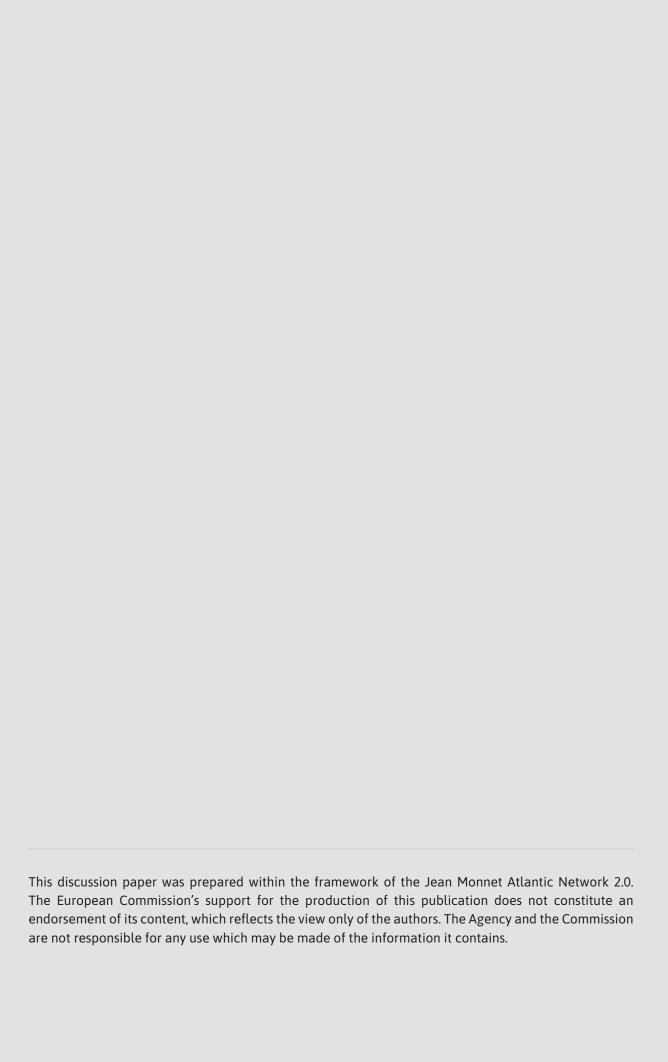


Security and Inequality Evidence from Portugal

Bruno P. Carvalho, Mariana Esteves, Susana Peralta









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Abstract

This paper analyses human security in Portugal and how it interacts with inequality. We use representative survey data to discuss the individual determinants of several dimensions of human security that go beyond the narrow conception of the absence of physical threats. These individual determinants include a multidimensional perspective, encompassing environmental security and living conditions. Albeit Portugal is one of the safest countries in the world, we document that certain groups, such as women, low-income classes, the elderly, and younger people, often feel less safe. However, we show that Portugal fares less well in a broader perspective, as its income, food, housing, and health security are often higher than in many other European Union nations.

Keywords: Human security, inequality, Portugal, European Union.

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Introduction

ortugal is considered relatively safe through a narrow security lens: the absence of physical threats. According to the Institute for Economics and Peace, Portugal is ranked as the sixth most peaceful country in the world.¹ Concerns with crime and terrorism are one of the country's least relevant issues.2 In 2020, 6.3% of people in Portugal reported they lived in areas with crime, violence, or vandalism, contrasting with 10.8% in the European Union (EU), according to the Survey for Income and Living Conditions.³ Still, 15.8% of Portuguese residents report they have felt unsafe or very unsafe walking alone after dark, and more than 83% believe a strong government to ensure safety is important, according to data from the European Social Survey (ESS).4

This statement can be expanded in two directions. On the one hand, the extent to which security hinges on this narrow definition related to crime is questionable. On the other hand, even if the average perception of security in a specific society is high, it may hide considerable heterogeneity among individuals, depending on their socioeconomic position. In this short paper, we broaden our analysis of Portugal's security in these two directions.

Humanity entered the 21st century with a revival in the interest of human security5. According to the prominent economist and moral philosopher Amartya Sen, this revival occurs for positive and negative reasons. On the negative side, Sen identifies the emergence of 'newly developed dangers and adversities' due to public health concerns, civil conflicts, and genocides. While Sen wrote these lines at the turn of the century, it is fair to say that the problems have been accentuated in the last two and a half decades.7 Currently, the human race is slowly emerging from a pandemic, and Europe is the site of an unprecedented war of aggression.

On the positive side, Sen reckons the 'enhanced possibility [...] to put our efforts and understanding together to achieve a better-coordinated resistance to the forces that

^{1.} Institute for Economics and Peace – Global Peace Index 2022: Measuring Peace in a Complex World. 2022. Available at: http://visionofhumanity. org/resources.

^{2.} Eurobarometer – 'Standard Eurobarometer'. No. 97. Summer 2022. Available at: https://europa.eu/eurobarometer/surveys/detail/2693.

^{3.} European Union Statistics on Income and Living Conditions (EU-SILC) – 'Survey for income and living conditions 2021'. 2021. Available at: https:// ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

European Social Survey - 'ESS round 10 - 2020. Democracy, digital social contacts.' 2022. Available at: https://ess-search.nsd.no/en/ study/172ac431-2a06-41df-9dab-c1fd8f3877e7.

^{5.} Sen, Amartya – 'Why human security'. Paper presented at the International Symposium on Human Security. Tokyo. 28 July 2000. Available at: https://www.ucipfg.com/Repositorio/MCSH/MCSH-05/BLOQUE-ACADEMICO/Unidad-01/complementarias/3.pdf.

^{6.} Ibid.

^{7.} Ibid.

make human survival so insecure.'8 Indeed, scientific advances in natural and social fields enhance the opportunities to deal with these challenges. However, what is precisely human security? Sen posits that while human security is related to the human development and human rights approaches to analysing societal achievements, it is a distinct concept.9

The concept of human security encompasses several distinct elements. First, it focuses on individual human lives, as opposed to, e.g., the military concept of national security. Moreover, regarding this latter, human security expands the set of threats considered, to include food, health, political, and environmental security, amongst others. It also involves 'the construction of safeguards and opportunities for people's strengths and aspirations.' Second, it must include the analysis of society and social arrangements that improve security. Third, in contrast to the concept of human development (as put forward by Sen¹¹), which aims at expanding positive freedoms, human security concentrates on downside risks. Concomitantly, with this narrower focus, it should concentrate on the more elementary human rights, whereas human development covers the whole range of such rights.

Indeed, modern perceptions of security are multidimensional and interconnected, as they are closely linked to global threats, such as climate change, recurrent economic crises, or increased inequality, amongst others. Characterisation of human security calls for objective and subjective dimensions of the concept¹² and the use of information on the individual level. Moreover, the individual dimension is crucial to study the connections between inequality and security.

Palma, Jardim and Monteiro's analysis of the security situation in 20 Portuguese municipalities is a significant piece of related research.¹³ The authors collected their data using a random sample of 3757 individuals. Their survey has much detail about the perception of crime rates of different kinds, which the authors relate to objective measures from official statistics. Palma, Jardim and Monteiro show that objective and subjective security measures are positively associated with subjective well-being in Portugal and vary across different regions.¹⁴ Women, elderly individuals, and those with lower incomes are the ones with the most vulnerable sense of security. These results have remained unchanged after a decade, as we will show in greater detail in this analysis.

^{8.} Ibid.

^{9.} Sen, Amartya – 'Basic education and human security'. Background paper for the Basic Education and Human Security workshop, organised by the Commission on Human Security, UNICEF, the Pratichi (India) Trust, and Harvard University, in Kolkata, 2–4 January 2002. Available at: http://www.humansecuritychs.org/activities/outreach/Kolkata.pdf.

