



VIRTUAL CENTRE OF EXCELLENCE FOR RESEARCH SUPPORT AND COORDINATION ON SOCIETAL SECURITY

D3.1 METHODOLOGY WORKSHOP AND REVIEW OF AVAILABLE EMPIRICAL SOURCES

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 313288.



01.01.2014
31.12.2018

info@societalsecurity.net

Coordinator:
PRIO



www.societalsecurity.net



D3.1 Methodology workshop and review of available empirical sources

Abstract: Deliverable 3.1 is a report on stocktaking of existing survey results. It has the function to deal with the main question of how to assess societal security by reviewing available empirical knowledge on perceptions of security in society.

Contractual delivery date: 30 April 2014 (M4)

Actual delivery date: 26 June 2014 (M6)

Version: 1

Total Number of pages: 45

Authors: Reinhard Kreissl, Alexander Neumann, Meropi Tzanetakis (IRKS), Mirjam Huis in 't Veld, Geerte Paradies (TNO), E. Anders Eriksson, Misse Wester (FOI)

Reviewers: J. Peter Burgess, Anne Duquenne (PRIO)

Dissemination level: PU



Contents

Introduction.....	1
1. What is societal security?	2
2. How to assess societal security? Relevant proxy indicators for societal security	5
2.1 Gini index.....	11
2.1.1 Methodology	11
2.1.2 Main findings	12
2.1.3 Limitations	14
2.1.4 Some lessons learned.....	14
2.2 Happiness Research.....	15
2.2.1 Methodology	15
2.2.2 Main findings	15
2.2.3 Limitations	17
2.2.4 Some lessons learned.....	17
2.3 Statistics on Crime and criminal justice.....	18
2.3.1 Methodology	18
2.3.2 Main findings	19
2.3.3 Limitations	23
2.3.4 Some lessons learned.....	23
2.4 Statistics on Income and Living Conditions	24
2.4.1 Methodology	24
2.4.2 Main findings	25
2.4.3 Limitations	26
2.4.4 Some lessons learned.....	27
2.5 Special Eurobarometer: Internal Security	27
2.5.1 Methodology	28
2.5.2 Main findings	28
2.5.3 Limitations	31
2.5.4 Some lessons learned.....	31
3. Measuring Societal Security in the context of quantitative Europe-wide surveys	33
3.1 Results on measuring Security in the Eurobarometer (EB)	33
3.1.1 Methodology and sample.....	33
3.1.2 Main results	33



3.1.3 Societal issues highlighted in the survey 34

3.1.4 Screening of indicators that are useful to operationalize societal security 34

3.2 Results on measuring Security in the European Social Survey (ESS)..... 37

3.2.1 Methodology and sample..... 37

3.2.2 Main results 39

3.2.3 Societal issues highlighted in the survey..... 40

5. Summary and outlook 42

6. References 44



Introduction

The following D3.1 report has the function to deal with the main question of how to assess societal security by reviewing available empirical knowledge on perceptions of security in society. At the same time, the D3.1 report represents the first phase in a three-step research approach heading for the aim of WP3, which is to generate an annual societal security report that will provide the SOURCE Network of Excellence with empirical data and insights on perceptions of societal security. This report is based on a methodology workshop that took place on 21 March 2014 in Vienna at IRKS-Research, Museumstrasse 5/12. This methodology workshop investigated and compared strengths and weaknesses of existing quantitative research results on societal security, in particular the Eurobarometer (EB) and the European Social Survey (ESS). Furthermore, launching a general survey of public perceptions of security and insecurity in European society would go beyond the scope of the SOURCE project due to limited financial resources. Instead, the idea of identifying and using proxy indicators was developed in order to give indications of societal security indirectly. Such proxy indicators are capable of capturing variations in understandings of what societal security means across different sectors of society.

The report starts with a historical overview of societal security in order to better understand the overall concept. Chapter two operationalizes the concept of societal security by transferring seven dimensions of societal security into possible proxy indicators. Therefore, this report provides five proxy indicators for societal security by way of examples, which are theoretically sampled according to seven dimensions of societal security: the Gini Index of the equalised disposable income, happiness research – in particular the youth-unemployment rate, statistics on crime and criminal justice – notably homicide rate and prison population, statistics on income and living conditions – especially at-risk-of-poverty-rate, and the Special Eurobarometer on Internal Security – notably poverty, terrorism and the economic and financial crises. Chapter three analyses strengths and weaknesses of two major European surveys – the Eurobarometer (EB) and the European Social Survey (ESS) – and identifies variables that can be used as proxy indicators for societal security. Chapter four involves an analysis of the most important surveys and studies relating to societal security in Austria, the Netherlands and Sweden – which are the countries mainly involved in WP3 of the SOURCE project. The report concludes in chapter five with a summary of this report and relates the D3.1 report to the overall multidimensional and qualitative research approach of WP3.



1. What is societal security?

To understand the concept of *societal* security one has to briefly dive into the history of the concept of security. The SOURCE inception report (D1.1) defines societal security as: “the ability of society to sustain its primary functions and to preserve its essential character under changing conditions and possible or actual threats” (free after Buzan et al. 1998: 119-123). By ‘society’ we mean not only the physical gathering of individuals, but also the organic, dynamic, collective support not only of life understood as existence, but life understood as meaningful existence. Experience and research of the last decade has suggested that security depends not only on physical protection from harm, but also on the actual resilience of social structures, organizations institutions, large and small, formal and informal. This encompasses the material aspects of life such as physical protection, shelter, food and subsistence. However, societal security comprises not only the material aspects of life, but also depends upon complex moral and social aspects such as confidence, trust, belonging, and loyalty. All of these contribute in an increasingly prominent way to the well-being of people in a wide range of different social settings. Thus while assuring societal security means protection from crises caused by intentional and unintentional human acts, natural hazards and technical failures, this protection depends heavily on the cultural and even moral facility of people.

‘Societal security’ is in this sense to be distinguished from the concept of ‘social security’ as it emerged in association with a variety of welfare state arrangements in the post-World War II period. These arrangements concern primarily varieties of social insurance aimed to improve the well-being of individuals in society through state-supported programmes of poverty reduction, retirement pensions, disability insurance, survivor benefits and unemployment insurance. ‘Societal security’ differs in two fundamental ways from ‘social security’. First, whereas social security takes ‘society’ as a given, aiming to enhance the well-being of individuals with a social setting, ‘societal security’ also brings the question of what constitutes a society into question. Thus, on the one hand, it forms the basis for research on the way that society is internally differentiated along non-class lines relative to the threats. On the other hand, it opens for research on the way that actors outside a given societal framework interact with actors inside it along differentiated lines and according to varying modalities.

In this respect, societal security means the security of societal sources of human well-being in general, and the societal sources of individual security in particular. It overlaps but is not identical with the notions of social security, state security and human security, and fills a void in the literature on security. Domestic and transnational (e.g. EU) security policies are often presented in terms of societal security; they are concerned with (1) the protection of critical infrastructure that the basic functioning of society relies upon (i.e. the security of structural conditions for meaningful/valued existence), and (2) with improving collective security systems for the protection of individuals and groups against specified threats (i.e. societal sources of individual security). These threats include major environmental and man-made hazards that cannot be addressed on an individual basis, and that fall outside the scope of traditional modes of state security, like the military and police (upholding essential state institutions).

Following this argumentation SOURCE defines security not only as a primarily national or territorial concept, although the Hobbesian model is still a common used model to understand and describe security as the duty of the state – as the nation is still the most prominent unit of analysis in the



mainstream security discourse¹. From the origins in early Hobbesian state theory security was one of the main provisions of the state. Protecting life and property of citizens was the justification of modern statehood. State authorities were guaranteeing internal peace through law enforcement and police and protection against external enemies through the military. Over time the semantics and focus of security shifted. With the internal pacification of modern Western societies security was increasingly spelt out as social security, provided through the institutions of the welfare state. Risks emerging from the labour market in the capitalist economy became the target of securitizing measures. Unemployment benefits and health insurance were two of the main pillars of security. At the same time the discourse about external security evolved with the changes of the global order but remained largely focused on the balance of military power between nation states, theorized in political science under the heading of international relations (IR). Questions of policing and crime developed a distinct discourse in criminology. So in a broad sense we can distinguish three main objects of security threats in modern societies: external threats, economic threats and threats emanating from criminal acts. Each domain comes with its own discourses and institutional arrangements. This scenario describes the situation until the late 20th century.

What has happened over the last decades is the emergence of new threats, discourses and a blurring of boundaries between the different domains. At the discursive level we see the emergence of securitization² as a theoretical framework, supplementing traditional IR. The basic idea of securitization is that every policy domain can be transformed into a security problem by changing the dominant discourse so that migration, health or technology development can become securitized. Along with these securitizing moves in political and academic discourses we see the emergence of new security threats primarily in the domain of environmental issues and climate change but also the vulnerability of complex interconnected techno-infrastructures of society are perceived as sources for new security threats. The most prominent case for the blurring of boundaries between the formerly entrenched security domains can be found in the new wars such as the war against terror proclaimed by the US administration after the attack of 9/11 where police and military actions intermingle creating an awkward situation not only from a legal and constitutional perspective. So what we find at the turn of the millennium is an amalgamation of traditionally distinct security domains merging with new threats all united under the overarching discursive frame of the global risk society³. What has been observed is a new culture of fear⁴. Putting this situation into historical perspective with the idea of a civil society at the level of the nation state that stood at the beginning of modern security discourse the difference becomes obvious: while civil society was perceived as a self-reproducing social arrangement protecting itself against more or less clearly defined threats through stable institutional arrangements, present-day societies are seen as complex, vulnerable, interconnected systems requiring constant monitoring in a permanent pre-emptive alertness to be prepared for worst case security threats. Against this

¹ The ETTIS (FP-7) project analysed official national policy documents on security and came to the conclusion that national security is the most prominent category in the security discourse. More on that can be found in the ETTIS report on the Conceptual foundations of security

² Buzan, B., Wæver, O. & de Wilde, J. (1998): *Security. A New Framework For Analysis*. Boulder/Col.: Lynne Rienner.

³ Beck, U. (1992): *Risk Society. Towards a New Modernity*, Sage Publications: London.

⁴ Glaeßner, G.-J. (2010): *Die Innen- und Rechtspolitik der Großen Koalition*. In: S. Bukow & W. Seemann (Eds.): *Die Große Koalition. Regierung – Politik – Parteien 2005-2009*, VS: Wiesbaden, pp. 174-190.



background critical observers see the development of a security-industrial-political complex⁵ taking civil society hostage. With risk and security as dominant frames for societal self-description the idea of societal security has become common coinage in academic and political debate. There are two readings of this concept that could be called paternalistic and reflexive, each suggesting a specific overall strategic approach. Whereas the paternalistic approach is state-centred, expert-driven and focussing on surveillance as the dominant mode to secure security, the reflexive reading of societal security goes beyond that by perceiving of security as a public good covering more than crisis management and protection against pre-defined threats from predators and vulnerable infrastructures.⁶

This re-focusing has a substantial and a procedural aspect. Substantially new dimensions come into the focus from securing individual well-being and social justice to securing the rights of minorities. Procedurally the idea of societal security puts more emphasis on bottom-up processes and stresses the idea of empowerment. Security is not seen as the domain of security experts but as a topic of general public interest requiring a broad involvement of the citizens. In an ideal situation the strategy of societal security brings security about as a by-product of comprehensive policies providing for individual well-being and living conditions. This may sound a bit abstract, but such an approach has the advantage of not falling prey to the paradox and self-defeating feedback processes of the paternalistic reading. Defining the realm of the social as object of surveillance based security policies in many cases increases perceived insecurity, while at the same time the gain in objective security these policies can achieve is not always clear. Pursuing the idea of societal security on the other hand the distinction between perceived and objective security loses its grip, since security in the complex reading of societal well-being and securing the living conditions of citizens in a more comprehensive way entails both: a higher level of security perceived and at the same time a higher level of (individual, communal and societal) resilience and a lower risk for many man-made or socially produced security problems.

⁵ Hayes, Ben (2009): NeoConOpticon: The EU Security-Industrial Complex, TNI/Statewatch. www.statewatch.org/analyses/neoconopticon-report.pdf

⁶ United Nations Development Programme (1994): Human Development Report 1994, Oxford University Press: New York.

2. How to assess societal security? Relevant proxy indicators for societal security

The fundamental question this D3.1 report is addressing is how to assess societal security. Therefore, launching a general survey of public perceptions of security and insecurity in European society would go beyond the scope of the SOURCE project due to limited financial resources. Instead of that, the idea of identifying and using proxy indicators was developed at the methodology workshop in Vienna in order to give indications of societal security indirectly. Such proxy indicators are capable of capturing variations in understandings of what societal security means across different sectors of society. Traditionally, security in empirical research is defined and measured along the subjective (feelings, cultural and social values) and objective (actual threats, harms, etc.) dimension of security. As societal security refers to a broader concept, more aspects have to be considered when trying to measure societal security. However, the concept of societal security will be operationalized by transferring seven dimensions of societal security into possible proxy indicators. The theoretical sampling of the proxy indicators that are going to be applied in the upcoming annual societal security reports (D3.4) is based on the findings of the ETIS (European security trends and threats in society) project⁷. Although there are diverse dimensions of societal security because of divergence understandings of societal security between different sectors, a selection of seven dimensions will be presented in the following as a limited picture of aspects of security that are included in various academic and official debates about security.



Graphic 1: The 7 Dimensions of Societal Security

⁷ Sweijjs, Tim (2012): ETIS – European security trends and threats in society - Project, D1.1 Conceptual foundations of security, Seventh Framework Programme European Union, 30.06.2012, http://ettis-project.eu/wp-content/uploads/2012/03/D1_11.pdf



Graphic 1 provides an overview on the seven dimensions of societal security that are going to be addressed in the upcoming SOURCE Societal Security Survey. Whilst physical security and political security, the first two conceptual dimensions that will be later applied in operationalising the concept of societal security for empirical research purposes in this part of the SOURCE network, are also key dimensions of the mainstream understanding of national security, societal security as pointed out is a much broader concept. Therefore the seven dimensions⁸ of societal security developed by the ETTIS project are the starting point for our empirical analysis of societal security. The seven dimensions provide a theoretical frame to will allow the SOURCE network team to cover various factors that are required to develop an empirical assessment of what societal security is. The research strategy that will outline this approach is part of the next deliverable D3.2 in this work package.

1) Physical security

Physical security refers to the integrity of human beings in their physical aspect. It implies the safeguarding of human bodies against physical harm that may result from attacks, threats or hazards. Threats against physical objects such as critical infrastructures are also often mentioned in this category.

2) Political security

Traditionally political security refers to the political robustness of states and the institutionalized rights they embody. Safeguarding political security involves confronting threats related to weak states, political failures and the misuses of political power that can have negative effects on the individuals living in a certain political system. The political dimension is also covers the sphere of the written law (national law and human rights) as the written law should protect citizens from the described threats.

