautz, 2016), Austria (Buchner & Lessmann, 2017) and Portugal (Costa, 2017), focusing respectively on the case of the long-term unemployed, older jobseekers and young unemployed people in Portugal. The Austrian report, for example, set out to understand how the financial crisis and subsequent austerity measures have impacted the rights and capabilities of jobseekers aged 45 to 60 in Salzburg. It shows that participants perceived the crisis as a step further on a long road that had already started before the beginning of the 21st century, with the general impression among participants that life in Austria had become harder. The German report points up the importance of local bottom-up initiatives to help the long-term unemployed.

What emerges from these three national reports is the participants' aspirations to decent work alongside job and income security to ensure financial and material security and better opportunities for access to employment for women, lone parents, the low-skilled and older jobseekers.

c). Resolve housing difficulties

Being deprived of one's own home, having to be taken in by someone or a specialised shelter, or having to live on the street is a violation of a person's dignity who is then in a highly vulnerable situation, with all the cumulative risks that implies (lack of access to healthcare, insufficient food, shorter life expectancy, isolation, etc.). Now the challenge of gaining a more accurate idea of the number of people deprived of housing lies in the definition of homeless and the choice made of statistical instruments (Brousse, 2004) in the development of a common method for Member States to capture this vulnerable population category. Ireland (Murphy, Kucharski, Haughan, Richardson, Twomey & Thompson, 2017) is the country that decided to address this issue. The country's report shows that loss of a home often follows job loss, itself driven up by the recession that hit Ireland following the dire consequences of the 2008 crisis (pay cuts, increase in taxes, etc.). Lone parents, young parents and migrants with low incomes unable or no longer able to pay the rising rents are most at risk of becoming homeless. They also often have closely related problems (addictions, mental health problems, and loss of friendships and family support).

d). Solve health and education issues

Human capital is weakened by a lack of adequate access to healthcare and insufficient school attendance (early school leavers), whether for financial, family or other reasons. The level of human capital refers to an individual's stock of incorporated knowledge on which an economic return can be made: skills, but also the state of health and nutrition (Guellec & Ralle, 2003). The inability to invest enough in human capital ultimately risks creating situations of vulnerability (health problems, social exclusion, lack of skills, unskilled, low-paid employment, etc.). The risks of future vulnerability are reduced when people have the capacity to look after themselves and their children, via ease of access to healthcare, and invest in education. The countries that focused on these subjects were England (Greener & Lavalette, 2017), Latvia (Lāce & Rungule, 2017), Italy (Rovere, 2016) and Switzerland (Bonvin & Laruffa, 2017), respectively with the case of mental healthcare users, women with disabilities, people with health problems and early school leavers. The English report points up, for example, that the number of psychiatric hospital beds fell from 2011 to 2014.

The three reports on health problems encountered by people, whether physical (illness or disability) or mental (depression, anxiety or stress), show that it sometimes costs too much to seek care and treatment and that there is a lack of social protection, as evidenced by public health spending cuts, even though these people have restricted functioning possibilities. Moreover, although these health problems affect more especially the homeless, jobless and migrants, the fragile people interviewed displayed the need to upgrade their contribution to society. This ties in with one of the Swiss report's conclusions, which is that young people who leave school early need to regain their self-confidence and win back recognition from others.

e). Solve migration issues

Emigration to a European country when migrants have scant knowledge of the language, the culture, and the formal and informal rules raises the problem of integration and implies a situation of vulnerability, especially when a lack of information means that migrants do not claim the entitlements to which they may have a right and which could better protect them. The countries that took up this subject were France (Droy, Ricardou, Rabemalanto & Dubois, 2017), Belgium (Beweging vzw, 2017) and Romania (Van den Nieuwenhof & Chert, 2017), respectively with the case of African immigrant women living in Paris suburbs, newly arrived immigrants in Flanders and the Romanian diaspora. All report on the precarity, social stigma and discrimination they suffer, as well as the accumulation of employment, housing and health problems leading them to contact NGOs for assistance.

All of these reports highlight a deterioration in the political and social climate along with a distrust of politicians and political institutions, as evidenced by the recent Eurobarometer surveys. This has found

expression in the recent rise in populism in Europe, which rides on the back of a sense of injustice, anger, frustration, insecurity and rising inequalities. These negative aspects should not obscure the fact that the vulnerable participants aspire to be free to live their own lives in a decent, dignified manner with more inclusion and social justice. The reports note the re-emergence of alternative forms of solidarity and local community support with informal networks (neighbourhood, associations, etc.), but building their capacities for beings and doings calls for targeted public policies, focused above all on the most vulnerable members of society.