^{10.} Webb, Dave; Wills-Herrera, Eduardo – Subjective Well-Being and Security. Heidelberg: Springer Dordrecht, 2012. DOI: 10.1007/978-94-007-2278-1_5.

^{11.} Sen, Amartya – 'Why human security'.

^{12.} Webb, Dave; Wills-Herrera, Eduardo – Subjective Well-Being and Security.

^{13.} Palma, Patrícia Jardim da; Lopes, Miguel Pereira; Monteiro, Ana Sofia – 'The impact of objective and subjective measures of regional security on subjective well-being: evidence from Portugal'. In Webb, Dave; Wills-Herrera, Eduardo – Subjective Well-Being and Security.

^{14.} Ibid.

Our focus will be on subjective security, acknowledging the importance of objective security measures since these can be critical in creating a sense of trust and confidence amongst citizens. We rely on individual-level data from the ESS, the European Union Survey on Income and Living Conditions (EU-SILC), and the Eurobarometer to analyse how safety and safety perceptions vary for different groups of the population, depending on their socio-demographic characteristics. Furthermore, we focus on a set of dimensions that combine the above theoretical considerations about the concept of human security with data availability, namely: environment, income, food security, housing quality, and health.

This analysis is organised as follows. Section 2 analyses the heterogeneity of safety perceptions in Portugal and compares crime rates to other European countries. Section 3 focuses on the environmental side of security. Section 4 emphasises the security of an individual's basic needs, such as income, food, housing, and health. Finally, Section 5 concludes the report.

^{15.} More detailed information about the data is given in Appendix A.1.

Security, Safety and Crime

How much do we value safety?

Table 1 shows the share of respondents, from the European Union (EU27) and Portugal (PT) who have identified each of the 15 possible issues facing their countries as the most important, ordered by the prevalence in the EU27. Most European residents identify rising prices, inflation, and cost of living, followed by energy supply and the economic situation. Note that this data was collected after the COVID-19 pandemic and before the war caused by the invasion of Ukraine by Russia. In the last column, red (green) highlights the issues more (less) frequently mentioned by residents in Portugal, compared to the EU27 average. The concerns directly linked to safety, such as crime and terrorism, ranked 11 and 15 for the EU27. On average, only 6% and 2% of European residents believe these are the most important issues facing their countries today. In Portugal, these percentages drop to only 1%.

Table 1. What do you think are the two most important issues facing the country now? European Union vs Portugal, 2020 (%)

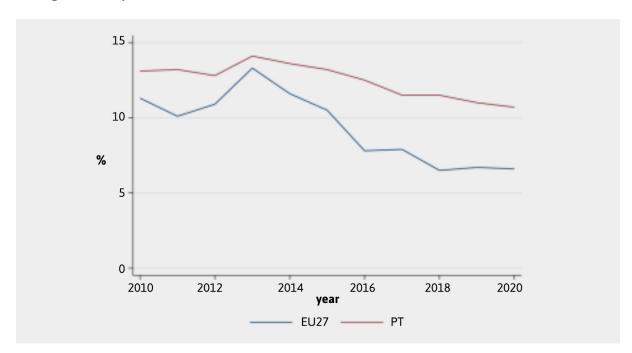
	EU27 (%)	PT (%)	Diff. (pp)
Rising prices/ inflation/ cost of living	54	55	1
Energy supply	22	3	-19
Economic situation	20	27	7
The environment and climate change	15	6	-9
Health	14	40	26
The international situation	12	8	-4
Unemployment	9	14	5
Government debt	8	6	-2
Immigration	8	4	-4
Pensions	7	9	2
Crime	6	1	-5
Housing	6	5	-1
The education system	6	4	-2
Taxation	5	7	2
Terrorism	2	1	-1

Source: Eurobarometer 2022.

These findings are consistent with the information collected by the EU-SILC.16 Fewer people in Portugal report living in an area with crime, violence, or vandalism than the EU average (Figure 1). In 2020, 6.6% of Portuguese residents said they faced a problem of crime, violence, or vandalism in their neighbourhood, compared to 10.7% for the EU27. This proportion has fallen progressively since 2013 (with peaks of 13.3% for Portugal and 14.1% for the EU27). In 2020, 6.7% of people in Portugal and 10.7% in EU27 reported this issue.

The figures presented so far necessarily average out substantial heterogeneity. As expected, for instance, people living in cities reported those problems over three times more often than people in rural areas in 2020 (8.7% vs 4.4%), as shown in Figure 2. The same tendency is found in the remaining EU countries (16.3% vs 5.8%). In terms of safety, the relative advantage of Portugal is more considerable in cities.

Figure 1. Proportion of population who live in an area with crime, violence, or vandalism: Portugal vs European Union, 2010–20



Source: EU-SILC.17

^{16.} European Union Statistics on Income and Living Conditions (EU-SILC) – 'Survey for income and living conditions 2020'. 2020. Available at: https:// $\underline{ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.}\\$

^{17.} Ibid.

20 15 % 10 5

Towns and suburbs

EU27 PT

Rural areas

Figure 2. Proportion of population who live in an area with crime, violence, or vandalism: by a degree of urbanisation, Portugal vs European Union, 2020

Source: EU-SILC.18

Is Portugal a safe country?

Cities

The 2022 ESS reports that 81% of respondents from the 19 European countries believe that living in secure and safe surroundings is essential. Table 2 shows that Portugal is above this average, with 87% of respondents stating the importance of secure and safe surroundings. The country for which this dimension is vital is Slovenia (90.9%), while Norway places it lower on the list (65.4%).

Another question related to security perceptions included in the 2022 ESS is whether people believe it is important that the government is strong and ensures safety.²⁰ In Slovenia and Greece, research suggests that there appears to be a positive correlation between the significance placed on living in secure and safe surroundings and the expectation that the government will play an active role in ensuring it. However, Italy and Portugal, in turn, the correlation seems to be negative: inhabitants have higher concerns for safety, but less often believe this should be ensured by a strong government. Nonetheless, many in all the EU countries believe the government should play a key role in ensuring safety (ranging from 92.8% in Slovenia to 59.7% in Italy). In Portugal, this proportion is 75.5%.

Perhaps a more tangible measure of the degree of safety of a country is the question

^{18.} European Union Statistics on Income and Living Conditions (EU-SILC) – 'Survey for income and living conditions 2021.'

^{19.} The fieldwork for the 10th edition of the ESS started in September 2020 but, due to the pandemic constraints, only finished in August 2022. Thus, some countries' results are still not available. European Social Survey – 'ESS round 10 - 2020,

^{20.} Ibid. For more detail, see Appendix A.1.

about whether respondents feel safe walking alone in their neighborhood after dark. Among the countries surveyed, Portugal has the highest percentage of people who feel safer(95%), followed by Finland and Slovenia. Greece, in turn, has the lowest percentage of people who feel safe walking alone after dark in their neighbourhood (58%).