3) Socio-economic security

Socio-economic security refers to protection against threats caused by the growing economic disparities the European society as well as the global financial crises are main problems in contemporary Europe. Fiscal and financial instability of member states resulting in rising unemployment rates in certain regions of Europe are major threats to societal security.

4) Cultural security

Buzan, Waeber and De Wilde defined societal security as the ability of a society to persist in its essential character under changing conditions and possible or actual threats. Society is understood not only as the physical gathering of individuals, but also the organic, dynamic and collective life of a community. This in the context of the SOURCE, society network as a set of values, customs, traditions and shared experiences of a community, in short, culture. Therefore aspects like citizen's diverse cultural identity and corporate values, though difficult to measure, will be identified as proxy indicators for societal security.

5) Environmental Security

⁸ Sweijts, Tim (2012): ETTIS Project – European security trends and threats in society, 1.2. *A Working Definition of Societal Security*, Seventh Framework Programme European Union, 30.11.2012, available at: http://ettis-project.eu/wp-content/uploads/2012/03/D1_2.pdf



Ulrich Beck's work on the 'risk society' spurred the popular discourse on the growing environmental concerns during the 1980s and 1990s after the Chernobyl incident. Under the dimension environmental security manufactured risks⁹ like the Chernobyl disaster in 1986, are covered alongside climate change and the environmental and human disasters that it may imply (adverse weather, flooding, draught, etc.).

6) Cyber Security

The integrity of computer networks and the government and commerce activities they support, in addition to the protection of personal data are the main (perceived) risks covered in this dimensions of societal security. Cyber security also concerns the increasing use of cyber surveillance tools.

7) Radical uncertainty

The last dimension covers exceptional and rare violence and threats and therefore cause radical uncertainties like natural hazards, pandemics but also terrorist attacks. However, both dimensions of societal security environmental and radical uncertainty security are dealing with natural disasters. There is a strong interdependency between pandemics and avalanches as examples for phenomena of uncertainty security and climate change and human disasters as examples for environmental security.

Resilience and societal security

Another important aspect that is taken into account is the concept of resilience. There are many definitions of resilience and the term is used differently in different domains. The standard definition of resilience refers to the ability of a system to cope with stress or a shock. In psychology resilience is often described as the ability of individuals to adapt to stress and adversity. In economy on the other hand resilience is sometimes defined as the ability of a business model and of business strategies to reinvent them dynamically as soon as circumstances changes. Gary Hamel coined the term "strategic resilience"¹⁰ as the ability to dynamically adopt to new circumstances and not only to a onetime crisis. For SOURCE and the understanding of societal security resilience will be used in the sociological as well as in the psychological sense as the ability of either social systems or individuals to cope with stress or a shock.

Proxy indicators for assessing societal security

As a next step, the concept of societal security will be operationalized by transferring these seven dimensions of societal security previously outlined into possible proxy indicators. Such proxy indicators are capable of capturing variations in understandings of what societal security means across different sectors of society. Therefore, this D3.1 report identifies five proxy indicators for societal security by way of examples and without a claim for completeness. Since the seven dimensions of societal security are

⁹ Giddens, Anthony (1999): Risk and Responsibility, The Modern Law Review Vol 62.

¹⁰ Adey, Paul and Ben Anderson (2012): Anticipating emergencies: Technologies of preparedness and the matter of security. *Security Dialogue* 43(2): 99-117. Barnard-Wills, David and Charles Moore (2010): The terrorism of the other: towards a contrapuntal reading of terrorism in India. *Critical Studies on Terrorism* 3: 383-402. Chandler, David (2012): Resilience and human security: The post-interventionist paradigm. *Security Dialogue* 43(3): 213-229. Scheffran, Jeff. (2012): Climate change, human security and violent conflict challenges for societal stability. *Hexagon series on human and environmental security and peace*. Berlin/New York, Springer. Webster, William. et al. (2013) Increasing Resilience in Surveillance Societies - The Social Perspective, IRISS project. Hamel, Gary, and Liisa Välikangas (2003): The Quest for Resilience. *Harvard Business Review*, September 2003, p. 3.



not representing closed concepts and since there are interdependencies between some of these dimensions (e.g., between environmental and radical uncertainty security), there are many assignment options for the different security dimensions previously outlined. For this reason the D3.1 report will present one assignment possibility exemplarily (see table 1a), while D3.2 will decide which the most robust proxy indicators are and integrate them into the multidimensional and qualitative research approach. However, by selecting these five proxy indicators in particular, these do not represent the five best nor are they the only proxy indicators for societal security available. It is rather a selection to capture variations of perceptions and to broaden the scope. The overall concept of this multidimensional empirical approach is to assess changes in societal security over time and between different societies as well as between different countries. Therefore, the SOURCE Societal Security Survey aims to develop a qualitative research approach and address experts for the different proxy indicators that should allow us to get a broader understanding of the different perceptions of societal security that are existing (for further information see chapter 5).

An exemplarily set of proxy indicators for perceptions of societal security and insecurity will be presented in the following (presented in table 1b), to assess seven dimension of societal security as described above in a quantitative way. The **GINI index** measures the degree of inequality in the distribution of income among individuals or households in a country (World Bank); **happiness research** in economics shows that subjective well-being is a far better measure of individual welfare and is therefore focusing on determinants such as income, employment, social capital and health (Happiness Research according to Frey); **statistics on crime and criminal justice**: relevant proxy indicators for societal security are crimes recorded by the police like homicide rate and prison population (Eurostat); **statistics on Income and living conditions**: of particular interest are variables on income, poverty, social exclusion, housing, labour, education and health (Eurostat); special **Eurobarometer** survey on internal security: of particular interest are public perceptions of the challenges to peace and security in the European Union (Eurobarometer). Quantitative data will be presented for each proxy indicator for Austria, the Netherlands and Sweden, because these are the countries mainly involved in WP3 of the SOURCE project (according to the SOURCE DoW). Additionally, it was agreed at the SOURCE Steering Committee on April 7, 2014 to add an in-depth case study on Greece to also cover southern Europe in the annual societal security reports (D2.4). Covering one southern European Member State is relevant for the aim of WP3, because many of their citizens are facing the consequences of the financial and economic crises in a different manner than the citizens in Austria, the Netherlands and Sweden, which are more or less 'old welfare states'. To sum up, data will be presented in the following for Austria, the Netherlands, Sweden and Greece to capture variations in perceptions of societal security and insecurity.

For operationalising the concept of societal security, its dimensions can be transferred into possible proxy indicators for capturing perceptions of societal security and insecurity as the following (see table 1a and 1b): In the field of physical security one possible threat amongst others that is addressed is the homicide rate as recorded by the police. In the field of cultural security one possible threat lies in the at-risk-of-poverty rate. In the field of socio-economic security, the degree of inequality in the distribution of income among households is addressed. In the field of political security, one threat addressed is the youth unemployment rate. In the field of environmental security one thread being addressed is the degree of public perceptions of environmental issues as a challenge to peace and security in the European Union. The field of cyber security is addressed by the degree of publically perceiving's of

cybercrime as a key challenge to national security. In the field of radical uncertainty security one threat lies in the degree of perceiving terrorism as an important challenge to national security. Furthermore, for each of the proxy indicators related to one dimension of societal security exemplarily, table 1b provides quantitative data for Austria, the Netherlands, Sweden and Greece to visualise differences between these countries on one spot. Giving one example, while the average youth unemployment rate for Austria, the Netherlands and Sweden is more or less below the EU-27 average (23,2 %), Greece is a massive outlier in this respect with an unemployment rate of 58,6 %. This means, for example, that every second person aged between 15 to 24 living in Greece was unemployed in 2013 and due to the financial and economic crisis this country is facing, the prospect of finding a job is very low. In this respect, such a high youth unemployment rate represents a threat to social cohesion and political stability.

Table 1a: Bringing together the 7 dimensions of societal security with the proxy indicators for societal security

7 dimensions of societal security	Proxy indicators for societal security
1) Physical security (e.g., borders, educational infrastructure, health, one`s own body)	Crime and Criminal Justice: Homicide rate
2) Political security (e.g., absence of threats to discrimination)	Economic happiness research: Youth unemployment rate
3) Socio-economic security (e.g., employment, income, long-term societal welfare)	GINI coefficient: Income inequality
4) Cultural security (e.g., ways of living together with value systems, traditions and beliefs)	Income and Living Conditions: At-risk-of-poverty rate
5) Environmental security (e.g., environmental dangers)	EB on Internal Security: Environmental issues
6) Cyber security (e.g., protect information and information systems)	EB on Internal Security: Cybercrime
7) Radical uncertainty security (e.g., safety from exceptional and rare violence and threats)	EB on Internal Security: Terrorism

Table 1b: Proxy indicators for perceptions of societal security and insecurity

Dimension of societal security	Physical security	Cultural security	Socio-economic security	Political security	Environmental security	Cyber security	Radical uncertainty security
Proxy indicator	Crime and Criminal Justice	Income and Living Conditions	GINI coefficient	Economic happiness research	EB on Internal Security	EB on Internal Security	EB on Internal Security
Database	Homicide per 100.000 inhabitants, average per year 2008-2010 (source: Eurostat)	At-risk-of-poverty rate, percentage of total population, 2012 (source: Eurostat)	Gini coefficient of equivalised disposable income, 2012 (source: Eurostat)	Youth-unemployment rate, annual average, as a percentage, 2013 (source: Eurostat)	Perceptions of Environmental issues to national security, 2011 (Source: Eurobarometer)	Perceptions of Cybercrime as challenge to national security, 2011 (Source: Eurobarometer)	Perceptions of Terrorism as challenge to national security, 2011 (Source: Eurobarometer)
AUT	0,58	24 %	27,6	9,2 %	21 %	16 %	11 %
SWE	0,94	15 %	24,8	23,4 %	21 %	6 %	30 %
NED	0,91	18 %	25,4	11,0 %	20 %	22 %	26 %
GRE	1,36	15 %	34,3	58,6 %	7 %	2 %	7 %
EU-27		16 %	30,6	23,2 %	11 %	10 %	25 %



Relevant proxy indicators for societal security are:

2.1 Gini index

The Gini index or Gini coefficient is a statistical measure introduced by the Italian statistician Corrado Gini in 1912.¹¹ The Gini coefficient is the most commonly used instrument for measuring **inequality in distributions of income**. Milanovic is referring to eight original sources, each of them calculating a Gini index based on actual household surveys.¹² However, for the purpose of this report D3.1 is focussing on two different organisations that are providing databases and calculating the Gini index for European countries. Firstly, the Gini coefficient is estimated within the Poverty and Inequality Database by the World Bank's Development Research Group.¹³ Secondly, other databases are Eurostat's EU-Statistics on Income and Living Conditions (EU-SILC) and, in particular, the Gini coefficient of equivalised disposable income.¹⁴ "The equivalised disposable income is the total income of a household, after tax and other deductions that is available for spending or saving, divided by the number of household members converted into equalised adults".¹⁵ Both organisations report similar Gini coefficients for European countries with minor differences. Although, more recent values are available from EU-SILC data, e.g., the latest Gini coefficient the World Bank is indicating for Austria is from 2000¹⁶, while the latest Gini coefficient EU-SILC is indicating for Austria is from 2012¹⁷.

2.1.1 Methodology

The World Bank's data are based on nationally representative household surveys, which were conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical agencies and World Bank Research Group country departments. For these surveys, randomly sampled households were interviewed.¹⁸ Data for upper- and middle-income countries are from the Luxembourg Income Study (LIS) database, which is a comparative database of disposable household income for 47 countries worldwide. Most household surveys are conducted annually by national statistical offices with varying sample sizes (across county and across survey year, e.g., the Austrian survey sample in 2000 consisted of 2544 households while in 2005 16,000 households were interviewed in Austria) and are

¹¹ Gini C. (1912): Variabilità e mutabilità: contributo allo studio delle distribuzioni e delle relazioni statistiche. Studi Economico-Giuridici pubblicati per cura della Regia Università di Cagliari.

¹² Milanovic B. (2013): Description of All the Ginis dataset, Summer 2013, World Bank: Washington, DC. <http://go.worldbank.org/9VCQW66LA0>

¹³ World Bank: GINI index, survey year 1980-2013. <http://data.worldbank.org/indicator/SI.POV.GINI>

¹⁴ Eurostat: Gini coefficient of equivalised disposable income, SILC, survey year 1995-2013. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12&lang=en

¹⁵ Eurostat: Glossary: Equivalised disposable income. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Equivalised_disposable_income

¹⁶ World Bank: GINI index, survey year 1980-2013. <http://data.worldbank.org/indicator/SI.POV.GINI>

¹⁷ Eurostat: Gini coefficient of equivalised disposable income, SILC, survey year 1995-2013. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12&lang=en

¹⁸ World Bank (2013): PovcalNet: an online poverty analysis tool. last updated 18.4.2013. <http://iresearch.worldbank.org/PovcalNet/index.htm>



harmonised for cross-national comparison by LIS.¹⁹ More information regarding the methodology can be found on World Bank's PovcalNet tool.²⁰

The EU-SILC on income is based on a nationally representative probability sample of the population living in private households (all persons aged 16 and over) at national level in all EU Member States. The surveys of the EU Member States were conducted by using uniform questionnaires. The datasets are collected from a rotating panel sample, in which each household is surveyed for four consecutive years. Therefore, all private households and all persons aged 16 and more within the household are eligible for the survey. Furthermore, people living in collective households and in institutions (e.g., retirement homes) are excluded from the survey. SILC aggregates two types of annual data: cross-sectional data and longitudinal data. Both dimensions include information on income (and its distribution). For the cross-sectional database minimum samples size of around 131 000 households, or 273 000 individuals aged 16 and more for all EU Member States, were defined. The longitudinal data required a minimum sample of 98 000 households or 204 000 individuals. The actual sample size had to be larger in order to compensate for all kinds of non-response.²¹ A detailed listing of the sample size for each EU Member State is presented in Eurostat's statistical book.²²

2.1.2 Main findings

The Gini index measures the **degree of inequality** via the **income among households** in a country. The Gini coefficient has implications for the economic health of a country. The index scores countries all over the world with a **one-number simplicity** for a versatile subject (income inequality). The Gini coefficient ranges from a minimum value of 0 per cent (all households have equal income) to a maximum value of 100 per cent (all households have completely unequal income).²³ Poorer countries often have less equal distribution of income than do richer countries; however there are also significant regional differences. Moreover, economic growth may lead to better living standards, but if this growth is distributed unequally then relative poverty is increasing.

There is a considerable diversity within the EU in the degree of income inequality: In 2012, the Gini index for the targeted countries of this report are: Greece 34,3%, Austria – 27,6%, Netherlands – 25,4%, Sweden – 24,8% (see table 1C). The ratio for EU-27 is 30,6% in 2012.²⁴ This data indicate that Sweden and the Netherlands are amongst the EU Member States with the highest income equality, while Greece is at the opposite side and amongst the EU-countries with the most unequal distribution of income (see table 1C).