3.2.2 The most relevant micro indicators and the composite scoreboard

With the five social vulnerability areas listed, and the main cross-cutting problems associated with these areas raised by the focus groups, we can now turn to proposing indicators able to express the situation of vulnerability experienced by the participants.

- In the area of poverty, the existing indicator in the form of the at-risk-of-poverty rate per household type (lone-parent families and couples with or without dependent children) illustrates the level of financial difficulty among certain parents, especially single parents with dependent children. The indicator in the form of the at-risk of poverty or social exclusion rate for people with moderate or severe disabilities (16+) adequately singles out the people challenged by health problems.
- In the area of employment, the long-term unemployment rate (over 12 months) and in-work at-risk-of-poverty rate (insecure workers) are two existing indicators that provide a good representation of the proportion of people living in difficulty, i.e. those whose capabilities are considerably constrained by a clear lack of adequate income.
- In the area of housing, the proportion of people who have had access to social housing could be used as an indicator to assess the number of low-income people with difficulties finding housing on their own on the private market. And the existing indicator on housing deprivation by item (leaking roof, damp walls, no shower, etc.), which needs to be further improved, is like a poor housing indicator expressing unfit living conditions.
- With respect to the health track, few indicators currently manage to capture blatant situations of human degradation (depression, anxiety, stress, deteriorating health, suicide, etc.). Among the European Commission's indicators, the portfolio of indicators on children may well contain an indicator measuring the number of deaths by suicide among 15-24 year olds, but there is no such indicator for adults. The main indicators found cover life expectancy at birth and healthy life expectancy, vaccination coverage, obesity, etc., but apparently none on mental health despite its being a decisive factor. Now the way individuals assess their own health (perceived or felt) is a subjective indicator considered to be one of the best health indicators, since the perception of poor health is predictive of objective health problems (Robine, Cambois & Romieu, 2004). This is why we would propose a perceived mental health indicator to express people's mental vulnerability, which could be a source of disabling disadvantage on a daily basis.
- With respect to the education track, an existing indicator well reflects the situation of vulnerability among young early school leavers: the rate of young people (15-19 years old) not in employment, education or training (NEET) and therefore at risk of poverty, isolation and social exclusion. This indicator serves as a support for the Swiss report (Bonvin & Laruffa, 2017) on young early school leavers. Another indicator such as the proportion of young people who have left school early (lower secondary) gives a good indication of the proportion of young people who will find it harder to access the labour market and will have accordingly less-skilled and less-well-paid employment.
- In the area of migration, the proportion of people in the population with a history of migration could express the proportion of those with more integration obstacles who find it harder to access their rights. As regards employment inequalities, the employment gap (in percentage points) between immigrants and non-immigrants is a discriminant indicator indicative of vulnerability.

The following **Figure 2** therefore serves as a scoreboard for closer monitoring of the indicators considered as priorities, since they are associated with the different areas of vulnerability listed above. We refer to the European Commission's SPC portfolios of indicators, based on the Laeken indicators, to determine whether the following proposed indicators are already among them or not.

Figure 2: Priority indicators to monitor the level of personal vulnerability

Area	Proposed indicator	Source	Already in existence?
Poverty	At-risk-of-poverty rate by household type	Eurostat, EU-SILC	Yes
Poverty	At-risk of poverty or social exclusion rate for people with moderate or severe disabilities	Eurostat, EU-SILC	Yes
Employment	Rate of long-term (over 12 months) unemployment (aged 15 years and +)	Eurostat, LFS	Yes
Employment	In-work at-risk-of-poverty rate (insecure workers)	Eurostat, LFS	Yes
Housing	Housing deprivation, by item	Eurostat, EU-SILC	Yes
Housing	Proportion of people living in social housing	X	No
Health	Perceived state of personal mental health	X	No
Health	Suicide rate per 100,000 inhabitants	Eurostat	Partially (for 15-24 year olds)
Education	Rate of young people (15-19 years old) not in employment, education or training (NEET)	Eurostat, LFS	Yes
Education	Share of persons aged 18 to 24 who have only lower secondary education	Eurostat, LFS	Yes
Migration	Share of persons in the population with a history of migration	X	No
Migration	Employment gap (in percentage points) between immigrants (born abroad) and non-immigrants	Eurostat, LFS	Yes