Table 2. Perception on safety in European Union countries, 2020 (%)

	Safe at nigh	it	Safety importa	ınt	Strong gov	,
1	Portugal	94.9	Slovenia	90.9	Slovenia	92.8
2	Finland	93.6	North Macedonia	89.4	Bulgaria	91.9
3	Slovenia	93.0	Italy	89.1	Netherlands	90.6
4	Italy	92.1	Slovakia	88.8	Greece	89.2
5	Hungary	91.4	Montenegro	88.5	Lithuania	88.0
6	Croatia	89.9	Greece	87.9	Iceland	87.4
7	North Macedonia	89.2	Portugal	87.1	Switzerland	86.8
8	Norway	87.6	Hungary	86.7	North Macedonia	85.1
9	Netherlands	86.8	Bulgaria	86.4	Estonia	81.5
10	Estonia	86.0	Croatia	84.3	Slovakia	81.3
11	Iceland	86.0	Finland	81.4	Finland	80.5
12	Slovakia	82.1	Estonia	79.8	Croatia	80.3
13	Switzerland	78.6	Czechia	78.9	Hungary	79.2
14	Czechia	78.4	Lithuania	78.3	Montenegro	78.4
15	France	75.6	Switzerland	78.0	Czechia	77.3
16	Montenegro	75.6	Netherlands	73.4	Norway	75.9
17	Lithuania	71.8	Iceland	73.3	Portugal	75.5
18	Bulgaria	67.8	France	72.7	France	75.4
19	Greece	57.8	Norway	65.4	Italy	59.7
	Total average	83.1		82.1		81.9

Source: ESS.²¹

Unsurprisingly, the proportion of people feeling safe walking alone after dark varies significantly by heterogeneity between population groups. In all 19 countries currently included in the 2022 European Social Survey, women report unsafe more frequently than men.²² In 2020, on average, this concern is reported by 30% of females and 12% of males. In Portugal, this gender gap is present, albeit smaller: 20.4% of women expressed the same concern, compared to 13.2% of men.

The position in the income distribution also matters for safety concerns. Table 3 shows that 25% of people in the poorest quintile (Q1) report feeling unsafe, compared with

^{21.} European Social Survey – 'ESS round 10 – 2020.

^{22.} Ibid.

7.1% in the wealthiest quintile $(Q5)^{23}$. A similar difference is observed for the EU average (32.1% vs 13.5%).

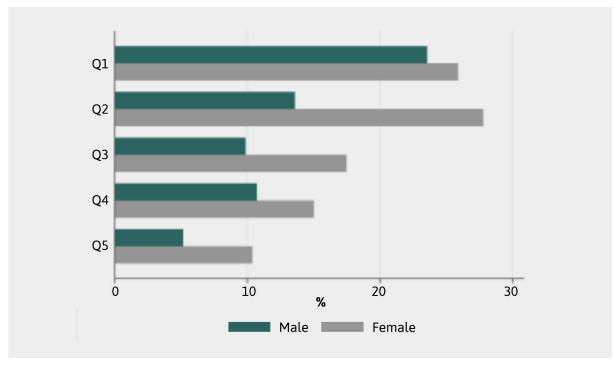
Table 3. Proportion of people who feel unsafe walking alone in the local area after dark, by income quintile, Portugal vs European Union, 2020 (%)

	Q1	Q2	Q3	Q4	Q5	Diff. (Q5-Q1)
PT	25.0	21.7	14.4	12.7	7.1	-17.9 pp.
EU average	32.1	24.6	20.4	16.4	13.5	-18.6 pp.

Source: ESS.24

Crossing the gender and income dimensions, as shown in Figure 3, it is clear that women in all quintiles report feeling unsafe more often. In the poorest quintile (Q1), there is a slight difference in how safe men and women feel, with 26% of women and 24% of men feeling unsafe. However, in the richest quintile (Q5), only 10% of women and 5% of men feel unsafe. In the second quintile (Q2), more women (27.8%) reported feeling unsafe, revealing a more noticeable gender gap.

Figure 3. Proportion of people who feel unsafe walking alone in the local area after dark by gender and income quintile, Portugal 2020



Source: ESS.²⁵

^{23.} Information about quintiles of equalised disposable income in Portugal is given in Appendix A.1 - Tables 19 and 20.

^{24.} European Social Survey – 'ESS round 10 – 2020.

^{25.} Ibid.

Portugal stands out from other EU countries as a place where young people aged 15-17 are more likely to report feeling unsafe when walking on the street after dark (27% vs 19% in the EU average). In most other countries, the oldest group (65+) has the highest prevalence of non-safety feelings.

These differences reflect different behaviours regarding the frequency of individuals being outside after dark. Individuals who report feeling less safe also tend to go out less often. If this is the case, for equivalent behaviours, we would observe even higher levels of heterogeneity.

20 %

Figure 4. Proportion of people who feel unsafe walking alone in the local area after dark by age group, Portugal 2020

Source: ESS.26

Figure 5 shows how this concern varies with the relation with the labour market. Unemployed people tend to be more concerned about this issue(> 40%), while employed people (10.4%) and students (5.5%) tend to feel less unsafe. Note that disabled people felt more unsafe than non-disabled people (31.9% vs 17.1%).

35-44 45-54

15-17 18-24 25-34

26. Ibid.

20
10
Paid work
Unemployed, looking for job
Unemployed, not looking for job

Figure 5. Proportion of people who feel unsafe walking alone in the local area after dark by main activity.

Source: ESS.27

To further ascertain the relevance of the documented heterogeneity dimensions so far, we estimate the following linear probability model, where *i* stands for the respondent:

Retired

Permanently sick or disabled

Housework, looking after children

$$\begin{aligned} y_i &= \alpha + \beta_1 Higher\ education_i + \beta_2 Higher\ education_i + \beta_3 Age_i + \beta_4 Age_i^2 + \\ \beta_5\ Unemployment_i + \beta_6 Retired_i + \beta_7 Disabled_i + \beta_8\ Married_i + \beta_9 Divorced_i + \\ \beta_{10}\ Widowed_i + \beta_{11} Norte_i + \beta_{12} Centro_i + \beta_{13}\ Alentejo_i + \beta_{14}\ Algarve_i + \beta_{15}\ Q2_i + \\ \beta_{16}\ Q3_i + \beta_{17}\ Q4_i + \beta_{18}Q5_i + \mathcal{E}_i \end{aligned}$$

The binary dependent variable, y_i will measure, in turn, whether respondents feel unsafe at night, value safety, and consider that a strong government is important. Each outcome is established on socio-demographic factors: gender, education level, age, labour market situation, legal marital status, region, and income quintile. All explanatory variables are binary, except age. Table 4 shows the results.

Table 4. Linear Probability Model

	(1)	(2)	(3)
	Unsafe at night	Safety important	Strong gov
Female	8.746***	2.702	2.461
	(1.854)	(1.603)	(1.839)
Higher education	-5.890*	-3.217	-3.315
	(2.410)	(2.084)	(2.390)
Age	-0.779**	0.120	0.231
	(0.284)	(0.245)	(0.281)
\ge²	0.010***	-0.000	-0.002
	(0.003)	(0.002)	(0.003)
Jnemployed	24.061**	11.180	16.241
	(8.431)	(7.291)	(8.362)
Retired	-3.504	-0.472	-5.706
	(4.595)	(3.973)	(4.557)
Disabled	5.906	9.285	7.234
	(10.640)	(9.201)	(10.554)
Married	-2.650	-1.597	-1.649
	(5.847)	(5.057)	(5.800)
Divorced	2.938	1.483	-5.562
	(2.898)	(2.506)	(2.875)
Vidowed	-1.075	0.270	-1.954
	(3.204)	(2.770)	(3.178)
Vorte	-0.775	8.069***	6.200**
	(2.330)	(2.015)	(2.311)
Centro	-5.087*	3.215	2.453
	(2.441)	(2.111)	(2.421)
Alentejo	2.129	-0.941	0.466
	(3.728)	(3.224)	(3.698)
Algarve	4.167	-33.987***	-54.810***
	(4.282)	(3.703)	(4.247)
Q2	-0.131	-4.492*	0.043
	(2.527)	(2.186)	(2.507)
Q3	-4.810	2.255	4.850
	(2.750)	(2.378)	(2.727)
Q4	-2.814	1.513	3.561
	(3.027)	(2.618)	(3.003)
Q5	-7.785*	2.757	6.287
	(3.813)	(3.298)	(3.782)
Constant	27.549***	78.333***	71.406***
	(7.036)	(6.085)	(6.979)
Observations	1837	1837	1837
	0.061	0.083	0.126

All in all, we find evidence that being female and unemployed increases the probability of feeling unsafe walking alone in the local area after dark. Those who live in the centre of Portugal (Centro) report feeling less unsafe. The richest people (Q5) also feel less unsafe.