¹⁹ Luxembourg Income Study: Luxembourg Income Study Database. <http://www.lisdatacenter.org/our-data/lis-database/>

²⁰ World Bank (2013): PovcalNet: an online poverty analysis tool. Last updated 18.4.2013. <http://iresearch.worldbank.org/PovcalNet/index.htm>

²¹ Wolff, P., Montaigne, F., González, G. R. (2010): Investing in statistics: EU-SILC, In: Atkinson, A.B., Marlier, E. (Eds.): Income and Living Conditions in Europe, Eurostat statistical books, European Union: Luxembourg, pp.38-55.

²² Ibid., p.45.

²³ World Bank (2012): World Development Indicators 2012. World Bank: Washington, DC, p.77. <http://data.worldbank.org/sites/default/files/wdi-2012-ebook.pdf>

²⁴ Eurostat (2012): Gini coefficient of equivalised disposable income, SILC, online data code: tessi190. <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tessi190>



To conclude, the Gini index is a good starting point or instrument for measuring inequality, indicating the distribution of income with one number per country. However, for understanding the complexity of inequality, more variables and implications are needed (e.g. education, wealth, employment etc.).

Table 1c: Gini coefficient of equivalised disposable income for selected EU Member Countries, 2012²⁵

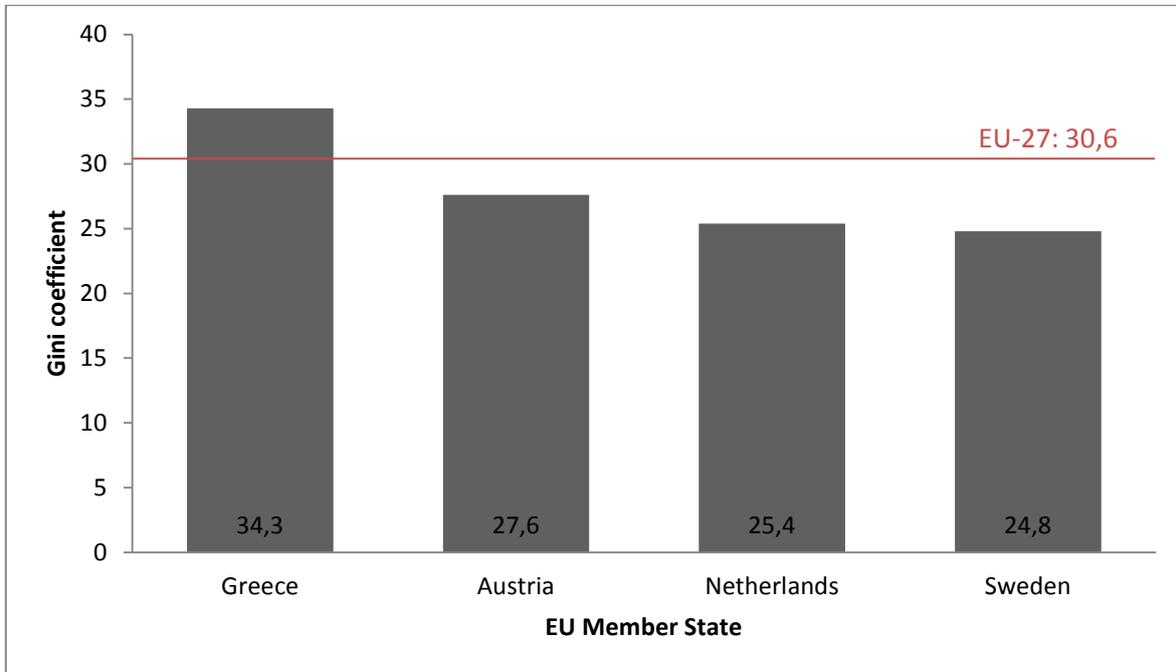
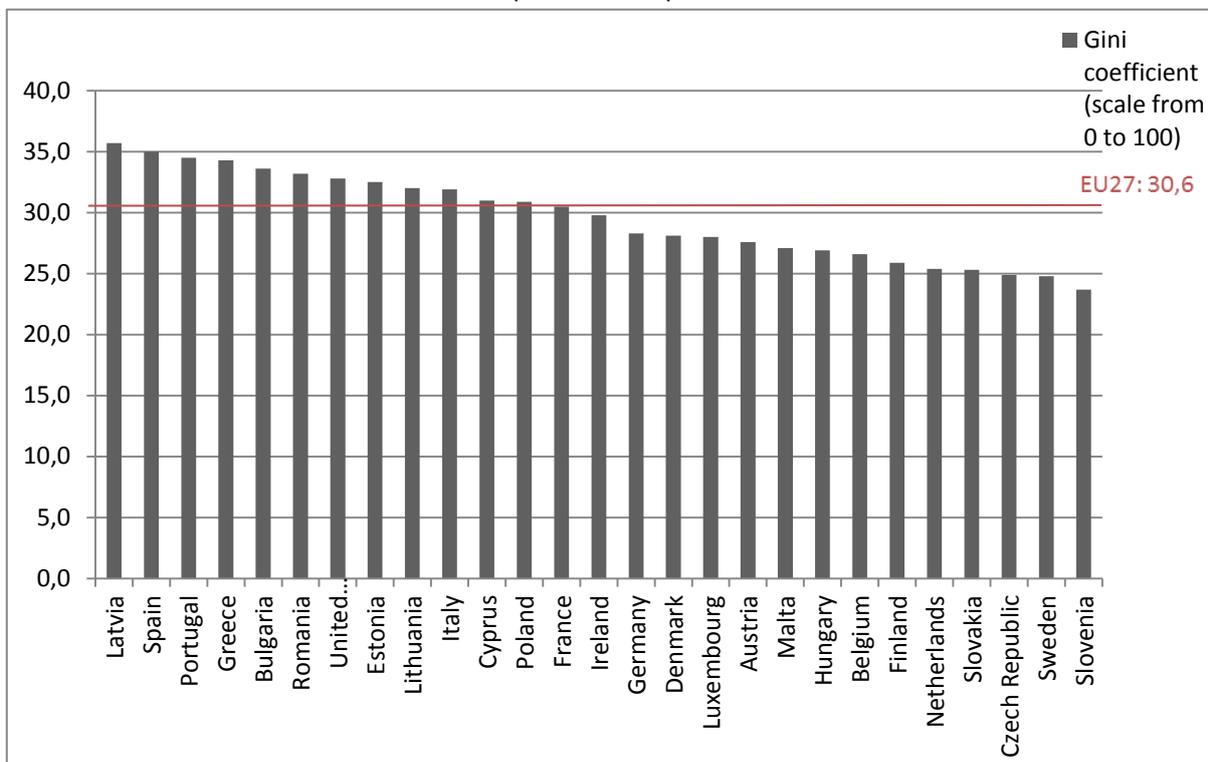


Table 1d: Gini coefficient of equivalised disposable income for EU-27, 2012²⁶



²⁵ Ibid.



2.1.3 Limitations

Generally speaking, cross-country comparisons of inequality generally suffer from problems of poor reliability, lack of coverage and inconsistent methodology. Regarding the latter, the underlying nationally representative household surveys differ in method and type of data collected. Therefore, the **distribution of income or consumption is not strictly comparable across countries**. This challenge is getting smaller as survey methods are improving and becoming more standardized; however maintaining strict comparability across countries is still impossible.²⁷

In addition, surveys can differ whether they **use income or consumption expenditure** as an indicator. The definitions of income used for national surveys differ across countries and the distribution of income is usually more unequal than the distribution of consumption. On the other hand, consumption is typically a better welfare indicator. Furthermore, households differ according to their members and to the extent that income is being shared amongst their members.²⁸ To allow a better comparison, the World Bank uses consumption where possible and Eurostat's EU-SILC uses the equivalised disposable income.

Another limitation is that the Gini index is **not additive across groups**. Therefore, the total Gini of a country cannot be aggregated into a regional Gini, although a Gini index can be computed for the aggregate.²⁹ Furthermore, the Gini coefficient has been criticized because it is a **relative**, not absolute, **measurement of wealth**. While the GINI coefficient for a country is rising (because the inequality of income is increasing), e.g., the number of people in absolute poverty may still be decreasing in the same country.

2.1.4 Some lessons learned

This section is dedicated to elaborating the question what the Gini index means for societal security. Therefore, the Gini coefficient is a proxy indicator for socio-economic security because it addresses the phenomenon of growing economic disparities within societies through measuring inequality in distributions of income in a country. If the economic growth is distributed unequally within a society then the relative poverty is increasing which affects the well-being of citizens negatively. Looking at countries analysed for D3.1 report, Greece has the highest Gini coefficient with 34,3% (also amongst the EU-27 Member States) and therefore the highest inequality in the household income. On the other hand, Austria, the Netherlands and Sweden have comparatively low income disparities (also for EU-27 ratio which is 30,6%). One possible interpretation of this correlation is that socio-economic well-being of people is lower in Greece compared to Austria, the Netherlands and Sweden because of disparities in the distribution of income.

²⁶ Ibid., Remark: Gini coefficient for Ireland was taken for 2011, because for 2012 no data was available.

²⁷ World Bank (2012): World Development Indicators 2012. World Bank: Washington, DC, p.77. <http://data.worldbank.org/sites/default/files/wdi-2012-ebook.pdf>

²⁸ Ibid.

²⁹ World Bank: Measuring Inequality. <http://go.worldbank.org/3SLYUTVY00>



2.2 Happiness Research

For a long time, economics has taken income as a suitable though incomplete proxy for human welfare. Happiness research shows that subjective well-being is a far better measure of individual welfare. Therefore, happiness research in economics explores the determinants of individual well-being. It's starting point is the endeavour to understand the drivers of subjective well-being in order to improve the human lot. The central question of economics is in consequence: How do economic growth, unemployment, inflation, and inequality, as well as institutional factors such as good governance, affect individual well-being? Nevertheless, economic happiness research is not restricted to the influence of economic factors on subjective well-being. Indeed, one of the most important findings has been that non-material aspects of a person's life—in particular, social relations among family members, friends, and neighbours—are important for life satisfaction.³⁰

2.2.1 Methodology

This section is dedicated to how youth unemployment is measured. For the age group 15-24, it is the number of those unemployed divided by the total number of youth people in the labour market (employed and unemployed). Furthermore, the EU Labour Force Survey (EU-LFS) delivers quarterly and annual estimates of unemployment for the European Union, Euro area, EU Member States, Candidate Countries, EFTA Countries (except for Liechtenstein). The EU-LFS results cover the total population usually residing in Member States, except for persons living in collective or institutional households. Eurostat considers the overall accuracy as high. However, data are representative for the population aged 15-74 (16-74 in Iceland, Norway, the United Kingdom, Italy and Spain). Unemployment is an important variable collected by EU-LFS, and therefore the survey design is optimized to measure unemployment. The sampling designs for EU-LFS are chosen on a country by country basis. Most of the National Statistical Institutes employ multi-staged stratified random sample design, especially those that do not have central population registers available.³¹

2.2.2 Main findings

According to Frey, four main factors on the determinants of happiness in economics can be identified: income, employment, social capital and health. Income is the most prominent factor in economic happiness research.³² However, extensive empirical literature has been produced on the relationship between subjective well-being and income. One major result is that richer people, on average, report higher life satisfaction.³³ However, comparing happiness and income between countries shows that income provides individual well-being at low levels of development, but once a

³⁰ Frey, B. S., Stutzer, A. (2012): Recent Developments in the Economics of Happiness: A Selective Overview, IZA Discussion Paper No. 7078, IZA, Bonn.

³¹ Eurostat (2014): Employment and unemployment (Labour Force Survey). Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/employ_esms.htm

³² Ibid.

³³ Frey, B. S., Stutzer, A. (2002): What Can Economists Learn from Happiness Research? In: Journal of Economic Literature, Vol. 40, No.2, p.409.



threshold is reached, the average income level in a country has little effect on average life satisfaction.³⁴

For the purpose of this report D3.1 employment, and here especially unemployment, will be looked in more detail. Therefore, one general finding is that unemployment is systematically related to lower individual well-being than employment. Individual unemployment involves loss of social status, self-esteem, personal relationships and daily time structure. High unemployment rates also have negative effects on people who are not personally affected by unemployment. Furthermore, high unemployment is also related to anticipated economic distress. For example, the probability that an employee loses his or her job increases because of high unemployment rates. Moreover, findings suggest that there is a correlation between job security and subjective well-being.³⁵

These findings lead to effects which are greater when looking at youth-unemployment rates (see table 1e) and taking into account the financial and economic crisis. Therefore, 23,2 % unemployed persons aged between 15 to 24 were living in EU-27 in 2013. The youth-unemployment rate, defined as the percentage of the unemployed people aged 15 to 24 compared to both employed and unemployed in that age group, for EU-27 increased between 2007 and 2013 constantly due to the financial and economic crisis. Although the average youth-unemployment rate in Greece is usually higher than EU-27 average, it increased rapidly from 32,9% in 2010 to 58,6% in 2013 and represents the highest rate for EU-27. The average youth-unemployment rate in the Netherlands is increasing since 2011 (7,6%) and reached 11% in 2013. Austria is following the same trend as the Netherlands with increasing rate since 2011 (8,3%). In 2013, 9,2 % of young people were unemployed in Austria. In contrast to Greece, Austria and the Netherlands are among the countries with the lowest youth-unemployment rate for EU-27 in 2013. While no specific trend can be observed for Sweden, it occupies a middle ranking with 23,4 % of youth-unemployment in 2013.³⁶

The youth unemployment rate reached a new historic high with 23,2 % in 2013 and chances for young people of finding a job are low. This development represents a danger to social cohesion and political stability. Furthermore, youth unemployment leads to a `scarring effect` with being trapped in the lower end of the labour market, lower wages, less long-term employment and lower career prospects and having a high risk of exclusion.³⁷ Therefore, individual well-being is not only lower for unemployed young people but also future prospects are diminishing.

³⁴ Ibid., p.416.

