Subjective well-being and social cohesion in Vienna and Budapest: An analysis of secondary data

Research Report

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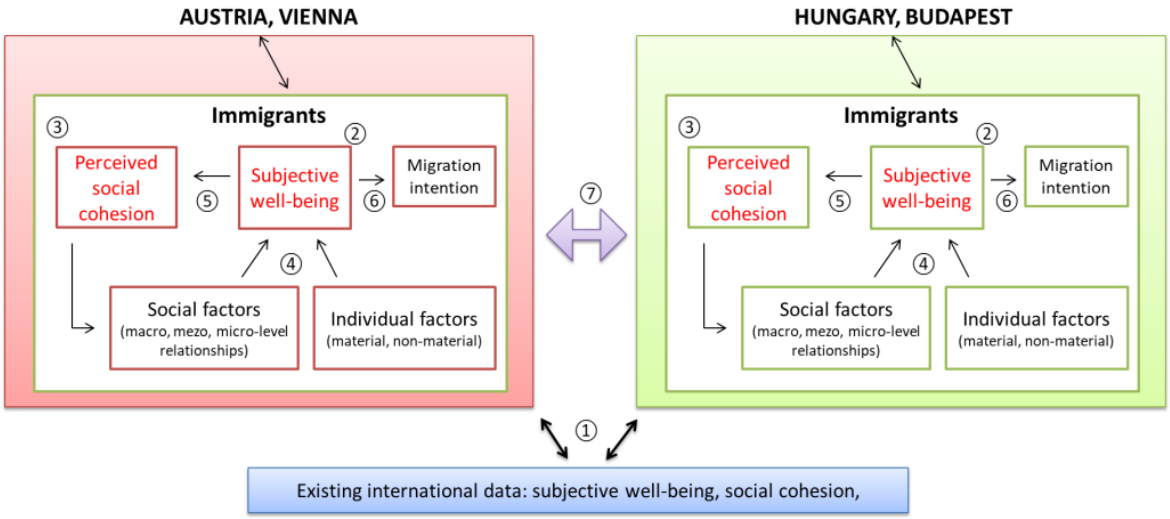
WELLCOH at a glance

Using quantitative and qualitative research methods, the WELLCOH project seeks to explore the relationship between social cohesion (SC) and subjective well-being (SWB) in the case of immigrants in Vienna and Budapest. The project's innovative approach is not limited to the strong linkage of the two concepts, but strives to understand the two-way causal relationship of these concepts within one research framework.

The project aims to answer the following *research questions* (visualised on Figure 1).

1. *International context*. How have the average scores of social cohesion and subjective well-being variables changed over time in Austria and Hungary in a European context?
2. *Measuring subjective well-being.* How do foreign-born residents of Vienna and Budapest construct well-being; i.e. which areas of life are the most important for these people, how do they prioritize these, and to what extent are they satisfied with achieved well-being outcomes? Which material and non-material factors are responsible for the vertical and horizontal inequalities in SWB?
3. *Measuring social cohesion.* What is the current level of social cohesion in the two cities? How do immigrants perceive social cohesion in terms of perceived exclusion, tensions, trust, and so forth? Which groups are at risk of experiencing low levels of social cohesion?
4. *The social cohesion–subjective well-being nexus*. To what proportion do the objective individual (material and non-material) and social factors contribute to subjective well-being? To what extent does social cohesion enhance SWB? Is it more important and more beneficial for vulnerable immigrant groups?
5. *The subjective well-being–social cohesion nexus*. How do the group-specific SWB differences influence the strength of social cohesion? Does a lower average level of life satisfaction, together with significant SWB inequalities, result in the weakening of social cohesion in the cities and their districts?
6. *Subjective well-being and migration intentions*. How does SWB influence immigrant intention to stay permanently, return to the country of origin, or leave for another country?
7. *Vienna and Budapest*. What are the main similarities and differences between the two cities regarding the dynamics of the social cohesion–subjective well-being nexus?

Figure 1. The logical structure of the project



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The work plan of the WELLCOH project is structured in work packages (Figure 2).