Those in the northern (Norte) region tend to place a higher value on living in secure and safe surroundings and wish for a stronger government to ensure safety than those in the Lisbon Metropolitan Area. The opposite happens in the Algarve, where people seem to value less on living in a secure and safe environment; they also place less importance on having a robust government ensuring safety.

To validate these results, we ran these regressions, including covariates, one by one. The results, unchanged with this robustness check, can be found in Tables 21, 22, and 23 of the Appendix.

Crime

Until now, we have been analysing perceptions of safety. Now, we will look at the reported crimes in Portugal and the EU-27. Table 5 shows that the share of intentional homicides and theft-type offences declined between 2010 and 2020 for Portugal and the EU-27. During this period, sexual assault and sexual violence crimes increased in Portugal by 22.1% and 13.3%, respectively.

While crimes such as homicides are measured objectively, other types of offences, particularly sex-related ones, depend a lot on the social norms that determine the potential victims' reporting behaviour. Therefore, when analysing these figures, it is important to remember that they represent the combined effects of prevalence and reporting.

Table 5. Recorded offences by category, per hundred thousand inhabitants, Portugal vs EU27, 2010 vs 2020

Crime		2010	2020	Diff. (%)
Intentional homicide	Portugal	1.2	0.8	-32.5
	EU27 average	1.7	1.2	-28.1
Theft	Portugal	899.1	632.9	-29.6
	EU27 average	1 518.3	896.0	-41.0
Rape	Portugal	4.0	3.1	-23.5
	EU27 average	9.8	14.3	45.6
Sexual assault	Portugal	16.9	20.6	22.1
	EU27 average	22.7	21.8	-3.8
Sexual violence	Portugal	20.9	23.6	13.3
	EU27 average	34.4	35.5	3.2

Source: Eurostat. 2022.

Environmental Security

he environment is associated with physical and mental health and is prone to induce risks for individuals. As shown in Figure 1, 15% of people in the EU-27 and 6% of people in Portugal consider the environment a matter of concern. We now show the available environmental risk statistics.

Smoke pollution, dust, unpleasant smells, or polluted water can significantly threaten health and security. Around 13.2% of Portugal's population reports household problems caused by pollution, grime, or other environmental problems, slightly below the EU27 average (13.7%, Table 6). Those from the poorest income quintile (Q1) are the most affected, with 17% living with these issues (Table 7). The Metropolitan Area of Lisbon (AML) is the most affected (15%), followed by Algarve (14.7%) and Alentejo (14.6%).

Table 6. Pollution, grime, or other environmental problems in the local area, Portugal vs EU27, 2020 (%)

	Portugal	EU27
Pollution, grime, or other environmental problems in the local area	13.2	13.7

Source: EU-SILC.28

Table 7. Pollution, grime, or other environmental problems in the local area, Portugal 2020 (%)

	Q1	Q2	Q3	Q4	Q5
Pollution, grime, or other environmental problems in the local area	17.0	12.0	12.7	13.0	12.0

Source: EU-SILC.29

According to the European Environment Agency (EEA), air pollution levels are too high in various countries across the European Union (EEA, 2022). In excessive concentrations, nearly 75% of the EU's urban population is exposed to fine particles known as PM2.5. Table 8 shows how numerous years of life we lose, on average, due to exposure to these particles. Portugal and the EU-27 improved between 2010 and 2020, with less than 40%

^{28.} European Union Statistics on Income and Living Conditions (EU-SILC) – 'Survey for income and living conditions 2020.'

^{29.} Ibid.

of the years lost. In Portugal, in 2020, the number of lost years of life amounted to 264 per 100,000 inhabitants, compared to 545 years in the EU-27 average.

Table 8. Years of life lost due to exposure to fine particles (PM2.5) per 100,000 inhabitants

Country	2010	2020	Diff. (%)
Portugal	451	264	-41.5
EU27 average	987	545	-44.8

Source: Pordata, 2022.

Wildfires are a significant concern in Europe, and Portugal is one of the most affected countries. As per Forest Fires in Europe, the Middle East and North Africa report, Portugal reported the highest number of wildfires (21,006) and burnt area (540,630 ha) in 2017. That year, this accounted for 59% of the total burnt area in the five Southern EU27 member states (Portugal, Spain, France, Italy, and Greece).³⁰

In 2021, Portugal reported 8,186 wildfires (61% less than in 2017) and 28,360 burnt areas (94% less than in 2017). This represented only 5% of the total in the EU27 (500,566 ha). The North was the most affected region, accounting for 42% of the total burnt territory. The period between July and August represented around 51% of the 2021 total burnt area³¹.

Regarding the impact of fires on the loss of human lives, 2017 was marked by two tragic events that resulted in 66 fatalities (65 civilians and one firefighter). In 2021, there were 6 fatalities, of which 2 were firefighters and 4 civilians (see Table 9).

Table 9. Area burned (hectares) and the loss of human lives, Portugal, 2017 vs 2020.

Year	Burned area (ha)	Casualties
2017	539 921	66
2021	28 360	6

Source: JRC Publications Repository. 32

^{30.} JRC Publications Repository – 'Forest fires in Europe, Middle East and North Africa 2017'. Publications Office of the European Union. 2018. Available at: https://publications.jrc.ec.europa.eu/repository/handle/JRC112831.

^{31.} JRC Publications Repository – 'Forest fires in Europe, Middle East and North Africa 2021'. Publications Office of the European Union. 2022. Available at: https://publications.jrc.ec.europa.eu/repository/handle/JRC130846.

^{32.} JRC Publications Repository – 'Forest fires in Europe, Middle East and North Africa 2017'; JRC Publications Repository – 'Forest fires in Europe, Middle East and North Africa 2021'.

Living Conditions

uman security is a broad concept that overlaps with all aspects of life. At the beginning of the century, King and Murray rethought the concept of security and proposed a human security index that leaves violence aside and measures the 'years lived outside a state of generalized poverty'.33

This section investigates different dimensions of human security that threaten the everyday lives of the most vulnerable: income, food, housing, and health security. As highlighted by Alkire, putting human security into practice entails facing these challenges.34

Income Safety

According to Eurostat, a person is at risk of financial poverty if their equivalised disposable income (after social transfers and taxes) is 60% of the median national income (924e per month in 2020). In Portugal, in 2020, 1.9 million people were below the at-risk-of-poverty threshold of 554e per month. Thus, 18.4% of the population in Portugal is poor, which is above the EU average of 16.7%.

The likelihood of being at risk for poverty differs for all population groups. Table 10 shows the most vulnerable groups in Portugal are women, children, young adults and the elderly, and non-Portuguese residents. The type of household is determinant to understanding the risk of poverty, with lone parent households being especially at risk (29.9%). Non-Portuguese have a risk of poverty 1.5 times higher than Portuguese in Portugal. Regarding the relationship with the labour market, the unemployed are twice as likely the employed to be at risk of poverty. The autonomous regions of Madeira and Azores are the most affected (24.2% and 21.9%, respectively). In the mainland, the risk of poverty rate is more significant in the Algarve (21.6%). Due to their over-dependence on tourism, these regions were strongly affected by the COVID-19 pandemic.

The inability to face financial commitments or unexpected expenses can also assess monetary strain. In Portugal, in 2021, 2.5% of the population had arrears on mortgage or rent payments, 5.3% had arrears on utility bills, 2% reduced utility costs, and 1.7% had arrears on other loan payments. Additionally, 31.2% report not being able to meet unexpected expenses with their resources (must seek financial assistance to pay on time).