4. Conclusion

The initial motive for this report on social vulnerability measurement indicators was to contribute to thinking on the future of Europe. This brings us back to the fundamental question: what Europe do we want and, going forward, with which poverty and social exclusion reduction objectives? The policy briefs (Nicaise, 2017b) and papers put together from all the RE-InVEST project country reports, along with the articles by many authors on Europe's recent socioeconomic developments, point up the importance of two phenomena taking on alarming proportions and becoming the new ills of an interactive humanity.

First, there is the rise of social vulnerability, objective and perceived, in the face of situations of growing economic, social and environmental uncertainty. This report's analytical framework and methodological considerations provide the basis for its thinking on the challenge to design and use suitable indicators for social vulnerability issues. Hence its tie-in with other issues such as fragility, poverty and exclusion, precarity, and human rights violation leading to dehumanisation, and its conception of resilience as a capacity to recover.

Second, this situation is flanked by a widespread increase in inequalities, albeit not as sharp in Europe as elsewhere. These inequalities are associated with the growing innovations required to manage a planet of nearly 10 billion inhabitants in 2050, as all these individual souls strive to protect themselves from all sorts of risks. Seeking to reduce these inequalities raises important questions of equity and social justice, and brings the capability approach into play.

These two new ills – increasing vulnerability and the rise in all sorts of inequalities – weaken social cohesion and trust, and undermine any quest for solidarity. We therefore need to establish the features of these ills, and their causal factors, to be able to eradicate them. This means identifying them using a suitable conceptual framework, measuring them (role of the indicators), observing them over time (monitoring indicators and observatories), and predicting and curbing their growth wherever possible.

This report on indicators, in its summary of the RE-InVEST project's national reports, stops short of this last approach. Nevertheless, this is the approach that will form the basis for the design of suitable policies: policies whose public measures and actions will create forms of social redistribution that will, first, alleviate the causes and repercussions of vulnerability by means of a solidarity approach and will, second, reduce inequalities in the areas concerned (sufficient access to healthcare, decent housing, quality work, etc.) by promoting social justice and equity. The European Social Observatory (OSE) is therefore the suitable body to measure vulnerability reduction efforts in the key areas listed, and this in a complementary manner to the issues of poverty and social exclusion.

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Appendix 1: A glossary of basic analytical terms

Agency. This concept refers to an agent's capacity to define goals and act accordingly to achieve them. It is an intentional action, in pursuit of a chosen end, which may be taken individually or collectively, i.e. in interaction with others. By extension, it includes, alongside the agent's directly observable capacity for effective action, the ability to project into a potential action, which opens up the idea of freedom to do. The term 'collective agency' is used to define a group or institution's capacity to define goals and act collectively in a goal-oriented, autonomous, intentional manner to achieve them by means of collective action.

Agent. The concept of agent is an extension of the concept of the individual. An agent is an independent entity capable of making his or her own choices and carrying them through rationally by allocating the necessary means to effectively achieve a given purpose. This purpose, unlike the individual, transcends the agent's own interest. The term 'economic agent' is used when the purpose is economic. The fact that the agent is capable of acting in pursuit of a chosen goal means that the agent can be allocated a responsibility. The term then used is 'moral agent'.

Alliance. Alliance refers to when responsible partners agree on a common goal in situations of asymmetric partnership, such as patient and carer, farmer and expert, and government and donor. The alliance is designed to overcome this asymmetry based on certain ethical principles such as autonomy and recognition, solidarity and benevolence, and professionalism. The notion of alliance is fundamental in the context of the solidarity economy to interlink the individual and the social, the social and the institutional, within collective or public policy actions designed to build socially sustainable development.

Autonomy. Amartya Sen defines autonomy as meaning that agents are capable of defining their own choices on their own. They do not depend on anybody else for that, unlike the slave. However, this does not mean that they are independent, since they may be part of a social network and make choices that morally commit them. This view of autonomy is therefore characteristic of the agent, but differs from that of the individual who proves to be independent since s/he is unconstrained by his or her social links.