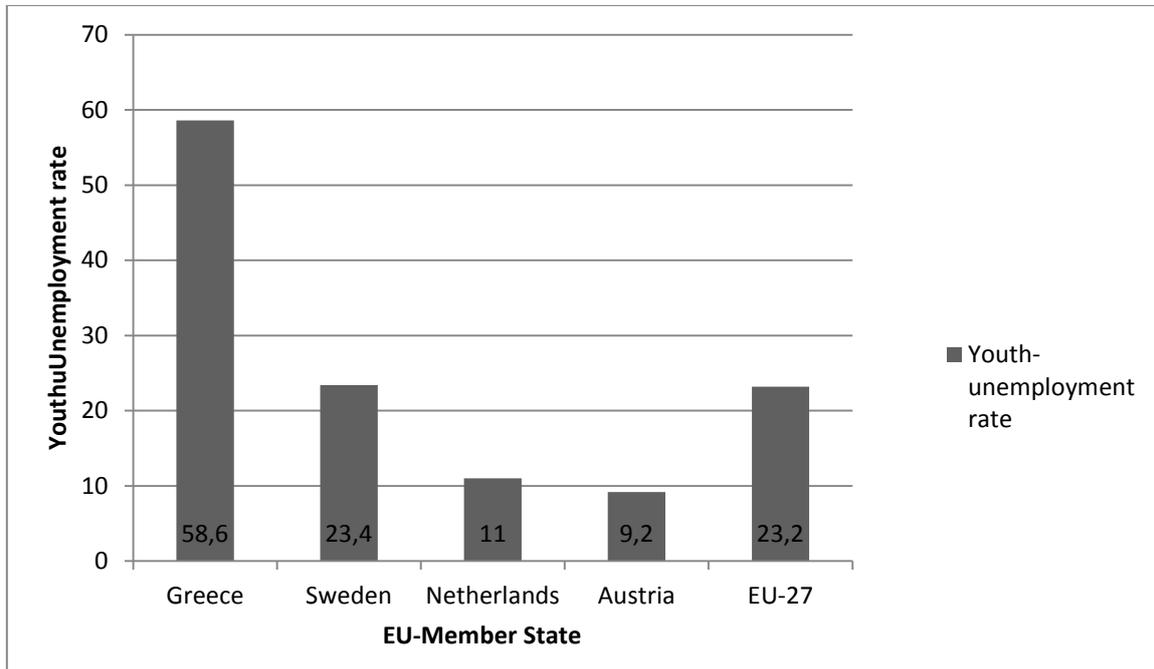
³⁵ Frey, B. S., Stutzer, A. (2012): Recent Developments in the Economics of Happiness: A Selective Overview, IZA Discussion Paper No. 7078, IZA, Bonn.

³⁶ Eurostat: Unemployment rate by sex and age groups - annual average, %, online data code: une_rt_a, 2013. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=une_rt_a&lang=en

³⁷ European Commission: Youth unemployment. http://ec.europa.eu/europe2020/pdf/themes/21_youth_unemployment.pdf



Table 1e: Youth-unemployment rate - annual average, as a percentage, 2013³⁸



2.2.3 Limitations

One limitation of youth unemployment rates is that a large share of people between 15 and 24 are outside the labour market and therefore, youth unemployment rates are generally higher than for overall unemployment rates. In fact, many youths are studying full time or in education and thus are not available for work.

2.2.4 Some lessons learned

This section is dedicated to elaborating the question what economic happiness research means for political security. Therefore, happiness research is about what determines individual well-being. One particular outcome of this research is that happiness is determined by employment and therefore unemployment is systematically related to lower subjective well-being. Moreover, youth-unemployment rate as a determinant of happiness research could be seen as proxy indicator for political security to the extent that unemployment involves loss of social status, self-esteem, personal relationships and daily time structure. In this respect, high youth-unemployment rates lead to lower career prospects of youth as well as concerned adolescents are stuck at the lower end of the labour market with lower wages and less long term employment and low prospects of finding a job at all if the country is affected by the financial and economic crisis (like Greece). Looking at the figures (see table 1e) for average youth-unemployment, Austria, the Netherlands and Sweden are below the EU-27 average (23,2 %), while Greece is a massive outlier in this respect with an unemployment rate of 58,6 %. As a consequence, high youth-unemployment rates can provoke political discontent and may cause political instability because future prospects for those persons aged 15 to 24 are gloomy.

³⁸ Ibid.



Furthermore, high youth unemployment does not contribute to the well-being of people and makes it more difficult to live a life in meaningful existence. In that connection, the foundation of societal security is eroding by high youth unemployment.

2.3 Statistics on Crime and criminal justice

Eurostat, the statistical office of the European Union, received a mandate under the 2004 Hague Programme to develop comparable statistics on crime and criminal justice (Crim). This mandate continued and expanded under the 2009 Stockholm Programme. Therefore, statistical data on total crimes recorded by the police, homicide, violent crime, robbery, domestic burglary, theft of a motor vehicle, drug trafficking, property crime, the number of police officers and figures on the prison population are available at country level for EU Member States, EFTA countries (Iceland, Liechtenstein, Norway, Switzerland), EU Candidate countries (the former Yugoslav Republic of Macedonia, Turkey, Montenegro, Serbia), and EU Potential Candidates (Albania, Bosnia and Herzegovina, Kosovo). Data on homicide are additionally available for NUTS 3 regions and selected cities for the mentioned countries.³⁹

2.3.1 Methodology

The data on crime and criminal justice come from official sources in the countries such as the National Statistics Office, the National Prison Administration, the Ministries of the Interior or Justice and the Police annually. Furthermore, the statistical population are the criminal offences recorded by the police in the respective country. The statistical population of police officers are the police personnel excluding civilians and prison population is relating to all prisoners including prisoners on remand but excluding those held for administrative reasons.⁴⁰

Comparing data on crime across countries is complicated because of considerable differences in the methods and definitions used in the countries. "There is usually no straight match to be made in types and levels of crime between countries, because legal and criminal justice systems differ in such areas as: definitions of crimes; methods of reporting, recording and counting crimes; and rates of reported to unreported crime."⁴¹ Also figures on prison population are to be taken with caution because of they depend on the number of cases dealt with by the courts, they don't reflect the length of the sentence imposed, they are effected by the percentage receiving a prison sentence, by the rate of imprisonment on remand and by the date of the survey (e.g., amnesties). For this reasons, direct comparisons of crime levels in different EU Member States are useful for identifying overall trends on the EU level in the first sense.⁴²

³⁹ Eurostat: Crime and criminal justice. Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/crim_esms.htm

⁴⁰ Ibid.

⁴¹ Clarke, S. (2013): Trends in crime and criminal justice, 2010, Eurostat. Statistics in focus, 18/2013, p.2.

⁴² Ibid., p.15.



More detailed information on sampling strategy and mode of data collection are not available, except for a hint that raw figures are requested on an annual basis from official sources in the countries.⁴³

2.3.2 Main findings

EU statistics on crime and criminal justice indicate that the number of most types of crimes (drug trafficking, robbery, violent crimes, and motor vehicle theft) recorded by the police is decreasing between 2007 and 2010 for EU Member States. Numbers of total recorded crimes⁴⁴ in the EU are also continuously decreasing since 2005. When looking at the national numbers in detail, a differentiated picture emerges: while total crime numbers recorded by the police are decreasing in thirteen EU Member States, these figures are increasing in twelve EU countries.⁴⁵

So far, some general findings were presented regarding Eurostat's statistics on crime and criminal justice. For the purpose of describing relevant proxy indicators for societal security in this report, two particular crime data will be described in detail with a focus on the countries that are analysed in D3.1 (Austria, Greece, Netherlands, Sweden): the homicide rate and the prison population.

Starting with homicide⁴⁶, its counting unit is usually the victim (rather than the number of cases) and definitions for homicide vary less between countries compared to other types of crime. However, the police in some countries register homicide as any death if the cause is not immediately assigned otherwise and therefore homicide rates might be overrepresented. Figures for the average number of homicide per 100 thousand inhabitants and per year suggest a decrease for most EU Member States from 2008-2010 compared to 2005-2007 (see table). While homicide rate decreased for Austria and Sweden, it remained unchanged for the Netherlands and increased for Greece (see table).⁴⁷ Furthermore, the table shows that Greece has the highest homicide rate with 1,36 killings per 100 thousand inhabitants and per year among the four selected EU Member States from 2008-2010. Greece is followed by Sweden (0,94), Netherlands (0,91) and Austria with a rate of 0,58 homicides per 100 thousand inhabitants.⁴⁸

⁴³ Eurostat: Crime and criminal justice. Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/crim_esms.htm

⁴⁴ Remark: According to Clarke (2013), numbers for total recorded crimes include offences against the penal code or criminal code, while less serious crimes (misbehaviour) are generally excluded.

⁴⁵ Ibid., pp.1-2.

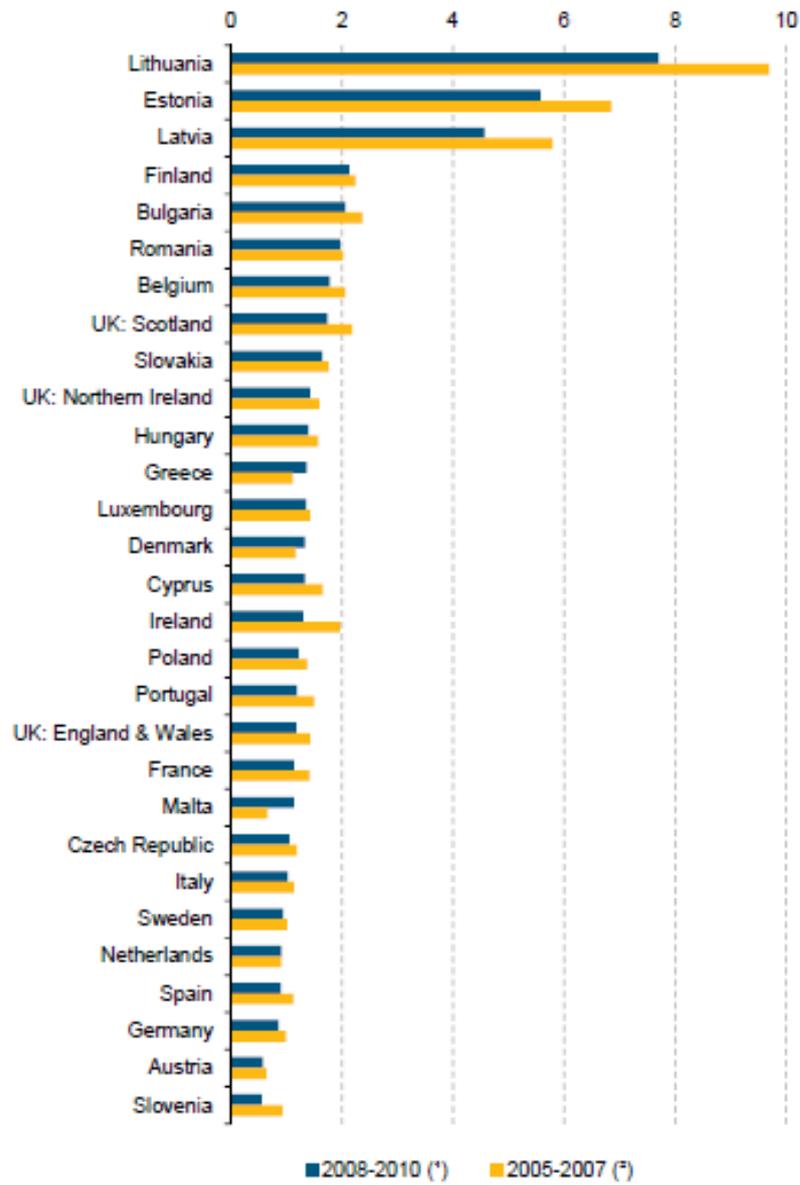
⁴⁶ Remark: According to Clarke (2013, p.2), homicide is defined as intentional killing of a person, including murder, manslaughter, euthanasia and infanticide. Causing death by dangerous driving is excluded, as are abortion and assisted suicide. Attempted (uncompleted) homicide is also excluded, except for Latvia.

⁴⁷ Clarke, S. (2013): Trends in crime and criminal justice, 2010, Eurostat. Statistics in focus, 18/2013, pp.2-3.

⁴⁸ Ibid., p.8.

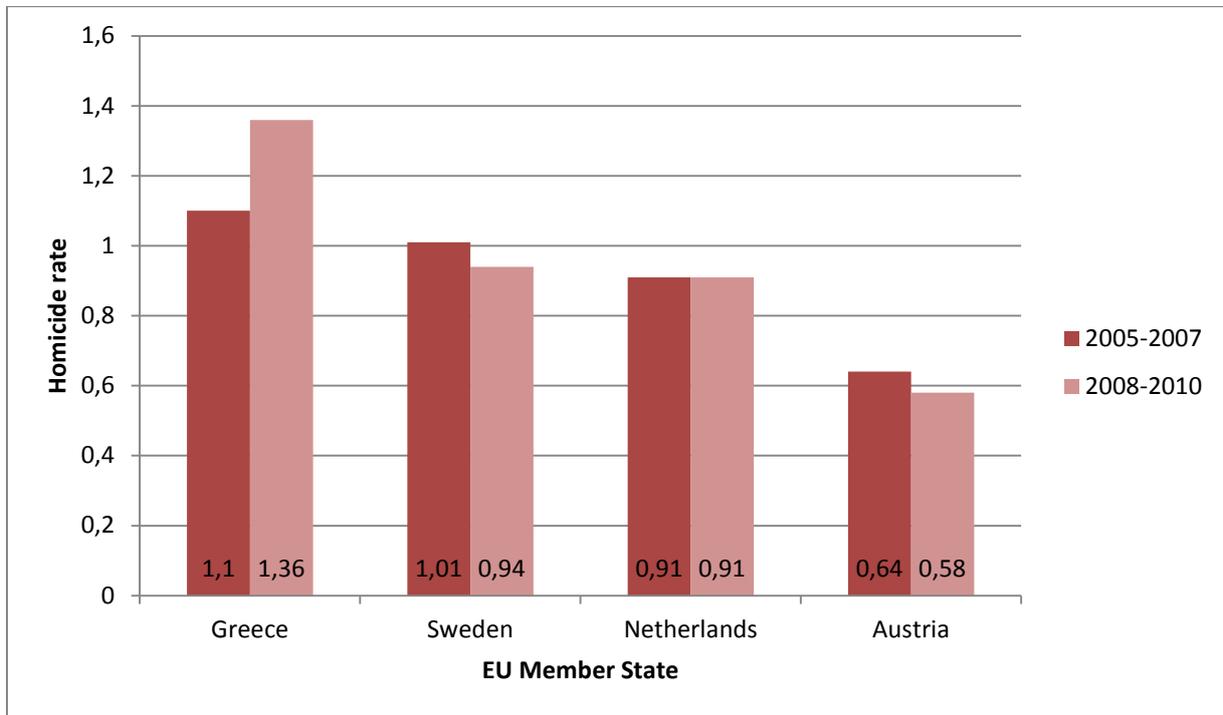


Table 1f: Homicide rate per 100 000 inhabitants, average per year, 2005-2007 and 2008-2010⁴⁹



⁴⁹ Ibid., p.3.

Table 1g: Homicide rate per 100 000 population for selected EU Member Countries, average per year, 2005-2007 and 2008-2010⁵⁰



The second crime data that is presented in D3.1 report are figures on prison population⁵¹ for the EU Member States. The total number of prisoners increased from 617000 prisoners in 2005 to 638000 prisoners in 2010 for EU-27 countries. When comparing the prison population rates for EU-27 Member States (see table), the Baltic countries have the highest rates for the periods 2005 to 2007 and 2008-2010. On the contrary, Nordic countries have the lowest prisoner rates per 100 thousand inhabitants for the same two periods.⁵² Furthermore, analogous to homicide rate, Greece has also the highest prison population rate (108 prisoners per 100 thousand inhabitants in 2008-2010) among the four countries that are analysed in D3.1 report (see table 1g). Nevertheless, average EU-27 rates are far higher with 126 prisoners. Austria has 99 prisoners on average per 100 thousand population, Netherlands has 87 prisoners and Sweden has 74 prisoners, all of them are ranked in the lower third of EU-27. Although figures indicate a steady increase in the prison population, among the four countries analysed prisoner rates are only increasing in Greece steadily since 2005.⁵³

⁵⁰ Ibid., p.8.