^{33.} King, Gary; Murray, Christopher J.L. – 'Rethinking human security'. In Political Science Quarterly. No. 116, 2002, pp. 585–610.

^{34.} Alkire, Sabina – 'A conceptual framework for human security'. Working Paper 2, Centre for Research on Inequality, Human Security and Ethnicity, $CRISE.\ 2003.\ Available\ at: \underline{https://assets.publishing.service.gov.uk/media/57a08cf740f0b652dd001694/wp2.pdf.}$

Table 10. At-risk-of-poverty rate (%)

Total 18.4 Gender Male 17.5 Male 17.5 17.5 Fenale 17.5 18.6 Age group 20.4 18.2 0-17 20.4 20.9 25-34 13.7 35-44 16.2 45-54 16.2 20.1 Household type Couple without any child(ren) 15.9 20.1 Couple with at least one child aged less than 25 16.0 20.1 Couple with at least one child aged less than 25 18.2 20.1 Couple with at least one child aged less than 25 18.2 20.1		(%)
Male 17.5 Female 19.2 Age group	Total	18.4
Female 19.2 Age group 20.4 0-17 20.4 18-24 20.9 25-34 13.7 35-44 16.2 45-54 16.2 55-64 20.6 65+ 20.1 Household type 15.9 Couple without any child(ren) 15.9 Couple with at least one child aged less than 25 29.9 Couple with at least one child aged less than 25 29.9 Cher 20.2 Portuguese 18.2 Other 27.2 Relationship with the labour market Working Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.4 Region 21.6 Centro 19.9 AML 12.8 Alentejo 17.1	Gender	
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55-64 20.1 65+ 20.1 Household type Couple without any child(ren) 15.9 Couple with at least one child aged less than 25 16.0 Lone parent with at least one child aged less than 25 29.9 Citizenship Portuguese 18.2 Other 27.2 Relationship with the labour market Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	35–44	16.2
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Household type Couple without any child(ren) 15.9 Couple with at least one child aged less than 25 16.0 Lone parent with at least one child aged less than 25 29.9 Citizenship Portuguese 18.2 Other 27.2 Relationship with the labour market Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	55–64	20.6
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Couple with at least one child aged less than 25 16.0 Lone parent with at least one child aged less than 25 29.9 Citizenship Portuguese 18.2 Other 27.2 Relationship with the labour market Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.4 Region 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Household type	
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Citizenship Portuguese 18.2 Other 27.2 Relationship with the labour market **** Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region *** Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Couple with at least one child aged less than 25	16.0
Portuguese 18.2 Other 27.2 Relationship with the labour market **** Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region *** Norte 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Lone parent with at least one child aged less than 25	29.9
Other 27.2 Relationship with the labour market Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Citizenship	
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Working 12.1 Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region V Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Other	27.2
Unemployed 40.7 Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Relationship with the labour market	
Fulfilling domestic tasks 18.5 Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Working	12.1
Student, pupil 36.5 Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Unemployed	40.7
Unable to work due to long-standing health problems 37.5 Retired 19.8 Other 21.4 Region 21.1 Norte 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Fulfilling domestic tasks	18.5
Retired 19.8 Other 21.4 Region Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Student, pupil	36.5
Other 21.4 Region 21.1 Norte 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Unable to work due to long-standing health problems	37.5
Region Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Retired	19.8
Norte 21.1 Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Other	21.4
Algarve 21.6 Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Region	
Centro 19.9 AML 12.8 Alentejo 17.1 Açores 21.9	Norte	21.1
AML 12.8 Alentejo 17.1 Açores 21.9	Algarve	21.6
Alentejo 17.1 Açores 21.9	Centro	19.9
Açores 21.9	AML	12.8
-	Alentejo	17.1
Madeira 24.2	Açores	21.9
	Madeira	24.2

Source: EU-SILC.35

^{35.} EUROPEAN UNION STATISTICS ON INCOME AND LIVING CONDITIONS (EU-SILC) – 'Survey for Income and Living Conditions 2021'. 2021. Available at: https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

Table 11 shows that Portugal is close to the EU27 average. A significant discrepancy is visible between income groups, as shown in Table 12. Low-income households often need help to fulfil financial commitments and thus cannot afford bills and house maintenance in due time. Poorer households (Q1) are twice as likely as wealthier households (Q5) to be unable to pay an unexpected bill and delinquent mortgage or rent payments.

Table 11. Inability to meet financial commitments or unexpected expenses, Portugal vs EU27, 2021 (%)

	Portugal	EU27
Arrears on mortgage or rent payments	2.5	3.2
Arrears on utility bills	5.3	6.4
Arrears on hire purchase instalments or other loan payments	1.7	2.5
Inability to face unexpected financial expenses	31.2	30.1

Source: EU-SILC.36

Table 12. Inability to meet financial commitments or unexpected expenses by income quintiles, Portugal 2021 (%)

	Q1	Q2	Q3	Q4	Q5
Arrears on mortgage or rent payments	4.2	4.4	3.7	1.7	0.5
Arrears on utility bills	8.9	7.9	6.6	5.0	1.7
Arrears on hire purchase instalments or other loan payments	2.5	1.9	2.5	2.6	0.2
Inability to face unexpected financial expenses	57.9	49.2	37.2	26.4	12.3

Source: EU-SILC.37

Food Security

Living conditions are strongly conditioned by the ability to address basic needs, including access to food. The Rome Declaration on World Food Security defines food security as 'all people, at all times, [to] have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs

^{36.} Ibid.

^{37.} Ibid.

for an active and healthy life'38 (The Rome Declaration on World Food Security, 1996).

For this reason, the Food and Agriculture Organization (FAO) proposed in 2018 that countries included eight questions about food insecurity in annual household surveys. In the EU, this is conducted through the SILC survey. The project is known as the Food Insecurity Experience Scale (FIES) and, 18 countries had already implemented it between 2018 and 2020. In 2021, Portugal joined with relevant findings.

In Portugal, in 2021, 6% of the total population reports concerns about not having enough food to eat, 10% state they cannot only afford to eat some kinds of food, 4% report they ate less than they thought was necessary, 2% ran out of food, and 3% were unable to afford meals with meat, chicken, fish (or vegetarian equivalent) every second day.

As this is a recent set of questions and has yet to be implemented in all the countries of the EU-SILC, it cannot be compared to the EU27. Nonetheless, we know that the share of the population unable to afford a meal with meat, fish, or a vegetarian equivalent every second day in 2021 in the EU27 average was 7.3%, compared to 2.3% in Portugal. The EU27 average is skewed by countries like Bulgaria and Romania, with 22.4% and 19.2% of people in this situation.

Table 13 shows that food security in Portugal is strongly conditioned by income: approximately 20% of the population in the lowest quintile of the income distribution (Q1) report they cannot afford enough food, 30% ate only a few kinds of food, and 17% ate less than thought he/she needed.

Table 13. Food security, by income quintile, Portugal, 2021 (%)

	Total	Q1	Q2	Q3	Q4	Q5
Worried that would not have enough food to eat	6.0	20.4	12.8	8.3	4.7	2.6
Unable to eat healthy and nutritious food	6.2	23.0	13.0	5.6	3.0	1.9
Ate only a few kinds of food	10.4	30.0	21.5	10.1	8.9	3.2
Skipped a meal	2.2	11.9	5.2	2.6	0.7	0.9
Ate less than thought he/she needed	4.1	17.0	9.8	5.1	3.5	1.4
Ran out of food	2.1	12.2	4.9	1.9	0.6	2.0
Was hungry and did not eat	2.0	9.8	4.6	2.8	0.7	0.9
Went without eating for a whole day	0.6	4.2	1.0	1.5	0.3	0.1

Source: EU-SILC.39

^{38.}

^{39.} *Ibid*.