Beings and Doings. This expression generically defines the purpose of capabilities for the agents in terms of functionings (being able to feed oneself) and freedoms (being a member of an association). Its simplicity aside, the expression could be criticised for not including more specifically other purposes (such as becoming) and not considering the interaction between the two terms, since doings can lead to beings and beings can enable certain doings.

Conversion Factors. These are the variable parameters, functional processes even, that are decisive in turning available resources into capabilities (see **Figure 1**). They may be personal and environmental characteristics, but also social and economic opportunities, collective behaviour, and so on.

Entitlement. Expresses the right or capacity to access particular privileges, goods and services. It can capture difficulties accessing food, in periods of famine, or even within households when women face discrimination.

Equity. The question of equity arises when a decision is made to combat inequalities in a particular context. A question of social justice is then put, such as, "Is it fair to do that?" or "Is it right to allow such a state of being?" These ethical questions differentiate what may be seen as legitimate inequalities (such as people being different heights) from illegitimate inequalities (too wide an income gap). This distinction is hence made on the basis of a particular justice rule, which is recognised and shared by the parties concerned for a specific context and objectives.

Ethics (of sustainable development). Ethics concerns the moral rules, especially those of justice, that enable a form of development to be sustainable and, more specifically, socially sustainable (by means of the interactions between people). Ethics has a bearing on questions such as poverty reduction, combatting inequalities and reducing vulnerability, by encouraging the establishment of rules of equity, responsibility, solidarity, building trust and long-term social cohesion. A. Sen rehabilitated the role of ethics in economics, criticising the tendency to refer to utilitarianism.

Functionings. These are an agent's effective, and therefore observable, achievements (in terms of beings and doings), such as the fact of being able to feed oneself, take part in a meeting, be a teacher, etc. These achievements concern securing an income, education, nourishment, health, housing, access to public goods, etc. They can be measured by specific indicators. The combination of different functionings constitutes the effectively achieved part of the agent's capabilities.

Fragility. Fragility implies the possibility of a fracture or, more generally, a break whereby the people concerned can no longer manage to adjust their set of capabilities to the external circumstances that made them vulnerable. This break situation appears in different forms: destruction, death, conflict, migration, etc. Fragility, because of the break, differs from vulnerability, which can be fought and overcome (resilience) by an adequate reinforcement of capabilities.

Freedoms. Whereas functionings are effectively achieved capabilities, freedoms are potential capabilities that one can choose to achieve or not. They cover all the possible choice alternatives given the opportunities and economic and social constraints. They are therefore freedoms of choice which, when effectively realised, give rise to observable functionings. The problem is evaluating this space of freedoms for each person, which may require induction methods (factor analysis, latent variable modelling, etc.).

Human Rights. Human rights cover a set of prerogatives recognised as specific to human beings since they correspond to needs essential for life. This concerns ways of being, the ideas in which we believe, goods and services, aspirations and so on, to which entitlement must be universal and inalienable. Several generations of rights have been developed to form a large body of rights of entitlement: civil and political rights, social and economic rights, rights in specific areas, etc. National governments, institutions, citizens and groups of citizens are bound to respect them and ensure that they are respected. These basic rights are defined by official documents and lay down a framework for public intervention. They are not always effectively enforced, hence the value of comparison with capabilities, especially people's effective capacities.

Indicators (of vulnerability). Vulnerability indicators are designed to measure the level of vulnerability reached by agents. The indicators are presented in the form of number, proportion and ratio, associating a value with the phenomenon concerned. The original Laeken indicators in the early 2000s presented the risk of poverty in the form of a percentage. Since, the wide range of forms of vulnerability found in highly diverse contexts has raised the questions as to "the vulnerability of who?" and "the vulnerability of what?" Different capabilities could be considered and composite vulnerability indicators developed based on the corresponding dimensions, using modelling (latent variables and factor analysis).

Inequality. A. Sen believes the dominant inequality is the inequality of capabilities. It transcends inequalities of resources, opportunities and outcomes. Human development helps reduce this form of inequality by building agents' capabilities. However, the actual applicability of this approach remains a challenge, since it is hard to make agents' real freedoms equal in the face of alternative sets of opportunities.

Poverty. Amartya Sen's definition of poverty extends to the deprivation of capabilities, especially basic capabilities (such as the capability to feed oneself). It therefore goes beyond the sole monetary poverty

threshold, captured by a level of monetary consumption, to define someone as poor. This approach establishes an absolute, multidimensional definition of poverty, which takes on a particular socio-historical meaning and may apply to all countries and all periods of time.