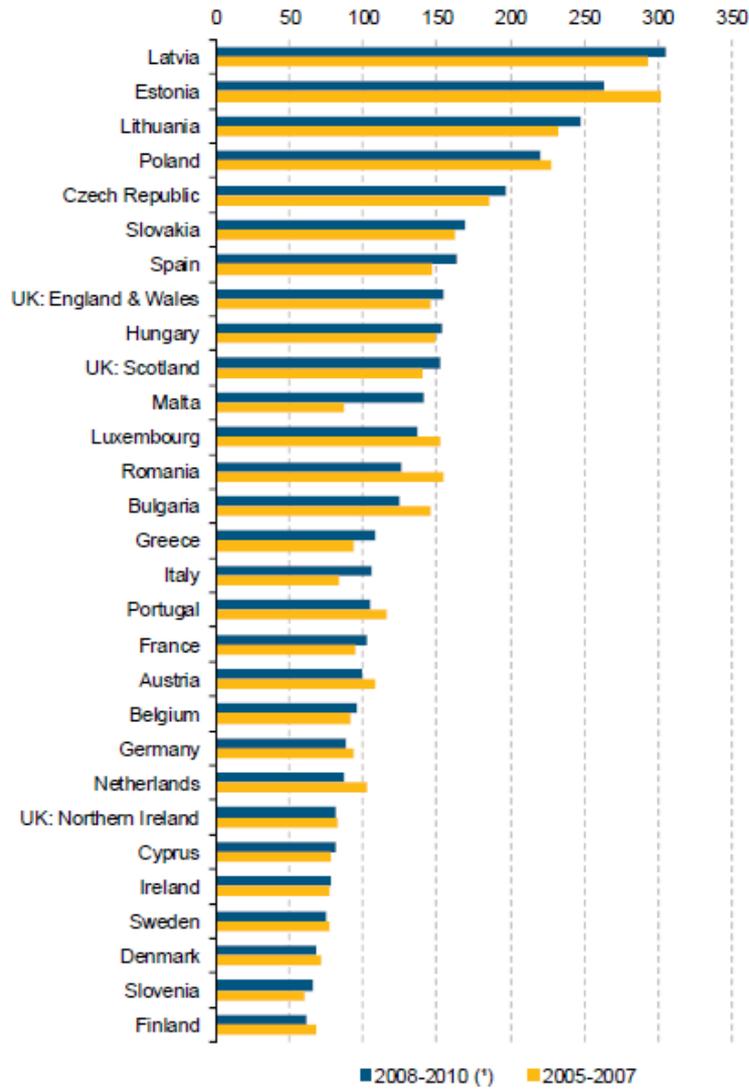
⁵¹ Remark: According to Eurostat, prison population is defined as the total number of adult and juvenile prisoners (including prisoners on remand) annually at 1 September (or nearest available date) in all types of prison establishments (Prison Administration facilities, other facilities, juvenile offenders' institutions, drug addicts' institutions and psychiatric or other hospitals). Figures on prison population exclude non-criminal prisoners held for administrative purposes (e.g., people held pending investigation into their immigration status). Eurostat: Crime and criminal justice. Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/crim_esms.htm

⁵² Clarke, S. (2013): Trends in crime and criminal justice, 2010, Eurostat. Statistics in focus, 18/2013, p.5.

⁵³ Ibid., p.14.

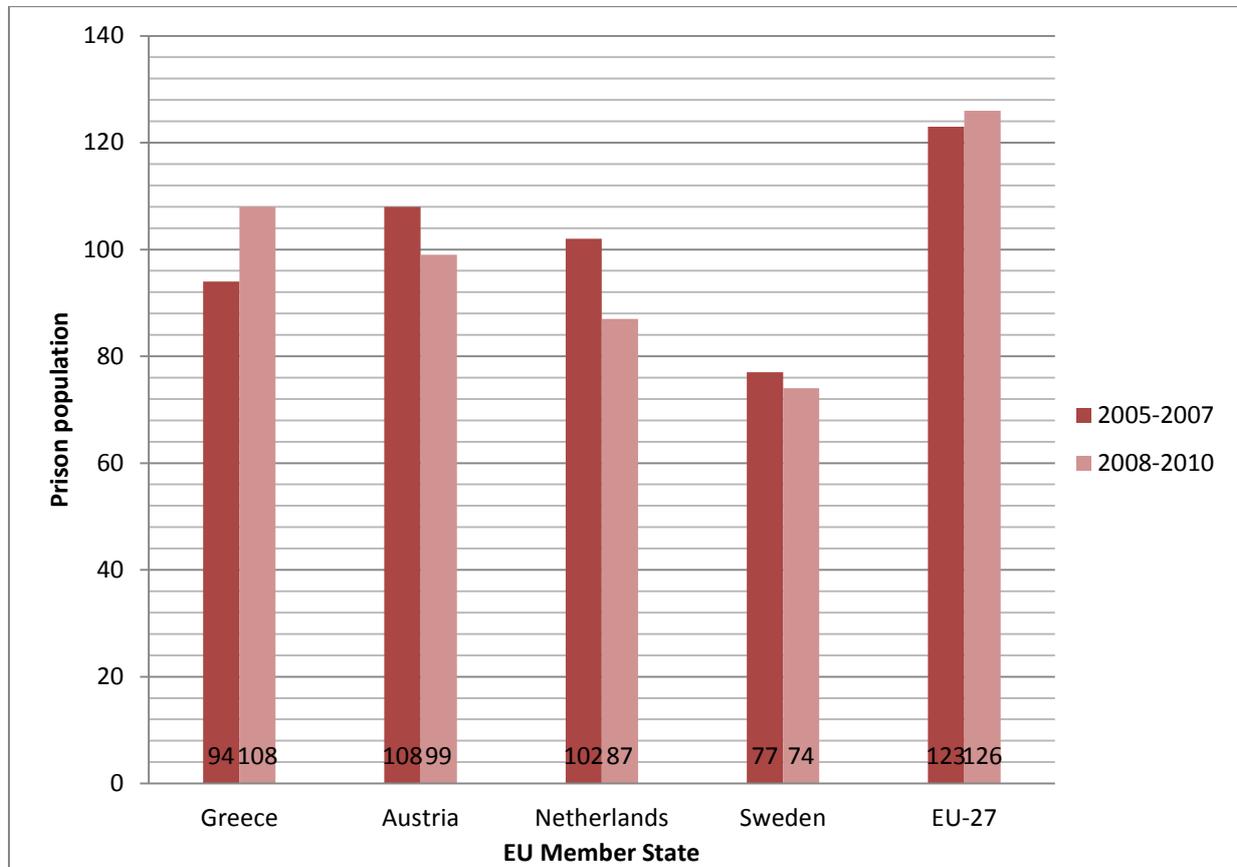


Table 1g: Prison population rate per 100 thousand inhabitants, average per year, 2005-2007 and 2008-2010⁵⁴



⁵⁴ Ibid., p.5.

Table 1h: Prison population rate per 100 000 inhabitants for selected EU Member Countries, average per year, 2005-2007 and 2008-2010⁵⁵



2.3.3 Limitations

Some methodological limitations are regarding the comparison of crime data across countries, which are elaborated under 1.3.1 Methodology.

2.3.4 Some lessons learned

This section is dedicated to elaborating the question what statistics on crime and criminal justice mean for physical security. Therefore, high crime rates lead to a threat for the safeguarding of human beings and are an appropriate proxy indicator for physical security. Homicide, for instance, is an ultimate harm for one's own body by intentionally killing a person. Looking at the average number of homicide per 100 thousand inhabitants and per year it decreased for Austria and Sweden, it remained unchanged for the Netherlands and increased for Greece from 2008-2010 compared to 2005-2007 (see table 1g). Furthermore, comparing these four countries Greece has the highest homicide rate with 1,36 killings per 100 thousand inhabitants, followed by Sweden (0,94 killings), the Netherlands (0,91 killings) and Austria (0,84 killings). This numbers are intending that the physical well-being of people living in Austria is higher than in Greece regarding the physical integrity of their citizens with a negative prospect for Greece because of increasing rates.

⁵⁵ Ibid., p.14.



2.4 Statistics on Income and Living Conditions

The European Union Statistics on Income and Living Conditions (EU-SILC) is an instrument aiming at collecting timely and comparable cross-sectional and longitudinal data on income distribution, people at risk of poverty, social exclusion and living conditions for EU-27 Member States, Croatia, Iceland, Norway, Switzerland and Turkey. EU-SILC has been progressively implemented since 2003 and operates legally under a framework Regulation of the Council and the European Parliament and a series of Commission implementing Regulations. The aim of EU-SILC is to monitor the efforts of EU Member States in the **fight against poverty and social exclusion**.⁵⁶ Furthermore, the poverty issue is a headline target of the Europe 2020 Strategy which is focussing on economic growth and recovering from the crisis by boosting employment, competitiveness, productivity, and social cohesion. Concretely, one in five people living in the EU is at risk of poverty or social exclusion and this represents an impediment to growth in the EU. In this respect, this headline target is aiming at lifting at least 20 million people out of risk of poverty or social exclusion by 2020. EU-SILC is therefore used to monitor progress towards this goal for the EU amongst others.⁵⁷

2.4.1 Methodology

The basic idea of EU-SILC is to have a common framework rather than a common survey across countries with a common questionnaire. The common framework consists of common guidelines and procedures (for weighting, sampling errors calculation), common concepts (household and income) and classifications aimed at maximising comparability of data, including harmonised lists of target variables to be transmitted to Eurostat. EU-SILC is carried out by national statistical institutes.⁵⁸

Two types of data are provided by EU-SILC annually. Firstly, **cross-sectional** data are collected regarding a given time period, including variables on income, poverty, social exclusion and other living conditions at the household and the individual level. Secondly, **longitudinal** data are provided concerning changes over time at the individual level. Longitudinal data are observed periodically every four years or less frequently on income information and deprivation for identifying the incidence and dynamic processes of poverty and social exclusion. However, target population for both data types are people living in private households. People living in collective households and in institutions (e.g., old people, people with disabilities, homeless people and other vulnerable groups) are excluded because there are not easy to reach and there might be too many differences between countries.⁵⁹

Both data sets are to be based on nationally representative probability sample of the population living in private households (household members aged 16 and over) within the country, irrespective

⁵⁶ Eurostat: Income and living conditions, Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/de/ilc_esms.htm

⁵⁷ Europe 2020 Strategy. http://ec.europa.eu/eu2020/index_en.htm

⁵⁸ Eurostat: Income and living conditions, Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/de/ilc_esms.htm

⁵⁹ Wolff, P., Montaigne, F., González, G. R.(2010): Investing in statistics: EU-SILC, In: Atkinson, A.B., Marlier, E. (Eds.): Income and Living Conditions in Europe, Eurostat statistical books, European Union: Luxembourg, p.40.



of language, nationality or legal residence status. The sampling strategy is supposed to ensure that every individual and household in the target population is assigned a known and non-zero probability of selection. The actual sample sizes are larger than the minimum effective sampling size in order to compensate for all kinds of non-responses. For the **longitudinal dimension** a minimum effective sampling size of 98000 households or 204 000 individuals in the EU as a whole were interviewed in any two consecutive years successfully. In detail, more than 3500 households, or 7250 individuals were achieved in Greece, more than 3250 households, or 6250 individuals were interviewed in Austria, more than 3750 households, or 6500 individuals were achieved in the Netherlands and 3500 households or 5750 individuals were interviewed in Sweden. For the **cross-sectional dimension**, a minimum effective sampling size of 131 000 households, or 273 000 individuals aged 16 and over were achieved. In detail, more than 4750 households, or 10000 individuals were interviewed in Greece, more than 4500 households, or 8750 individuals were interviewed in Austria, more than 5000 households, or 8750 individuals were interviewed in the Netherlands and 4500 households or 7000 individuals were interviewed in Sweden.⁶⁰ A detailed list of minimum effective sampling size for both the cross-sectional and longitudinal data type for each EU Member State is given in Eurostat's statistical book.⁶¹

2.4.2 Main findings

In 2012, there were 84 million people in EU-27 Member States, equivalent to 16,9% of the overall population, who lived in private households facing a risk of poverty after social transfers or social exclusion. The total number of people at-risk-of poverty after social transfers is continuously increasing since 2009 for EU-27 countries.⁶² Persons at-risk-poverty are defined as those with an equivalised disposable income (after social transfers meaning that social benefits such as pensions and unemployment benefits are included) below the risk of poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers.⁶³ The equivalised disposable income is "the total income of a household that is available for spending or saving, divided by the number of household members converted into equivalised adults".⁶⁴

Looking at table 1i, more than one fifth of the population in Greece (23,1%) was viewed as being at-risk-of-poverty in 2012 with numbers increasing continuously during the period from 2009 to 2012. While at-risk-of-poverty rates do not follow a clear trend for the Netherlands, the number of persons at-risk-of-poverty are also increasing in Austria and Sweden for the period from 2009 to 2012. But unlike in Greece, the at-risk-of-poverty rate by poverty threshold is below the EU-27 average (16,9%) for Austria (14,4%), Sweden (14,1%) and the Netherlands (10,1%) in 2012. Furthermore, while Greece

⁶⁰ Ibid., pp.44-46.

⁶¹ Ibid., p.45.

⁶² Eurostat: At-risk-of-poverty rate by poverty threshold, age and sex, SILC, online data code: ilc_li02, 2012.

<http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

⁶³ Eurostat (2012): Project Lot 1: EU-SILC (European Union Statistics on income and Living Conditions): Methodological studies and publications, Document: Task 5.1.1 - Working paper with the description of the 'Income and living conditions dataset', pp.113-115.