Housing Security

Having a fixed and safe place to return to at the end of a work or school day is essential to one's safety. In Portugal, 16.4% of the population lived in energy poverty in 2021, i.e., meaning they were unable to heat their homes adequately (6.9% EU27). In 2020 (most recent available data), 6.8% of the population considered their dwellings were too dark (6.5% in EU27), 0.6% did not have an indoor private flushing toilet (1.8% in EU27), and 25.2% lived in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor (14.8% in EU27). Table 14 summarises this reality. Once again, those with lower income are in a more unsafe situation. Table 15 shows that 1 in 3 people in Q1 is unable to keep their home adequately warm (vs. 5% in Q5). Leaking dwellings are present across all income groups, with almost 40% of people reporting this issue in Q1 and 15% in Q5.

Table 14. Housing conditions, Portugal vs EU27, 2021 (%)

	Portugal	EU27
Unable to keep their home adequately warm	16.4	6.9
Dark dwellings	6.8	6.5
No indoor private flushing toilet	0.6	1.8
Leaking dwelling	25.2	14.8

Source: EU-SILC.40

Note: The inability to keep the home adequately warm corresponds to 2021, and all remaining variables to 2020.

Table 15. Housing conditions, by income quintiles, Portugal 2021 (%)

	Q1	Q2	Q3	Q4	Q5
Unable to keep their home adequately warm	33.8	24.2	16.7	12.5	5.2
Dark dwellings	9.8	8.8	7.2	4.8	4.5
No indoor private flushing toilet	1.4	1.0	0.5	0.2	0.2
Leaking dwelling	36.8	27.4	26.4	23.9	14.9

Source: EU-SILC.41

Note: The inability to keep the home adequately warm corresponds to 2021, and all remaining variables to 2020.

^{40.} *Ibid*.

^{41.} *Ibid*.

Health Security

All the security factors covered so far affect one crucial aspect of security, which is one's health. In principle, access to medical care is ensured on an equal basis for the Portuguese population, thanks to the existence of a National Health Service (NHS). Nonetheless, access differences persist across income groups, as shown in Table 17. These differences are likely be attributed to the combination of private top-up healthcare and lack of access to the public supply due to transaction costs, such as waiting lists or system illiteracy.

Those in the poorest quintile (Q1) are three times more likely to miss medical examinations/treatments due to a lack of financial means. The fact that the NHS does not provide dental care worsens the access of the poorer groups to this type of health care. In 2021, almost 19% of the people with low income indicated at least one occasion when they needed a dental examination or treatment but did not have access (compared to 7% of the total population).

Table 16. Share of people reporting unmet needs for medical/dental care for reasons of expense, Portugal vs EU27, 2021 (%)

	Portugal	EU27
Medical	1.7	1.0
Dental	8.8	2.6

Source: EU-SILC.42

Table 17. Share of people reporting unmet needs for medical/dental care for reasons of expense, by income quintile, Portugal 2021 (%)

	Q1	Q2	Q3	Q4	Q5
Medical	5.1	3.1	1.0	0.9	0.4
Dental	18.8	15.1	7.4	5.0	2.0

Source: EU-SILC.43

^{42.} Ibid.

^{43.} Ibid.

Conclusion

he objective of this paper was to extend the narrow concept of security related to (the absence of) physical threats into Sen's multidimensional human security.⁴⁴ Moreover, we sought to show how the heterogeneous position of individuals in society influences the security of their existence.

The actual dimensions of human security discussed in the paper resulted from combining the dimensions of interest and data availability. In particular, we tried, to the extent possible, to rely on individual-level data that would allow us to characterise asymmetries concerning security.

Overall, people in Portugal generally feel safe. According to Institute for Economics and Peace, Portugal is the sixth safest country in the world. However, there are still concerns about safety, especially for certain population groups. Women, low-income groups, the elderly, and younger people are among the groups of the Portuguese population who feel less safe. Regarding subjective security, Portugal is where more people feel safe walking alone in their neighbourhood after dark (95%), followed by Finland and Slovenia. The unemployed are four times more likely to feel unsafe than the employed. Disabled people also feel more unsafe than non-disabled people (31.9% vs 17.1%).

Since 2013, Portugal has been following the EU's trend of decreasing the proportion of the population living in areas with crime, violence, or vandalism. People who live in cities reported these problems over three times more often than those in rural areas of the country.

Turning to objective security, between 2010 and 2020, crimes related to sexual assault and sexual violence were the ones that most increased for both Portugal and the EU27 (22.1% and 13.3%, respectively). Regarding environmental security, low-income individuals are the most affected by pollution in their local areas. Although air pollution levels have decreased in the last decade, extreme phenomena like wildfires have devastating effects.

In 2020, The at-risk-of-poverty rate in Portugal in 2020 was 18.4%, higher than the average of 16.2% in the EU. With a median equivalised disposable income of 924e per month in 2020, the Portuguese population still faces significant challenges in making ends meet. Approximately 1 in 3 cannot meet unexpected expenses with their resources.

^{44.} Sen, Amartya – 'Basic education and human security'.

^{45.} Institute for Economics and Peace – Global Peace Index 2022....

Food security is also strongly conditioned by income: around 20% of the population in the lowest quintile of the income distribution (Q1) cannot afford enough food, 30% eat only a few kinds of food, and 17% eat less than they thought they needed. Poor housing conditions are present in a significant proportion of households in Portugal, with 1 in 3 people in Q1 unable to keep their home adequately warm (vs 5% from Q5). Leaking dwellings are present across all income groups, with almost 40% of people in Q1 and 15% in Q5 reporting this issue. Finally, despite widespread access to the National Health Service (NHS), those in Q1 are three times more likely to forego medical examinations/ treatments due to a lack of funds. The difference between income groups is most visible in dental care, which is not provided by the NHS. In 2021, almost 19% of people with low incomes reported at least one occasion when they needed a dental examination or treatment but lacked access (compared to 7% of the total population).

The following are our main conclusions. Firstly, Portugal remains a relatively safe country within the EU, even when considering the broader concept of human security. Secondly, one tends to find more prevalence of insecurity in dimensions other than the ones related to crime and physical threats. Thirdly, and most importantly, the relative security of the country conceals significant heterogeneity amongst socioeconomic groups, highlighting the crucial role of personal circumstances and the importance of targeting public policies at these groups more prone to experience insecurity.

Recall that, per Sen, human security focus on downside risks and more fundamental human rights⁴⁶. Therefore, these inequalities in human security are not second order.

^{46.} SEN, Amartya – 'Basic education and human security'.

Bibliografia

Alkire, Sabina – 'A conceptual framework for human security'. Working Paper 2, Centre for Research on Inequality, Human Security and Ethnicity, CRISE. 2003. Available at: https://assets.publishing.service.gov.uk/media/57a08cf740f0b652dd001694/wp2.pdf.

Eurobarometer – 'Standard Eurobarometer'. No. 97. Summer 2022. Available at: https://europa.eu/eurobarometer/surveys/detail/2693.

European Environment Agency – 'Air quality in Europe 2022'. Web Report. 2022. Available at: https://www.eea.europa.eu//publications/air-quality-in-europe-2022.

European Social Survey – 'ESS round 10 - 2020. Democracy, digital social contacts'. 2022. Available at: https://ess-search.nsd.no/en/study/172ac431-2a06-41df-9dab-c1fd8f3877e7.

European Union Statistics on Income and Living Conditions (EU-SILC) – 'Survey for income and living conditions 2020'. 2020. Available at: https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

European Union Statistics on Income and Living Conditions (EU-SILC) – 'Survey for income and living conditions 2021'. 2021. Available at: https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

Institute for Economics and Peace – Global Peace Index 2022: Measuring Peace in a Complex World. 2022. Available at: http://visionofhumanity.org/resources.