- WP1, "Setting the Framework" aims to build up a theoretical framework for the project. A literature overview deepens our knowledge of relevant concepts, and methods in general.
- To place the subsequent empirical results into a wider context, the goal of WP2, “Secondary data analysis” is to understand the patterns of SC and SWB – with special emphasis on Hungary and Austria – and the factors that might be responsible for the country-level differences. Official statistical data, EU-SILC, and other data sources data provided the main inputs for the secondary analysis.
- WP3, “Primary data collection and analysis” will implement the narrative and cognitive interviews, set up the survey, and analyse the newly collected primary data. While the qualitative methods will function as exploratory, pre-test works, the survey is expected to provide new information about the SWB and SC profiles of the target groups in Vienna and Budapest.
- In WP4, “Policy options”, focus groups and roundtable discussions will take place to converge the views and priorities of migrants and the interests of decision-makers toward an effective policymaking.
- WP5, “Dissemination and Communication” will communicate the results by introducing the project and its main findings to the scientific community, stakeholders, and actual migrants.

- The goal of WP6, "Management" is to provide a clear organisational framework and all necessary support mechanisms to facilitate a smooth workflow and maximise the effectiveness of the project.

Figure 2. Visualized work plan (A: activities, O: scientific outputs, M: milestones, D: deliverables)

Mo:	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
YY MM	23 10	23 12	24 02	24 04	24 06	24 08	24 10	24 12	25 02	25 04	25 06	25 08	25 10	25 12	26 02	26 04	26 06	26 08	26 10	26 12	27 02	27 04	27 06	27 08
WP1	------- *A.1.1, A.1.2* -------																							
WP2	---------- *A.2.1, A.2.2* ----------								O.2.1 M															
WP3									*A.3.1*	---------- *A.3.2* ----------		M		O.3.1		---------- *A.3.3* ----------							O.3.2 M
WP4									*A.4.1*							*A.4.2*								O.4.1
WP5	D.5.4, D.5.5 ---------- *Communication:* D.5.1, D.5.2, D.5.3 ----------																							
										---------- *Scientific dissemination:* O.5.1, O.5.2 ----------															
WP6	*D.6.1, D.6.2, D.6.3* ---------- *Management* ----------																							

Source: own figure.

1. Introduction

This Research Report is the first published study of the WELLCOH project, summarizing the research activities of WP1 and WP2. The Report has two main objectives. On the one hand, it aims to provide a short overview of the relevant theoretical frameworks of subjective well-being (SWB) and social cohesion (SC), the two pillars of WELLCOH. On the other hand, it aims to better understand patterns of social cohesion and subjective well-being in Budapest and Vienna, Hungary and Austria. Connecting these two concepts and analysing causal relationships is not yet within the scope of this project phase. The goal of this Research Report is to place the subsequent empirical results into a wider context by focusing on the differences between the two cities based on the available secondary sources. Therefore, we will reflect on the nexuses Nr. 1, 2, 3 and 7 on Figure 1.

2. Theoretical background

2.1 International migration

The United Nations Department of Economic and Social Affairs defines an international migrant as "any person who changes his or her country of usual residence," excluding movements undertaken for "recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimages." Individuals who remain outside their country of origin for a period of three to twelve months are classified as short-term international migrants. If the duration exceeds twelve months, they are categorized as long-term international migrants (UN 1998: 17). The term "usual residence" refers to the location "at which a person normally spends the daily period of rest, regardless of temporary absence for purposes of recreation, business, medical treatment or religious pilgrimage or, in default, the place of legal or registered residence" (EC 2007).

In recent years, the European Union has introduced a new term in its policy vocabulary: "intra-EU mobility." This term describes the movement of people from one EU Member State to another, exercising their right to free movement. While this type of spatial mobility is treated separately in EU policy discussions, from a scientific perspective, it still constitutes a form of international migration. In this Research Report, we adhere to the United Nations' definition and use the term "migration" consistently, irrespective of people's country of origin.

Migration processes can be categorized in various ways. For example, migration may be voluntary or forced, regular or irregular. Beyond the legal distinctions, migration can also be classified by motivation, or the direction of movement (e.g. emigration, immigration, return migration, re-emigration, transilient migration, circular migration etc. – King 1986,

Fassmann et al. 2018). Moreover, in recent decades, a new form of migration has emerged, influenced by the increasing permeability of national borders and advancements in transport and communication technologies. People, for example, maintain multiple households, their family members are spread across several countries, and their networks of relationships increasingly span great distances across national borders. Migrant transnationalism, a "liquid" form of migration, often results in hybrid identities, and attachments to both the country of origin and destination. Therefore, instead of adhering to a single set of national or cultural norms, individuals maintain ties with multiple communities simultaneously (Glick Schiller et al. 1995, Fassmann 2002, Upegui-Hernandez 2014).