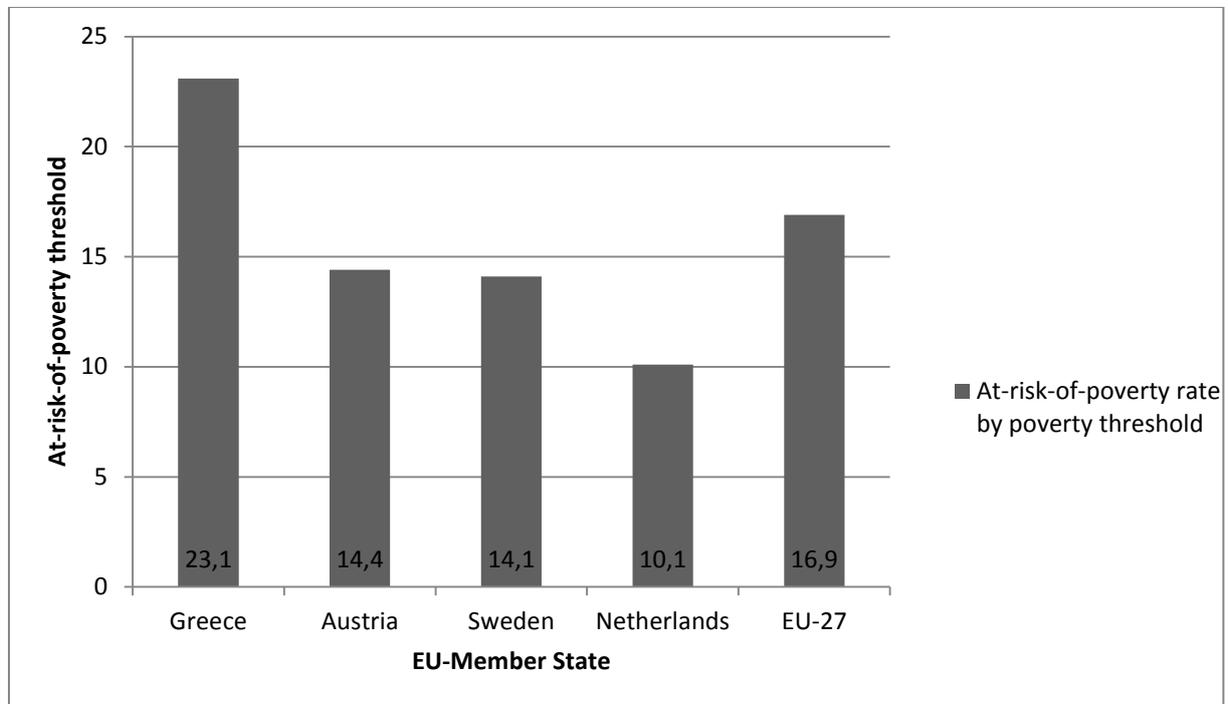
http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/documents/tab/Tab/Working_paper_on_EU_SILC_datasets.pdf

⁶⁴ Ibid., p.26.



has the highest proportion of persons at-risk-of-poverty in 2012, the Netherlands is among the EU-27 countries with the lowest at-risk-of-poverty rate.⁶⁵

Table 1i: At-risk-of-poverty rate by poverty threshold, percentage of total population, 2012⁶⁶



2.4.3 Limitations

One limitation of EU-SILC is that only people living in private households are taken into account and therefore people living in collective households and institutions are excluded from the target population. This could lead to an underrepresentation of old people, people with disabilities, homeless people and other vulnerable groups. On the other hand, including collective households makes comparisons across countries more difficult because of the different compositions of collective households.

The at-risk-of-poverty rate is a relative measure of poverty, linked to income distribution, which takes into consideration all sources of monetary income including labour market income and social transfers. Nevertheless, this rate is a proxy for being at risk of poverty within one country and is not perfectly suitable for comparisons between countries, because no common threshold is underlying. Furthermore, income based indicators do not take into account the actual distribution of income between household members and therefore the gender dimension remains unconsidered.⁶⁷

⁶⁵ Eurostat: At-risk-of-poverty rate by poverty threshold, age and sex, SILC, online data code: ilc_li02, 2012. <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

⁶⁶ Ibid.

⁶⁷ Eurostat (2012): Project Lot 1: EU-SILC (European Union Statistics on income and Living Conditions): Methodological studies and publications, Document: Task 5.1.1 - Working paper with the description of the 'Income and living conditions dataset', pp.113-115.



2.4.4 Some lessons learned

This section is dedicated to elaborating the question what statistics on income and living conditions mean for cultural security. Understanding cultural security as the ability of a society to persist in its essential character under changing conditions and possible or actual threats, the at-risk-of-poverty-rate represent a serious threat to the cultural well-being of a society. Therefore, the at-risk-of-poverty-rate is a proxy indicator for cultural security because it represents a major challenge to social cohesion, dynamic and collective life of a community, productivity, employment, corporate values and last but not least economic growth. The total number of people living at-risk-of poverty after social transfers is continuously increasing since 2009 for EU-27 countries. In 2012 one in five people living in the EU was at risk of poverty or social exclusion. Once again, Greece sticks out with having the highest at-risk-of-poverty among the EU-27 Member States (see table 1i), with numbers increasing continuously during the period from 2009 to 2012. The rate is also increasing for Austria and Sweden from 2009 to 2012 but at a different level. In contrast to Greece (23,1%), the at-risk-of-poverty is below EU-27 average (16,9%) for Austria (14,4%), the Netherlands (10,1%) and Sweden (14,1%) in 2012. One possible interpretation of this numbers is that cultural well-being of a society is lower in Greece compared to Austria, Sweden and the Netherlands because of high at-risk-of poverty rates.

2.5 Special Eurobarometer: Internal Security

Special Eurobarometer 371: Internal Security⁶⁸ was published in November 2011. As suggested by the title, the **aim** of this European survey was to provide a strategic overview by comparing and contrasting the **public perceptions** of European citizens with the security approach taken in the Internal Security Strategy. The EU Internal Security Strategy in Action: Five steps towards a more secure Europe include the following five challenges: serious and organised crime, terrorism, cybercrime, security of EU borders and resilience to natural and man-made disasters.⁶⁹ All of the five challenges listed by the EU Internal Security Strategy are amongst the perceived challenges of European citizens to the internal security. While terrorism and organised crime are mentioned spontaneously by European citizens as main challenges (mentioned by between 22 and 33 percent of Europeans), cybercrime, security of EU borders and natural/man-made disasters seem to be of medium importance, mentioned by between 6 and 11 percent of Europeans. The survey was carried out by TNS Opinion & Social on behalf of the European Commission's Directorate-General Home Affairs.

This Special Eurobarometer 371 survey serves as a starting point for identifying security challenges in the perception of European citizens. However, it is particularly **relevant to SOURCE** as it focuses on public perceptions exploring the 'subjective' feeling of European citizens towards 'objective' states of societal security.

⁶⁸ Special Eurobarometer 371 (2011): Internal Security. Wave EB75.4, TNS Opinion & Social, Brussels: European Commission. http://ec.europa.eu/public_opinion/archives/ebs/ebs_371_en.pdf

⁶⁹ European Commission, Communication (2010): The EU Internal Security Strategy in Action: Five Steps Towards a More Secure Europe, COM(2010) 673 final, 22.11.2010, Brussels: European Commission. http://ec.europa.eu/commission_2010-2014/malmstrom/pdf/news/internal_security_strategy_in_action_en.pdf



2.5.1 Methodology

The survey was conducted between the 4th of June and the 19th of June 2011; results were published in November 2011. The survey, carried out by TNS Opinion & Social consortium, used face-to-face interviews, which took place in participants' homes in their main language. Respondents were asked in two open questions what they believe to be the most important challenges to the security of both at EU and national level. European citizens were allowed to identify up to three challenges for each question. TNS carried out the wave 75.4 of the Eurobarometer as requested by the European Commission's Directorate-General Home Affairs. Therefore, Eurobarometer Special Surveys are integrated in Standard Eurobarometer's polling waves. Furthermore, TNS selected the sample using a multi-stage random (probability) sampling strategy. The survey consisted of a sample of 26,840 European citizens (over the age of 15) from 27 European Union Member States. In each Member State, a number of sampling points was drawn with probability proportional to population size (for a total coverage of the country) and to population density. Full details regarding sample figures can be found in the annex of the Special Eurobarometer 371 report.⁷⁰

Additionally, the survey provides some socio-demographic variables - male/female, age range, the impact of education, social and financial status, and occupation - to provide greater insight.⁷¹

2.5.2 Main findings

Special Eurobarometer reports are based on in-depth thematic studies. This special Eurobarometer 371 on internal security gives a picture of **public perceptions of the challenges to peace and security in the European Union**. The study provides detailed analysis of the way in which internal security and issues relating to it are perceived both at EU level and within 27 individual Member States of the EU (national level) (for the outcomes of challenges to national security see table 1j. The challenges regarded as most relevant for national and EU security by the EU citizens are, however, not among the priority challenges included in the EU Internal Security Strategy. The economic and financial crisis is rated first from both, the national (33%) and the EU perspective (34%).⁷²

⁷⁰ Special Eurobarometer 371 (2011), Annex.: Technical Specification (no page number included).

⁷¹ Ibid., p.6.

⁷² Ibid., p.12, 21.



Table 1j: Special Eurobarometer 371 on Internal Security: Europeans' views on challenges to national security⁷³

QC1 What do you think are the most important challenges to the security of (NATIONALITY) citizens at the moment?

	Economic and financial crises	Terrorism	Poverty	Organised Crime	Corruption	Illegal immigration	Petty crime	Natural disasters	Environmental issues / Climate change	Cybercrime	Nuclear disasters	Insecurity of EU borders	Religious extremism	Civil wars and wars	Other (SPONTANEOUS)	Don't know
EU27	33%	25%	24%	22%	18%	13%	13%	11%	11%	10%	8%	6%	6%	4%	9%	8%
BE	32%	20%	27%	15%	8%	23%	31%	11%	16%	10%	9%	7%	11%	3%	12%	2%
BG	48%	4%	60%	23%	24%	1%	26%	10%	4%	0%	2%	1%	2%	1%	19%	2%
CZ	38%	14%	16%	39%	38%	10%	8%	22%	12%	16%	8%	6%	4%	5%	3%	4%
DK	30%	55%	5%	19%	2%	9%	6%	5%	19%	4%	4%	5%	11%	5%	21%	4%
DE	28%	34%	19%	32%	14%	8%	9%	12%	20%	27%	19%	7%	10%	5%	6%	4%
EE	22%	9%	17%	9%	11%	3%	12%	5%	6%	9%	3%	12%	1%	4%	19%	14%
IE	61%	10%	30%	45%	25%	8%	17%	5%	9%	6%	4%	2%	1%	2%	5%	3%
EL	56%	7%	50%	13%	39%	28%	15%	6%	7%	2%	4%	10%	1%	3%	4%	0%
ES	57%	38%	35%	11%	37%	16%	7%	10%	7%	4%	5%	3%	4%	4%	2%	2%
FR	15%	16%	20%	7%	7%	10%	31%	7%	8%	4%	7%	3%	7%	3%	26%	19%
IT	44%	26%	18%	31%	19%	24%	7%	13%	13%	8%	10%	8%	5%	9%	2%	2%
CY	54%	6%	15%	28%	21%	55%	15%	5%	7%	7%	1%	8%	1%	1%	26%	
LV	27%	2%	41%	13%	28%	2%	23%	3%	4%	2%	1%	2%	0%	2%	5%	16%
LT	41%	5%	41%	25%	42%	4%	17%	9%	6%	7%	6%	2%	0%	2%	8%	6%
LU	16%	4%	10%	13%	5%	11%	37%	6%	9%	4%	7%	6%	1%	1%	21%	11%
HU	52%	5%	51%	20%	27%	4%	9%	20%	16%	3%	4%	3%	1%	1%	8%	2%
MT	27%	6%	15%	20%	27%	38%	12%	5%	12%	9%	1%	5%	3%	5%	9%	10%
NL	22%	26%	14%	23%	7%	7%	31%	8%	20%	22%	6%	6%	15%	3%	26%	4%
AT	40%	11%	20%	39%	9%	23%	15%	20%	21%	16%	14%	19%	6%	3%	3%	4%
PL	22%	9%	21%	13%	11%	1%	7%	16%	4%	3%	2%	1%	1%	4%	6%	27%
PT	41%	9%	42%	24%	30%	6%	11%	7%	6%	3%	4%	7%	2%	4%	2%	7%
RO	41%	14%	55%	14%	56%	2%	4%	19%	9%	4%	6%	3%	1%	5%	2%	4%
SI	46%	3%	30%	31%	47%	2%	6%	17%	15%	4%	3%	1%	2%	1%	9%	3%
SK	40%	11%	36%	24%	31%	3%	20%	46%	14%	5%	9%	3%	1%	3%	2%	1%
FI	27%	16%	11%	22%	2%	12%	10%	11%	14%	8%	15%	9%	2%	4%	27%	8%
SE	17%	30%	4%	23%	3%	3%	5%	7%	21%	6%	9%	1%	6%	3%	27%	9%
UK	24%	47%	14%	25%	6%	23%	9%	3%	7%	11%	2%	8%	10%	3%	6%	9%

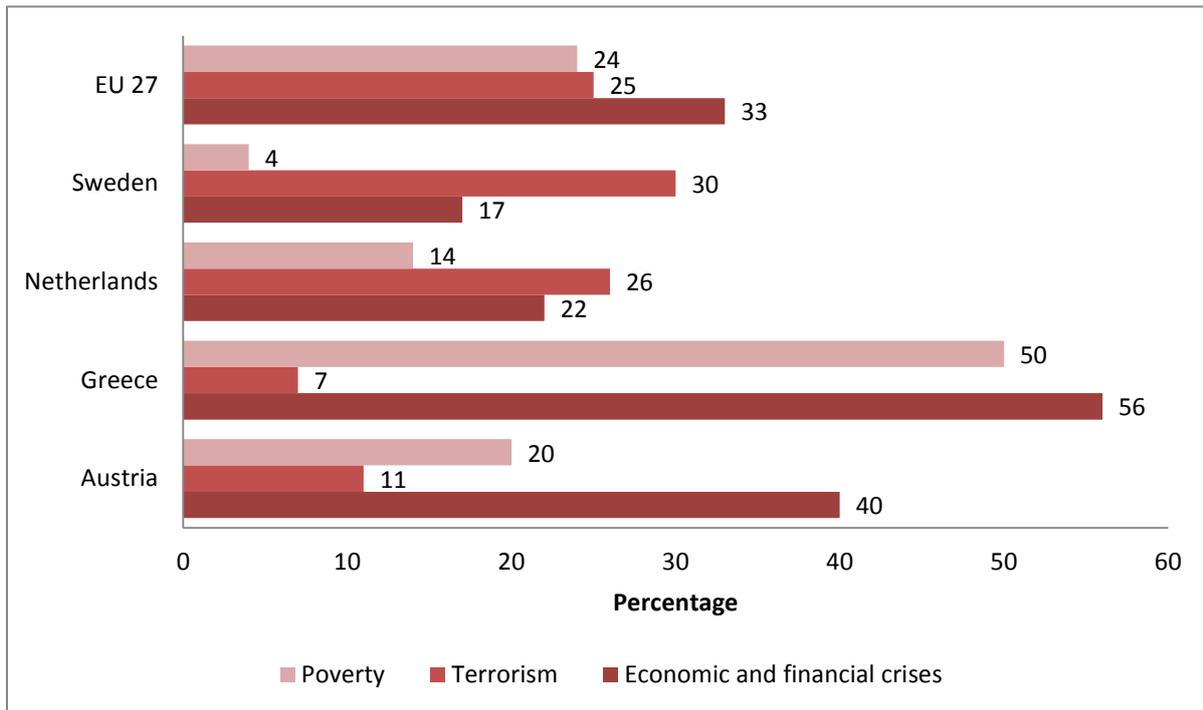
Legend : Open/Umprompted question

Highest percentage per country Lowest percentage per country
 Highest percentage per item Lowest percentage per item

⁷³ Ibid., p.12.