Resilience. The term ‘resilience’ refers to where a person, social group or system manages to overcome the repercussions of a shock (dysfunction, trauma or break) that has destroyed all or part of their integrity. This implies an effective or potential capability to recover to start anew and a step-by-step process conducted to set a course for sustainable development.

Resources. The term ‘resources’ covers all the forms of goods (commodities, consumables, durables and capital goods) and services, and even rights, that can be used to function. A. Sen states that these goods are converted into effective functionings, thereby contributing to the formation of capabilities. A solely economic analysis of these goods, as commonly conducted in economics without considering the capabilities they generate, remains confined to a ‘resourcist’ vision of the economy, which differs from the real economy.

Responsibilities. The ethical notion of responsibility applies to socially sustainable development when it refers to the balance of rights and obligations in a society where the aim is to preserve trust and social cohesion. Philosopher H. Jonas defines two forms of responsibility: most commonly, retrospective responsibility (ex-post) created by the action conducted (according to one’s capabilities) and its consequences; and prospective responsibility (ex-ante), which relates to questions concerning the grounds for the action to be taken and the relevance of using a right or a capability. This second form of responsibility probes the relevance of certain actions to vulnerable populations and is frequently used in connection with the solidarity economy.

Rights and Obligations. All societies hinge on a subtle balance, in time and space, of people’s rights and obligations. Rights generally only become effective once the obligations are met, in that the fact of having rights does not automatically imply their transformation into capabilities, especially since certain freedoms sometime have to be foregone to meet the obligations, which implies forms of prospective responsibility (ex-ante, before the action) on which A. Sen does not expand. Yet these forms are entirely consistent with the above-described processes of agency, whether individual or collective.

Social actor. The concept of social actor expands on and transcends the concepts of the individual (focused on rationality) and economic agent (focused on effectiveness). A social actor’s integration into a social network enables that actor to act in a ‘reasonable’ manner to achieve common, shared goals. This gives rise to a certain amount of retrospective responsibility (ex-post, after the action) for actions taken. The term ‘agent’ also often covers the concept of social actor. The term can be extended to groups and institutions that are active at the social level such as associations, unions and local government.

Solidarity Economy. This is an alternative movement of the real economy, which is formally based on the social economy (comprising cooperatives, associations, foundations, unions, etc.), but is ethically guided by three justice criteria: responsible freedom, equity in reducing inequalities and recognition of differences in solidarity. By placing the emphasis on people’s responsible choices and alternatives, the solidarity economy echoes the capability approach, which then finds a field of application in the solidarity economy provided it incorporates prospective responsibility (ex-ante) and agency or collective action.

The Individual. This concerns, by definition, the individual of orthodox microeconomics, for whom autonomy expresses independence from others and whose rationality consists of maximising his or her satisfaction or interest. The subject of A. Sen’s analyses evolves from his first studies on social choice with

their focus on the individual to a focus on the agent, with different definitions of autonomy and rationality, to overcome the overly restrictive characteristics of the microeconomic individual.

The Person. The concept of the person extends and transcends the concepts of economic agent and social actor. Only the person is capable of assigning, out of commitment or a desire for self-improvement, personal ex-ante responsibility for the other or for the environment. This responsibility could lead to the person, for the sake of the other, to voluntarily accept a reduction in his or her freedom or, more generally, the non-use of his or her capabilities. A. Sen uses the term ‘person’ increasingly frequently in his recent work without giving a precise anthropological definition for the term that would ascribe the person this corresponding level of responsibility. Philosopher P. Ricoeur, in his work on the phenomenology of the person, advocates considering the person as responsible.

Utilitarianism. This school of philosophical and ethical thought places the emphasis on the search for happiness and overall well-being. In economic terms, it consists of seeking to maximise satisfaction by means of consumption. A. Sen defines it as having three pillars: an individual utilities (or satisfactions) rationale, sum-ranking of these utilities, and measurement of the consequences of actions taken in terms of their utility. The first pillar is characteristic of ‘welfarism’ and the third of ‘consequentialism’. A. Sen is not concerned with utilitarianism as utilities-based reasoning, since he gives precedence to capabilities.