JRC Publications Repository – 'Forest fires in Europe, Middle East and North Africa 2017'. Publications Office of the European Union. 2018. Available at: https://publications.jrc.ec.europa.eu/repository/handle/JRC112831.

JRC Publications Repository – 'Forest fires in Europe, Middle East and North Africa 2021'. Publications Office of the European Union. 2022. Available at: https://publications.jrc.ec.europa.eu/repository/handle/JRC130846.

King, Gary; Murray, Christopher J.L. – 'Rethinking human security'. In *Political Science Quarterly*. No. 116, 2002, pp. 585–610.

Palma, Patrícia Jardim da; Lopes, Miguel Pereira; Monteiro, Ana Sofia – 'The impact of objective and subjective measures of regional security on subjective well-being: evidence from Portugal'. In Webb, Dave; Wills-Herrera, Eduardo – Subjective Well-Being and Security. Heidelberg: Springer Dordrecht, 2012. DOI: 10.1007/978-94-007-2278-1_5.

Sen, Amartya – 'Why human security'. Paper presented at the International Symposium on Human Security. Tokyo. 28 July 2000. Available at: https://www.ucipfg.com/Repositorio/ MCSH/MCSH-05/BLOQUE-ACADEMICO/Unidad-01/complementarias/3.pdf.

Sen, Amartya - 'Basic education and human security'. Background paper for the workshop on Basic Education and Human Security, organized by the Commission on Human Security, UNICEF, the Pratichi (India) Trust, and Harvard University, in Kolkata, 2–4 January 2002. Available at: http://www.humansecuritychs.org/activities/outreach/ Kolkata.pdf.

Webb, Dave; Wills-Herrera, Eduardo – Subjective Well-Being and Security. Heidelberg: Springer Dordrecht, 2012. DOI: 10.1007/978-94-007-2278-1_5.

World Food Summit – 'The Rome Declaration on World Food Security'. In Population and Development Review. Vol. 22, No. 4, 1996, pp. 807–09. Available at: http://www.istor. org/stable/2137827.

APPENDIX

A.1 Data

This report relies mainly on survey individual-level data from data Eurobarometer, European Social Survey (ESS), and Survey on Income and Living Conditions (SILC). Table 18 summarises some important aspects of these databases.

Table 18. Databases used in this report

				Samp	le size	
Database	Edition	Year	Туре	EU27	Portugal	Reference period
Eurobarometer	Standard 97 - 2022 Summer 2022	2002	Survey	26 468	1009	Jun - Jul 2022
European Social Survey (ESS)	ESS round 10	2020/2022	Survey	33 351	1838	Sep 2020 - May 2022
Survey on Income and Living Conditions (SILC)	-	2021	Survey	282 150	32 325	Apr - Jun 2020

The Eurobarometer began in 1974, intending to monitor the state of public opinion in Europe on issues related to the European Union as well as attitudes on subjects of political or social nature. Eurobarometer surveys rely on a randomly selected sample of at least 1000 persons aged 15 years and older per country or territory reported. This report focuses on the Standard Eurobarometer, conducted twice a year, monitoring key trends in contemporary socio-political events in each country.

The European Social Survey (ESS) is a biennial survey of European attitudes and behaviours. Since 2021, the ESS has been conducted every two years in different European countries. It results from a consortium of academic institutions led by the University of London in the United Kingdom. The Institute of Social Sciences of the University of Lisbon, ISCTE-IUL and ISCSP coordinate this survey in Portugal. The most recent data refer to 2016 and cover 23 countries, including Portugal. Face-to-face interviews are conducted with computer assistance. The Azores and Madeira regions are excluded.

Finally, in European coordination, the National Institute of Statistics conducted the Survey on Living Conditions and Income (EU-SILC). It provides, as a reference source for comparative analyses on social inclusion and income distribution, multidimensional, cross-sectional (i.e., about the year under review) and longitudinal (i.e., over time) microdata (i.e. at the individual and family level)) on income, poverty, living conditions, social exclusion, work, health and education. It was implemented in seven countries in 2003, a year later in Portugal.

The main outcome variables used in this report are:

- 'Safe at night' Walking alone in the local area after dark is essential to feel safe. This is a self-reported variable in which the respondents choose between four levels of safety: 'Very safe', 'Safe', 'Unsafe' and 'Very unsafe'. This report grouped it into two categories: 'Safe at night' encompasses 'Very safe' and 'Safe' and 'Unsafe at night' encompasses 'Very unsafe' and 'Unsafe'. The proportion of people who do not answer, refuse to answer, or do not know is 0.8%.
- 'Safety important' Living in secure and safe surroundings is essential. This query asks respondents if they concur with the statement 'Important to live in secure and safe surroundings'. There are six categories: 'Very much like me', 'Like me', 'Somewhat like me', 'A little like me', 'Not like me' and 'Not like me at all'. This report grouped it into two categories, with 'Safety important' including those who say that the affirmation sounds 'Very much like me', 'Like me' or 'Somewhat like me'. The proportion of people who do not answer, refuse to answer, or do not know is 1.1%.
- Strong gov —Important that government is strong and ensures safety. In this question, respondents identify if they agree with the statement 'Important that government is strong and ensures safety'. There are six categories: 'Very much like me', 'Like me', 'Somewhat like me', 'A little like me', 'Not like me' and 'Not like me at all'. In this report, we grouped it into two categories, in which 'Safety important' includes those who say that the affirmation sounds 'Very much like me', 'Like me' or 'Somewhat like me'. The proportion of people who do not answer, refuse to answer, or do not know is 1.9%.
- Pollution, grime or other environmental problems in the local area Format of the question: 'Do you have any of the following problems related to the place where you live: pollution, grime or other environmental problems in the local area such as smoke, dust, un- pleasant smells or polluted water?' The objective is to assess whether the respondent feels 'pollution, grime, among others' to be a problem for the household (not whether they are bothered by the problem).

Table 19. Income quintiles monthly and annual income, Portugal 2020, ESS

Income quintile	Monthly income (€)	Annual income (€)
Q1	0 – 700	0 – 8500
Q2	701 – 1100	8501 – 13500
Q3	1101 – 1600	13501 – 19000
Q4	1601 –2300	19001 –27500
Q5	>2301	>27501

Source: ESS⁴⁷ European Social Survey, 2022⁴⁸

Note: Respondents were asked to choose from 10 income groups the one which better described their household's total income (after tax and compulsory deductions).

^{47.} World Food Summit – 'The Rome Declaration on World Food Security'. In Population and Development Review. Vol. 22, No. 4, 1996, pp. 807–09. Available at: http://www.istor.org/stable/2137827.

^{48.} European Social Survey – 'ESS round 10 - 2020. Democracy, digital social contacts'. 2022. Available at: https://ess-search.nsd.no/en/study/172ac431-2a06-41df-9dab-c1fd8f3877e7

Table 20. Average monthly and annual income, by income quintile, Portugal 2020, EU-SILC

Income quintile	Monthly income (€)	Annual income (€)
Q1	350	4 200
Q2	1 098	13 176
Q3	2 128	25 536
Q4	3 341	40 092
Q5	6 537	78 444

Source: EU-SILC.49

Note: Respondents reported their total disposable household income (after tax and compulsory deductions).