Table 1k: Special Eurobarometer 371 on Internal Security: Perceived challenges of European citizens from selected EU Member States to the internal security at national level⁷⁴



In the following, a selection of the three highest rated perceived challenges of European citizens to the internal security will be presented and discussed for the EU Member states that are being analysed in D3.1 report (namely Austria, Greece, Netherlands and Sweden). These perceived challenges are regarded as relevant for societal security. Results from this survey suggest that Europeans perceive the **economic and financial crises** (33%), terrorism (25%), poverty (24%) and organised crime (22%) as key challenges to national security (see table 1k).⁷⁵ When comparing results between different EU Member States, then substantial differences occur. On the individual country level, especially Greeks (56%) and Austrian (40%) citizens consider the economic crises as important challenges to their national security. At the opposite end of the spectrum, respondents in the Netherlands (22%) and Sweden (17%) are least likely to consider economic and financial crises important challenges for their country.⁷⁶ From a socio-demographic perspective, the more trouble a respondent has in paying the bills, the more likely to perceive economic and financial crises as a national security threat. Furthermore, the more people live in the household, the more likely the citizen is to mention economic and financial crises as an important challenge for national security.⁷⁷

One quarter (25%) of European citizens consider that **terrorism** is an important challenge to national security, although there is a lot of variation between EU Member States. While 30% of respondents in Sweden and 26% of citizens in the Netherlands mention terrorism, less than 10% of inhabitants in Austria (11%) and Greece (7%) consider terrorism as an important challenge to their country's

⁷⁴ Special Eurobarometer 371 (2011): Internal Security

⁷⁵ Ibid., p.10.

⁷⁶ Ibid., pp.11-12.

⁷⁷ Ibid., p.16.



security.⁷⁸ From a socio-demographic perspective, managers (30%) are the most likely to mention terrorism as a threat.⁷⁹

Poverty is perceived as an important challenge to national security by 24% of citizens across the EU. On the national level, 50% of Greeks consider poverty as an important national security challenge. By contrast, respondents in Austria (20%), the Netherlands (14%) and Sweden (4%) are least likely to mention poverty as a challenge to national security.⁸⁰ From a socio-demographic perspective, poverty is most likely to be mentioned by house persons and the unemployed (30%).⁸¹

When having a closer look at the distribution of perceived challenges to national security in different countries, one finds that Greeks are most concerned about economic and financial crises (56%) and poverty (50%) and are least likely to mention organised crime (13%) and terrorism (7%) as security challenges. By contrast, terrorism (30%) is perceived as the main security challenge to citizens in Sweden, followed by organised crime (23%). Meanwhile, 17% of respondents in Sweden mention that the economic and financial crises and 4% mention poverty as a threat to their security.⁸²

2.5.3 Limitations

One critical remark can be made about the sample size. The survey on Internal Security consisted of a sample of 26,840 European citizens from 27 European Union Member States. While 1005 face-to-face interviews with Austrian citizens lead to a representative sample of the Austrian population of 7 million aged 15 years and over the same is unsustainable for interviewing 1044 Italian citizens out of a Italian population of 51,8 million (aged 15 years and over).

2.5.4 Some lessons learned

This section is dedicated to elaborating the question what the special Eurobarometer on Internal Security tells us about societal security. Therefore, the special Eurobarometer is a proxy indicator for environmental, cyber and radical uncertainty security at the same time, because the survey serves as a starting point for identifying security challenges in the `subjective` perception of European citizens towards `objective` states of societal security. Therefore, both subjective feelings and objective state of societal security are covered by this Eurobarometer. When understanding environmental security as climate change and the environmental and human disasters that it may imply it a directly indicated by the perception of environmental issues as a threat to national security according the special Eurobarometer. Additionally, the degree to which cybercrime is perceived by European citizens as a challenge to national security is a proxy for cyber security because the latter implies security of private data and the increase of cybercrime incidents as the main risk covered in this dimensions of societal security. Furthermore, perceiving the risk of terrorism as a threat to national

⁷⁸ Ibid., pp.11-12.

⁷⁹ Ibid., p.16.

⁸⁰ Ibid., pp.12-13.

⁸¹ Ibid., p.16.

⁸² Ibid., p.12.



security serves as a proxy for radical uncertainty security because it covers terrorist attacks as well as natural hazards and pandemics.

However, environmental issues/climate change (EI) and cybercrime (CR) seem to be of medium importance for European citizens (see table 1j), being mentioned by 11% (EI) and 10% (CR) compared to 33% of Europeans perceiving the economic and financial crisis as a main threat to peace and security in the EU. Interestingly, people living in Austria (21% EI, 16% CR), the Netherlands (20% EI, 22% CR) and Sweden (21% EI, 6% CR) are much more concerned about environmental issues/climate change and cybercrime than respondents living in Greece (7% EI, 2% CR). More European citizens (25%) consider terrorism an important challenge to national security, although there is a lot of variation between EU Member States. 30% of respondents in Sweden, 26% of citizens in the Netherlands and 11% of inhabitants in Austria mention terrorism as an important challenge to their country's security. By contrast this issue is viewed as a security challenge by 7% of respondents in Greece. Half of people living in Greece (56%) say that economic and financial crises are an important security challenge. Moreover, all of the three perceived threats to national security are not limited to national borders nor are they restricted to particular sectors of European society.

Comparing and interpreting the data for public perceptions of challenges for national security, Greeks do not regard environmental, cyber or radical uncertainty security as major security threats, but are rather cornered about socio-economic security, e.g. the development of the economic and financial crises. People living in Sweden perceive terrorist attacks as a main security challenge (reflecting radical uncertainty security) as well as environmental security (reaching the highest level for EU-27 together with Austria). However, cyber security is not considered as a key challenge for their national security. Numbers for the proxy of environmental, cyber or radical uncertainty security are quite similar for the Netherlands, indicating that one in five persons perceives environmental issues/climate change and cybercrime respectively as a threat to internal security. People living in Austria regard environmental security (reaching the highest level for EU-27 together with Sweden) as a main challenge among this three challenges analyzed (terrorist attacks, environmental issues and cybercrime). Cyber security seems to be of medium importance for Austrian respondents. On the contrary, radical uncertainty security seems to be not a major perceived security challenge in Austria.



3. Measuring Societal Security in the context of quantitative Europe-wide surveys

The annual societal security reports will discuss a series of proxy indicators that will again cover certain dimensions of societal security. Proxy indicators are variables, key figures, data that were measured in other contexts but are of a high explanatory value to put the concept of societal security on a sound empirical basis. There won't be 'a couple' of indicators that will stand-in to assess societal security in the upcoming annual societal security reports. The annual societal security reports are aiming to visualise change. Change, at the one hand within societies over time, so the development of the selected indicators will be of interests but more and that's the flipside of the proxy indicators that are going to be used, to show variations between societies. For those proxy indicators that are identified in chapter 1 of this report the two main sources are the Eurobarometer (EB) and the European Social Survey (ESS). **Both surveys are not genuine security or societal security surveys.** For the upcoming annual societal security reports we've reviewed the EB and ESS and identified several key questions and variables that will be incorporated as proxy indicators for societal security in the SOURCE societal security report. This chapter is focusing on variables that can act as proxy indicators and will also identify gaps that need be covered from other (qualitative) sources.

3.1 Results on measuring Security in the Eurobarometer (EB)

3.1.1 Methodology and sample

Since 1973 the European Commission has been monitoring the evolution of public opinion in the Member States and thus helping the preparation of texts, decision-making and the evaluation of its works. The surveys and studies address major topics concerning European citizenship, such as enlargement, social situation, health, culture, information technology, environment the Euro-defence etcetera. The Standard Eurobarometer (EB) is one of the instruments of the Public Opinion Analysis sector of the European Commission⁸³.

3.1.2 Main results

Each survey of the Eurobarometer consists of approximately 1000 face-to-face interviews per country. It covers the population of the respective nationalities of the European Union Member States, residents in each of the Member States and aged 15 years and over. The Standard Eurobarometer had also been conducted in five candidate countries (e.g. Turkey, the Former Yugoslav Republic of Macedonia, Iceland, Montenegro and Serbia) and in the Turkish Cypriot Community. TNS opinion⁸⁴ carries out the survey. The reports are published twice yearly.

⁸³ Information for the sections in this chapter is found on http://ec.europa.eu/public_opinion/index_en.htm accessed: 28.04.2014

⁸⁴ See the companies website for more information: <http://www.tns-opinion.com/> (accessed: 29.04.2014)



3.1.3 Societal issues highlighted in the survey

In the introduction of the results of the second survey round of the Eurobarometer the content of survey is explained in more detail: “The first part analyses how Europeans perceive their political institutions: national governments and parliaments, and the EU and its institutions. The second part looks at the main concerns of Europeans at personal, national and European levels, and at their expectations for the next twelve months. The report then considers how respondents perceive the current economic situation, while the fourth part is devoted to the euro and the issues raised by the crisis. The report next examines the way in which Europeans perceive the various initiatives of the Europe 2020 strategy and whether they think that the European Union is going in the right direction to emerge from the crisis. In a final part, the report looks at European citizenship.” (p. 3)⁸⁵

From this introduction it becomes clear that the Eurobarometer especially focuses on politics and economics in the EU. As a consequence results of the Eurobarometer may be used to inform on two of our dimensions of societal security: Political security and socio-economic security. These items of the EB will be integrated into the proxy indicators and will be used in the SOURCE annual societal security reports to measure societal security across different member states.

3.1.4 Screening of indicators that are useful to operationalize societal security

In the overview below items of the Eurobarometer are categorized under the 7 dimensions of societal security as depicted in Table 1a (this document)⁸⁶. To come to this overview we studied the results of the second survey round of the Eurobarometer in 2013. Items that were presented and discussed in these results were selected for one of the seven societal security dimensions using common sense logic. As can be seen from the resulting overview presented below many items provide information on socio-economic security. In addition, as becomes clear from the category ‘other’, the Eurobarometer might be useful to identify trends in what EU citizens perceive as threats and what they think needs attention from the EU, now or in the future.

a) Physical Security

In the Eurobarometer no items can be found that inform on this dimension.

b) Political security

QA10. Tendency to trust authorities

QA11. Image of EU

QA19a.3. My voice counts in the EU

QA22. Optimism about the future of the EU

c) Socio-economic security

⁸⁵ Standard Eurobarometer 80 Autumn 2013 (see http://ec.europa.eu/public_opinion/archives/eb/eb80/eb80_first_en.pdf)

⁸⁶ Flash Eurobarometers are not consulted for this overview. For, Flash barometers are not consequently, for example yearly, repeated and as a result less useful as an input for an instrument that should measure societal security on a yearly base.



Socio-economic security is measured with a variety of variables in the EB. For SOURCE we identified the following 4 variables that should be included in the list of proxy indicators for societal security:

QA2a. Personal judgement on

- financial situation of household
- Personal job situation
- The economic situation of your country
- The economic situation of Europe

QA2a.1 Personal judgement on:

- the economic situation of your country

QA3a. Expectations on

- The economic situation of your country
- The economic situation of Europe
- Financial situation of household
- Personal job situation

QA17.1. Opinion on European economic and monetary union

QC1. Impact of the crisis on jobs

QC3a. The most effective level at which to tackle the crisis

d) Cultural security

In the Eurobarometer no items can be found that inform on this dimension.

e) Environmental security

In the Eurobarometer no items can be found that inform on this dimension.

f) Cyber security

In the Eurobarometer no items can be found that inform on this dimension.

g) Radical uncertainty

In the Eurobarometer no items can be found that inform on this dimension.

h) Other

QA4a Main concerns at national level.

The concerns that can be selected in this item fall into different dimensions of security. For example results of end 2013 on this item showed that the main concerns were 'unemployment' and 'economic situation'.

QA4a Main concerns at personal level.

The same holds for this item. The concerns that can be selected fall into different dimensions of security. For example results of end 2013 on this item showed that the main concerns were 'rising prices / inflation' and 'unemployment'.

QA6a Main concerns at European level.



The same holds for this item. The concerns that can be selected fall into different dimensions of security. For example results of end 2013 on this item showed that the main concerns were 'Economic situation' and 'unemployment'.

QB1. Perceived importance of the Europe 2020 strategy initiatives

- to help the poor and socially excluded
- to modernise labour markets
- to support an economy that uses less natural resources and emits less greenhouse gases
- to help the Industrial base to be more competitive by promoting entrepreneurship and developing new skills
- to enhance the quality and appeal of the EU's higher education system
- to increase the support for research and development policies and turn inventions into products
- to develop the e-economy by strengthening ultra-fast Internet within the EU.

QB2. Perceived ambition level of European Targets:

- to increase energy efficiency...
- three quarters of men and women between 20 and 64 years old should have a job
- to increase the share of renewable energy in the EU by 20% by 2020
- the share of funds invested in research and development should research...
- to reduce the EU greenhouse gas emissions..
- the number of young people leaving school with no qualifications...
- the number of Europeans living below the poverty...
- at least 40% of the people aged 30 to 34 should have a higher education degree or diploma

QB3. Overall, are the priorities of the EU right?

QD6T. Which of the following are the most positive results of the EU?

- The free movement of people, goods and services
- Peace among the member states
- The euro
- Student exchange programmes such as Erasmus
- The economic power of the EU
- The political and diplomatic influence of the EU in the rest of the world
- The level of social welfare (healthcare, education, pensions) in the EU
- The Common Agricultural Policy
- Other (*Spontaneous*)
- None (*Spontaneous*)
- Don't know



3.2 Results on measuring Security in the European Social Survey (ESS)

Since the end of 2013 ESS has the status of ERIC (European Research Infrastructure Consortium). Well in line with this ESS data are used independently by many researchers for a variety of purposes. The ESS consortium does, however, publish overviews of key findings and more topical “topline findings”.⁸⁷

3.2.1 Methodology and sample

ESS is performed biannually since 2002 and consists of core and rotating modules (themes), shown in the table below.

	R1	02	R2	04	R3	06	R4	08	R5	10	R6	12
Media and social trust	•		•		•		•		•		•	
Politics	•		•		•		•		•		•	
Subjective well-being...	•		•		•		•		•		•	
Gender, Household	•		•		•		•		•		•	
Socio demographics	•		•		•		•		•		•	
Human values	•		•		•		•		•		•	
Immigration	•											
Citizen involvement	•											
Health and care			•									
Economic morality			•									
Family ... well-being			•						•			
Timing of life					•							
Personal ... well-being					•							•
Welfare attitudes							•					
Ageism							•					
Justice									•			
Democracy												•

⁸⁷ <http://www.europeansocialsurvey.org/essresources/findings.html> (accessed 26 April 2014).



The country coverage by survey year is shown in the following table. Grey dots (•) indicate countries taking part in ESS round but with data not yet released.