Vulnerability. An agent is vulnerable when s/he risks a loss of well-being following an unforeseen adverse event such as job loss, a rise in prices or a natural disaster. This can lead to subsequent shocks and corresponding breaks such as falling into a poverty trap or having to migrate. This vulnerability is associated with the person’s own characteristics (gender, age, disability, status, etc.), but also the environment (housing, place, period, etc.). An agent’s capacity to recover is increased by the reinforcement of certain capabilities and the combination or substitution of others, facilitating resilience to such situations.

Appendix 2: List of RE-InVEST countries, target groups, main areas and priority topics for vulnerability

	Country/area	Study area	Target groups of vulnerable people	Main subject addressed
1	England	Liverpool	Mental healthcare users	Health
2	Latvia	Jelgava, near Riga	Women with disabilities	Health
3	Ireland	Small Irish town, and two towns outside of Dublin	Homeless people	Housing
4	France	Aubervilliers (Paris area) and north-eastern district of Paris	African immigrant women living in Paris suburbs	Migration
5	Germany	German federal state of Hessen	Long-term unemployed	Employment
6	Belgium	Flanders region	Newly arrived immigrants	Migration
7	Scotland	Glasgow	Lone parents in financial difficulty	Poverty
8	Switzerland	Geneva	Early school leavers	Education
9	Italy	Piedmont region	People with health problems	Health
10	Netherlands	Rotterdam	Households in financial difficulty	Poverty
11	Austria	Salzburg	Older job seekers	Employment
12	Portugal	Urban area of S. João da Madeira, Aveiro district	Young unemployed people	Employment
13	Romania	Berbesti and Dumitresti	Romanian diaspora (Romanians with a history of migration)	Migration

Main cross-cutting subjects in the national reports:

The vulnerable participants in different focus groups listed the main following dimensions (or key words), related to individual and collective capabilities, and to human rights:

- Healthcare (a precondition for everything else), both mental and physical, medical care provision, disabilities, mental health and suicide, depression, mental distress, anxiety, stress, pressure, psychological restraints, addictions.
- Adequate housing, housing conditions, social housing, difficulty paying the rent.
- Inadequate food, emergency food assistance, food poverty.
- Educational and cultural needs, opportunity to study, human capital, low qualifications.
- Labour market opportunities, employment with quality jobs, decent work, job security, income security, financial and material security, financial freedom, family income, temporary contracts, precarious jobs, difficulty entering the labour market, long-term unemployment.
- Social and economic crisis, austerity measures, low income, erosion of social rights, risk of poverty, payment difficulties, vicious circles, social isolation, worsening living conditions, difficulty making long-term plans, uncertainty, lack of individual assistance, lack of information, fragility.
- Family, children, friends, neighbourhood, gender relationships, partnership, solidarity, social network, social environment, local communities, informal networks, civil society.
- Quality of life, progress in life, satisfaction, well-being, stability, success, human dignity, opportunity to be oneself and live one's own life, freedom of choice for a decent life, leisure.
- Access to service provision, social organisations and public services, civic participation, participation in society, inclusion, social justice.
- Loss of social and societal recognition, lack of social protection, social stigma, discrimination, stereotypes, change in attitudes, feelings of unfairness and widening of inequalities, sense of insecurity, resentment, anger, frustration, pessimism, autonomy constraints, reduction of personal initiatives.
- Political climate, social climate, fearful atmosphere, distrust in politicians and political institutions.
- Questions of migration and integration, mobility, refugees' rights.

RE-InVEST - Rebuilding an Inclusive, Value-based Europe of Solidarity and Trust through Social Investments

In 2013, in response to rising inequalities, poverty and distrust in the EU, the European Commission launched a major endeavour to rebalance economic and social policies with the Social Investment Package (SIP). The purpose of RE-InVEST is to strengthen the philosophical, institutional and empirical underpinnings of the SIP, based on social investment in human rights and capabilities. Our consortium is embedded in the 'Alliances to Fight Poverty'. We actively engage with European citizens severely affected by the crisis to co-construct a more powerful and effective social investment agenda with policy recommendations.

<http://www.re-invest.eu/>

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Loughborough University • United Kingdom
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UNIGE • Université de Genève • Switzerland
RSU • Rigas Stradina Universitate • Latvia
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EAPN Portugal • Rede Europeia Anti Pobreza Portugal Associacao • Portugal
Fundatia TON • Fundatia the Open Network for Community Development • Romania
The Poverty Alliance • United Kingdom
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