A.2 Robustness checks

Table 21. Linear Probability Model - Unsafe at night

Unsafe at night	(1)	(2)	(3)	(4)	(5)
Female	9.420***	9.009***	9.035***	9.060***	8.746***
	(1.804)	(1.808)	(1.834)	(1.839)	(1.854)
Higher education	-7.777***	-7.417**	-7.265^**	-7.336**	-5.890*
	(2.283)	(2.282)	(2.289)	(2.303)	(2.410)
Age	-0.690*	-0.748**	-0.826**	-0.824**	-0.779**
	(0.271)	(0.271)	(0.283)	(0.283)	(0.284)
Age ²	0.009***	0.010***	0.010***	0.010***	0.010***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Unemployed		24.089**	24.024**	25.002**	24.061**
		(8.402)	(8.406)	(8.407)	(8.431)
Retired		-3.970	-4.078	-3.514	-3.504
		(4.567)	(4.583)	(4.594)	(4.595)
Disabled		4.238	3.901	5.037	5.906
		(10.623)	(10.633)	(10.625)	(10.640)
Married			-2.675	-2.362	-2.650
			(5.842)	(5.838)	(5.847)
Divorced			3.591	3.368	2.938
			(2.887)	(2.893)	(2.898)

^{49.} EUROPEAN UNION STATISTICS ON INCOME AND LIVING CONDITIONS (EU-SILC) – 'Survey for Income and Living Conditions 2021'.

Widowed			-0.362	-0.439	-1.075
			(3.191)	(3.187)	(3.204)
Norte				-0.868	-0.775
				(2.330)	(2.330)
Centro				-4.627	-5.087*
				(2.430)	(2.441)
Alentejo				2.697	2.129
				(3.722)	(3.728)
Algarve				5.732	4.167
				(4.188)	(4.282)
Q2					-0.131
					(2.527)
Q3					-4.810
					(2.750)
Q4					-2.814
					(3.027)
Q5					-7.785*
					(3.813)
Constant	23.222***	24.102***	25.569***	26.418***	27.549***
	(6.796)	(6.799)	(6.926)	(7.003)	(7.036)
Observations	1837	1837	1837	1837	1837
	0.047	0.051	0.052	0.057	0.061
Standard errors in parentheses					
* ** ***					

Standard errors in parentheses

* p <0.05, ** p <0.01, *** p <0.001

Source: European Social Survey

Table 22. Linear Probability Model - Safety important

Safety important	(1)	(2)	(3)	(4)	(5)
Female	3.108	2.819	2.787	2.529	2.702
	(1.614)	(1.618)	(1.643)	(1.591)	(1.603)
Higher education	-2.782	-2.602	-2.574	-2.196	-3.217
	(2.042)	(2.043)	(2.051)	(1.992)	(2.084)
Age	0.196	0.157	0.141	0.129	0.120
	(0.242)	(0.243)	(0.253)	(0.245)	(0.245)
Age ²	-0.001	-0.001	-0.001	-0.001	-0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)

Unemployed		12.761	12.707	9.486	11.180
		(7.523)	(7.531)	(7.273)	(7.291)
Retired		3.435	3.444	-0.212	-0.472
		(4.089)	(4.105)	(3.974)	(3.973)
Disabled		12.667	12.631	9.797	9.285
		(9.512)	(9.525)	(9.192)	(9.201)
Married			0.495	-1.106	-1.597
			(5.233)	(5.050)	(5.057)
Divorced			1.035	1.219	1.483
			(2.586)	(2.503)	(2.506)
Widowed			0.206	0.228	0.270
			(2.859)	(2.757)	(2.770)
Norte				8.146***	8.069***
				(2.016)	(2.015)
Centro				2.626	3.215
				(2.102)	(2.111)
Alentejo				-1.184	-0.941
				(3.219)	(3.224)
Algarve				-33.947^***	-33.987***
				(3.623)	(3.703)
Q2					-4.492*
					(2.186)
Q3					2.255
					(2.378)
Q4					1.513
					(2.618)
Q5					2.757
					(3.298)
Constant	78.887***	79.652***	79.950***	78.491***	78.333***
	(6.079)	(6.087)	(6.204)	(6.058)	(6.085)
Observations	1837	1837	1837	1837	1837
	0.005	0.008	0.008	0.079	0.083
Standard errors in parentheses					

* , ** , ***

Standard errors in parentheses

* p <0.05, ** p <0.01, *** p <0.001

Source: European Social Survey⁵⁰

^{50.} European Social Survey – 'ESS round 10 - 2020. Democracy, digital social contacts'. 2022. Available at: https://ess-search.nsd.no/en/study/172ac431-2a06-41df-9dab-c1fd8f3877e7

Table 23. Linear Probability Model- Strong government is important

Strong gov	(1)	(2)	(3)	(4)	(5)
Female	3.150	2.771	3.060	2.191	2.461
	(1.897)	(1.903)	(1.930)	(1.824)	(1.839)
Higher Education	-2.283	-1.992	-2.277	-2.074	-3.315
	(2.401)	(2.403)	(2.408)	(2.284)	(2.390)
Age	0.242	0.188	0.259	0.274	0.231
	(0.285)	(0.286)	(0.298)	(0.281)	(0.281)
Age ²	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Unemployed		18.892*	19.175*	15.280	16.241
		(8.845)	(8.844)	(8.337)	(8.362)
Retired		-0.745	-0.945	-5.723	-5.706
		(4.808)	(4.822)	(4.556)	(4.557)
Disabled		11.354	11.540	7.764	7.234
		(11.184)	(11.186)	(10.537)	(10.554)
Married			0.968	-1.822	-1.649
			(6.146)	(5.789)	(5.800)
Divorced			-6.196*	-5.966*	-5.562
			(3.037)	(2.869)	(2.875)
Widowed			-2.632	-2.576	-1.954
			(3.357)	(3.160)	(3.178)
Norte				6.316**	6.200**
				(2.311)	(2.311)
Centro				1.984	2.453
				(2.409)	(2.421)
Alentejo				-0.077	0.466
				(3.691)	(3.698)
Algarve				-56.327***	-54.810***
				(4.153)	(4.247)
Q2					0.043
					(2.507)
Q3					4.850
					(2.727)
Q4					3.561
					(3.003)

Q5					6.287
					(3.782)
Constant	73.053***	73.990***	72.508***	72.603***	71.406***
	(7.148)	(7.158)	(7.286)	(6.944)	(6.979)
Observations	1837	1837	1837	1837	1837
	0.002	0.005	0.008	0.123	0.126

Standard errors in parentheses

* , ** , ***

Standard errors in parentheses

* p <0.05, ** p <0.01, *** p <0.001

Source: European Social Survey⁵¹

 $[\]textbf{51.} \ \ \text{European Social Survey} - \text{`ESS round 10 - 2020. Democracy, digital social contacts'. 2022. Available at: } \underline{\text{https://ess-search.nsd.no/en/study/172ac431-2a06-41df-9dab-c1fd8f3877e7}}$

About the Project

The Jean Monnet Atlantic Network 2.0 is a small network of six members that keep intense communication and joint activities on the Atlantic Basin. The Network also serves as a central arena for discussing globalisation and key major trends in the several Atlantic microcosms. By combining the national with the regional perspective, its research and debates take into account the different foreign interests and pressures, as well as a critical view on the possible roles and future of the European Union (EU) in the area.

It is the present link of a long chain of projects. In 2016, the project that established the first Jean Monnet Network on Atlantic Studies (jeanmonnetnetwork.com.br) sought to foster knowledge and co-operation among scholars and researchers on topics of fundamental importance for Atlantic actors in general, and for the EU, in particular. It involved a greater number of centres and universities.

Seven years later, still focussed on the original three broad thematic axes -Energy/Sustainability, Trade/Economy (International Economic Flows) and Security/Inequality-, the Jean Monnet Atlantic Network 2.0 represents a continuation and a rupture with the previous undertakings.

It intends to offer a wide, innovative and sometimes controversial view on Atlantic problems and the expectations on and scope of the EU activities relative to them. The papers in this series are a sample of its achievements.