	R1 02	R2 04	R3 06	R4 08	R5 10	R6 12
Albania						•
Austria	•	•	•	•	•	
Belgium	•	•	•	•	•	•
Bulgaria			•	•	•	•
Croatia				•	•	
Cyprus			•	•	•	•
Czech Republic	•	•		•	•	•
Denmark	•	•	•	•	•	•
Estonia		•	•	•	•	•
Finland	•	•	•	•	•	•
France	•	•	•	•	•	•
Germany	•	•	•	•	•	•
Greece	•	•		•	•	
Hungary	•	•	•	•	•	•
Iceland		•				•
Ireland	•	•	•	•	•	•
Israel	•			•	•	•
Italy	•	•				•
Kosovo						•
Latvia			•	•		
Lithuania				•	•	•
Luxembourg	•	•				
Netherlands	•	•	•	•	•	•
Norway	•	•	•	•	•	•
Poland	•	•	•	•	•	•
Portugal	•	•	•	•	•	•
Romania			•	•		
Russian Federation			•	•	•	•
Slovakia		•	•	•	•	•
Slovenia	•	•	•	•	•	•
Spain	•	•	•	•	•	•
Sweden	•	•	•	•	•	•
Switzerland	•	•	•	•	•	•
Turkey		•		•		
Ukraine		•	•	•	•	•
United Kingdom	•	•	•	•	•	•



Sampling is done in order to represent the population or sub-sets of the population in each country.⁸⁸ The effective sample sizes has been set to 1500 randomly selected respondents in countries with populations over 2 million inhabitants, and a sample size of 800 for those countries with a population less than that. The minimum age of a respondent is 15 years of age and there is no limit to how old a respondent can be. The response rate is set to 70% even if this might be difficult to achieve. The participating countries need to plan and implement a strategy for a sufficient number of contact attempts in order to increase the response rate.

The differences in sampling possibilities are taken into consideration. For example, the Nordic countries have reliable databases of residents that are updated regularly that can be accessed by researchers in order to draw a reliable sample. In other European countries, such as Portugal or Bulgaria, multi-stage sample designs are used. Within the ES project, there are a number of sampling experts that evaluate each country's research plan in order to achieve a good research design among all participating countries.

As the ESS has been used for a number of years, the methods for improving the quality of data has been investigated. For example, the possible bias of non-responses has been adjusted by testing the effects by performing thorough analysis of attrition. This has resulted in a sample-based or population-based weighting adjustment in order to avoid biases in the data. Weights have also been developed so that it is possible to compare countries despite national differences.

Translations of the questionnaire and interview questions are also subject to validation. If more than 5% of a national population speaks a minority language as their first language, the questionnaire is to be translated into this particular language. The translation of questions follows a process called TRAPD: Translation, Review, Adjunction, Pretesting and Documentation. There are also three sets of people involved in the translation: the translators themselves, the reviewer, and the adjudicator, that should all have extensive knowledge of survey work and the specific goals of the ESS. Having these check and balances ensures that the data collected within the ESS are valid and reliable.

3.2.2 Main results

The structure of ESS naturally lends itself to cross-country comparison and identification of regions of similar pattern. The following list of results from the most recent of the mentioned overview publications exemplifies this:

- Workers in the Nordic countries appear to have been affected less severely by the economic crisis than workers in other areas of Europe. This may reflect differences in the levels of employment protection available to them compared with other countries.
- Southern Europe (particularly Greece) has seen a steep decline in political legitimacy following the Great Recession. The impact of economic decline on political legitimacy has been felt more strongly in Eurozone countries compared with the rest of Europe.

⁸⁸ *Sampling for the European Social Survey Round VI: Principles and Requirements*. European Social Survey, 2012. (http://www.europeansocialsurvey.org/docs/round6/methods/ESS6_sampling_guidelines.pdf, accessed 24 April 2014)



- The Nordic countries are most trusting of their police and courts and believe that their institutions are legitimate holders of power and authority; while eastern, and sometimes southern, European countries tend to be less trusting.
- Political engagement remains lower in former communist countries compared with western Europe. This disengagement reflects dissatisfaction with the current political reality as much as the legacy of communism.
- While attitudes towards homosexuality have become more permissive across many European countries, this is not the case across much of Eastern Europe where agreement that gay people should be free to live their lives as they wish remains low.⁸⁹

3.2.3 Societal issues highlighted in the survey

The list of results in the previous section suggests that values and attitudes are highlighted by ESS. In particular one of the survey modules administered in all surveys is Human values.

But more hard data practical to collect at individual level are also collected. Examples include employee training, proportion of housework done by women, and political and civic action participation.⁹⁰

The personal background data collected in ESS allow correlating results also to socio-demographics, household structure, political allegiance, and media habits.

3.2.4 Screening of indicators that are useful to operationalize societal security

Obviously ESS provides a very relevant grid to correlate security-related values and attitudes, as well as behaviour, too. In the future, in principle a societal security module could be added to ESS. However, already the existing ESS set of variables provides several relevant indicators of societal security. In what follows they will be briefly reviewed following the modular structure of ESS. If not otherwise said it is the 2012 version of ESS that will be used.

Media and social trust

Here it is obviously the social trust part that is of relevance. It contains the following items.

- Most people can be trusted or you can't be too careful
- Most people try to take advantage of you, or try to be fair
- Most of the time people helpful or mostly looking out for themselves

Politics

Questions on trust of key societal organisations have clear security relevance:

- Trust in country's parliament

⁸⁹ *Exploring public attitudes, informing public policy: Selected findings from the first five rounds*. European Social Survey, July 2013, p. 5 (http://www.europeansocialsurvey.org/docs/findings/ESS1_5_select_findings.pdf, accessed 26 April 2014).

⁹⁰ *Ibid.*, p. 6, 9, 18, and 19.



- Trust in the legal system
- Trust in the police
- Trust in politicians
- Trust in political parties
- Trust in the European Parliament
- Trust in the United Nations

Other questions include attitudes to immigrants and gay and lesbian people.

Subjective well-being...

This module contains a couple of very directly security relevant items:

- Respondent or household member victim of burglary/assault last 5 years
- Feeling of safety of walking alone in local area after dark

Gender, Household

Relative to societal security this module is entirely to be regarded as background data.

Socio demographics

With a wide definition of economic security, e.g. unemployment data could be of relevance.

Human values

In addition to the relevance as background data some of the 21 items in the human values module also have direct security relevance. This is the third we found to have the highest relevance with regard to societal security.

- Important that people are treated equally and have equal opportunities
- Important to live in secure and safe surroundings
- Important to understand different people
- Important to make own decisions and be free
- Important that government is strong and ensures safety
- Important to seek adventures and have an exiting life
- Important to care for nature and environment .



5. Summary and outlook

This report represents the first phase in a 3-step research approach towards the main aim of WP3, which is to develop an annual societal security report that will provide the SOURCE Network of Excellence with empirical data and insights on societal security. The methodology workshop that led to this report developed the idea of identifying and using proxy indicators for societal security, as it is a broad concept that covers many aspects of the everyday life of European citizens. The proxy indicators are theoretically sampled according to seven dimensions of societal security (see chapter 2. How to measure societal security?). For this report, the five potentially most interesting proxy indicators have been described to provide a first impression on the D3.4 annual societal security report. The quantitative data that will be compiled and analysed in the D3.4 report is based on two main sources, the Eurobarometer (EB) and the European Social Survey (ESS). Chapter 3 of this report is analysing the strengths and weaknesses of these two major European surveys and identified variables that can be used as proxy indicators for societal security. The quantitative data that is covered by the annual societal security report will be complemented by a qualitative research approach that is outlined in the upcoming deliverable of WP3 (D3.2 survey handbook). At the methodology workshop in Vienna it was agreed that for the societal security report three different types of data will be identified, collected and analysed:

a) **Public Perception Surveys** (e.g. Eurobarometer)

To measure for example politic security (one dimension of societal security) the EB provides several questions on the trust in authorities, the image of the EU and optimism about the political future of the EU. Those variables identified in chapter 3 of this report will be systematically compiled and processed in the annual societal security reports (upcoming D3.4).

b) **Proxy Indicators** (e.g. Gini Index)

The Gini Index is measuring the degree of inequality via the income among households in a country. The gini coefficient has implications for the economic health of a country as the GINI is indicating the distribution of income with one number per country. Its inventors do not inquire the Gini Index to measure societal security but it can highlight some aspects of the socio economic security in a country. The various proxy indicators that have been identified in the EB and ESS will together explain different aspects of societal security.

c) **Experts Interviews with representatives from different sectors from each participating country**

The primary challenge for WP3 is to understand and cover the diversity of what societal security is. Consequently the methodology workshop at the beginning of WP 3 came to the conclusion that in addition to the identified already exciting Public Perception Surveys and the Proxy Indicators for societal security a qualitative component is key to understand and describe the diversity of the concept. The next deliverable (D3.2) will draft a survey handbook and include a sampling strategy for the complementary qualitative expert interviews that will be conducted annually over the next 5 years.

To summarise, both the EB and the ESS offer a large variety of different indicators for societal security. The theoretical sampling applied along the seven dimensions of societal security will structure the survey approach and provide a set of quantitative indicators for societal security and



complement this data with an annual qualitative survey amongst experts for societal security from different domains.



6. References

- Beck, U. (1992): Risk Society. Towards a New Modernity, Sage Publications: London.
- Buzan, B., Wæver, O. & de Wilde, J. (1998): Security. A New Framework For Analysis. Boulder/Col.: Lynne Rienner.
- Clarke, S. (2013): Trends in crime and criminal justice, 2010, Eurostat. Statistics in focus, 18/2013.
- Europe 2020 Strategy. http://ec.europa.eu/eu2020/index_en.htm
- European Commission, Communication (2010): The EU Internal Security Strategy in Action: Five Steps Towards a More Secure Europe, COM(2010) 673 final, 22.11.2010, Brussels: European Commission. http://ec.europa.eu/commission_2010-2014/malmstrom/pdf/news/internal_security_strategy_in_action_en.pdf
- European Commission: Youth unemployment. http://ec.europa.eu/europe2020/pdf/themes/21_youth_unemployment.pdf
- European Opinion Research Group (2003): Public safety, exposure to drug-related problems and crime, Report prepared for the European Commission.
- European Union (1995-2010): Eurobarometer Interactive Search System.
- European Social Survey: <http://www.europeansocialsurvey.org/essresources/findings.html>
- European Social Survey (2012): Sampling for the European Social Survey Round VI: Principles and Requirements. http://www.europeansocialsurvey.org/docs/round6/methods/ESS6_sampling_guidelines.pdf
- Eurostat: At-risk-of-poverty rate by poverty threshold, age and sex, SILC, online data code: ilc_li02, 2012. <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
- Eurostat: Gini coefficient of equivalised disposable income, SILC, survey year 1995-2013. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_di12&lang=en
- Eurostat (2012): Gini coefficient of equivalised disposable income, SILC, online data code: tessi190. <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tessi190>
- Eurostat (2012): Project Lot 1: EU-SILC (European Union Statistics on income and Living Conditions): Methodological studies and publications, Document: Task 5.1.1 - Working paper with the description of the 'Income and living conditions dataset'. http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/documents/tab/Tab/Working_paper_on_EU_SILC_datasets.pdf
- Eurostat (2014): Employment and unemployment (Labour Force Survey). Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/employ_esms.htm
- Eurostat: Crime and criminal justice. Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/crim_esms.htm
- Eurostat: Glossary: Equivalised disposable income. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Equivalised_disposable_income
- Eurostat: Income and living conditions, Reference Metadata in Euro SDMX Metadata Structure. http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/de/ilc_esms.htm
- Eurostat: Unemployment rate by sex and age groups - annual average, %, online data code: une_rt_a, 2013. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=une_rt_a&lang=en
- Frey, B. S., Stutzer, A. (2002): What Can Economists Learn from Happiness Research? In: Journal of Economic Literature, Vol. 40, No.2, pp. 402-435.
- Frey, B. S., Stutzer, A. (2012): Recent Developments in the Economics of Happiness: A Selective Overview, IZA Discussion Paper No. 7078, IZA, Bonn.



- Giddens, Anthony (1999): Risk and Responsibility, *The Modern Law Review* Vol 62.
- Gini C. (1912): Variabilità e mutabilità: contributo allo studio delle distribuzioni e delle relazioni statistiche. Studi Economico-Giuridici pubblicati per cura della Regia Università di Cagliari.
- Glaeßner, G.-J. (2010): Die Innen- und Rechtspolitik der Großen Koalition. In: S. Bukow & W. Seemann (Eds.): Die Große Koalition. Regierung – Politik – Parteien 2005-2009, VS: Wiesbaden, pp. 174-190.
- Hamel, Gary, and Liisa Välikangas, “The Quest for Resilience”, *Harvard Business Review*, September 2003, p. 3 [of the HBR offprint]. <http://hbr.org/archive-toc/BR0309>
- Hayes, Ben (2009): NeoConOpticon: The EU Security-Industrial Complex, TNI/Statewatch. www.statewatch.org/analyses/neoconopticon-report.pdf
- Luxembourg Income Study: Luxembourg Income Study Database. <http://www.lisdatacenter.org/our-data/lis-database/>
- Milanovic B. (2013): Description of All the Gini dataset, Summer 2013, World Bank: Washington, DC. <http://go.worldbank.org/9VCQW66LA0>
- MSB (2013) Opinioner 2013. MSB publication number 635, Karlstad.
- MSB (2012) Opinioner 2012, MSB publication number 554, Karlstad.
- MSB (2011) Opinioner 2011, MSB publication number 391-12, Karlstad.
- SOM-institutet (2011): Svenska trender, Lennart Weibull, Henrik Oscarsson & Annika Bergström (red.) Göteborgs Universitet.
- Special Eurobarometer 371 (2011): Internal Security. Wave EB75.4, TNS Opinion & Social, Brussels: European Commission. http://ec.europa.eu/public_opinion/archives/ebs/ebs_371_en.pdf
- Standard Eurobarometer 80 Autumn 2013. http://ec.europa.eu/public_opinion/archives/eb/eb80/eb80_first_en.pdf
- Sweijs, Tim (2012): ETTIS – European security trends and threats in society - Project, D1.1 Conceptual foundations of security, 30.06.2012, http://ettis-project.eu/wp-content/uploads/2012/03/D1_11.pdf
- United Nations Development Programme (1994): Human Development Report 1994, Oxford University Press: New York.
- Wolff, P., Montaigne, F., González, G. R.(2010): Investing in statistics: EU-SILC, In: Atkinson, A.B., Marlier, E. (Eds.): Income and Living Conditions in Europe, Eurostat statistical books, European Union: Luxembourg, pp.38-55.
- World Bank (2013): GINI index, survey year 1980-2013. <http://data.worldbank.org/indicator/SI.POV.GINI>
- World Bank (2013): PovcalNet: an online poverty analysis tool. last updated 18.4.2013. <http://iresearch.worldbank.org/PovcalNet/index.htm>
- World Bank (2012): World Development Indicators 2012. World Bank: Washington, DC, p.77. <http://data.worldbank.org/sites/default/files/wdi-2012-ebook.pdf>
- World Bank: Measuring Inequality. <http://go.worldbank.org/3SLYUTVY00>