In official statistics, the term "migration background" typically refers to the parental origins of individuals.[1] While the social relationship and the subjective perception of well-being of these people with a migration background but born already in Austria or Hungary would also be valuable to examine, the WELLCOH project specifically targets the foreign-born population in Vienna and Budapest. This focus is partly for practical reasons, as country of birth is a common variable in available survey data, enabling comparative analysis between native-born and foreign-born populations. However, it is worth noting that only individuals with a legal address in Austria or Hungary are included in the population of interest. As a result, these individuals may have the opportunity to be included even in surveys like EU-SILC or microcensus. During the primary data collection phase, we aim to identify a subgroup characterized by transnational migration behaviours.

Migration statistics can generally be divided into two types: flow and stock data. Flow data measure the number of migrants entering or leaving the territory of a country, over a defined time period, typically one calendar year. In contrast, stock data represent the total number of international migrants residing in a particular country at a specific point in time. The most commonly used proxy variables for defining international immigrants are country of birth or, where this information is unavailable, citizenship.

For instance, in statistical publications in Hungary, citizenship data is most commonly highlighted (e.g., KSH 2022). However, in the tables of the Hungarian Central Statistical Office and in scientific discourse, multiple concepts are used with various combinations of data on citizenship and country of birth. Kincses (2023: 18-19) defines the "foreign-

[1] For instance, according to Statistics Austria, people with a migration background are defined as those whose parents were both born abroad.

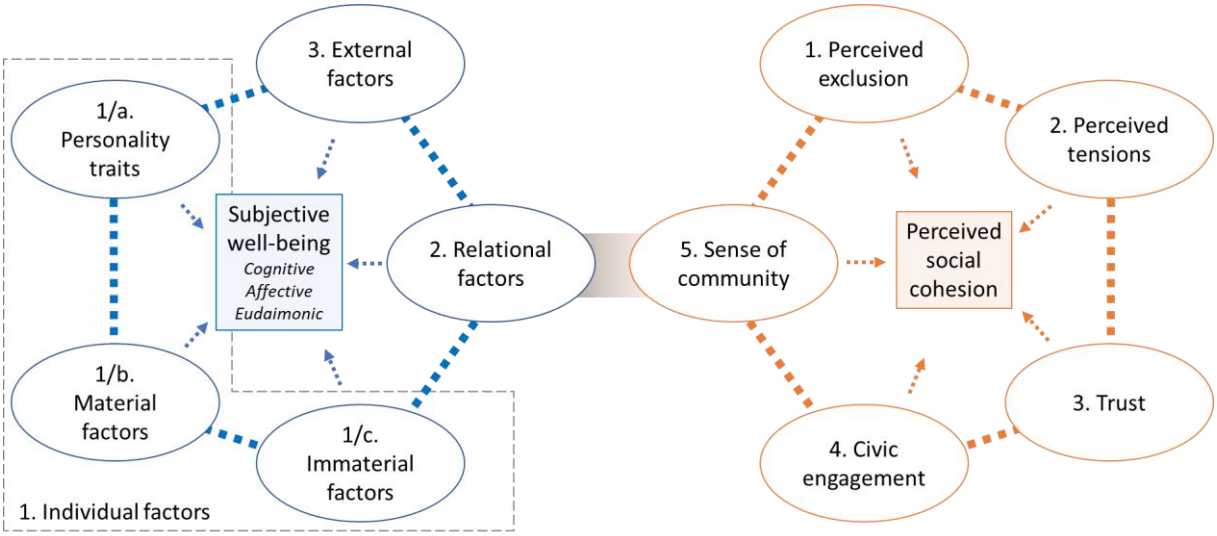
affiliated" population as including foreign citizens born in Hungary, foreign citizens born abroad, and Hungarian citizens born abroad.

*In this Research Report, we use **foreign country of birth** as a proxy for defining international immigrants. Our analyses will focus on stock data.*

2.2 Conceptual framework

This chapter outlines the conceptual framework of the WELLCOH project. It does not aim to provide an exhaustive review of the academic literature on well-being and social cohesion, nor to present the existing theoretical approaches in detail. Instead, the focus will be on the key components that form the logical structure illustrated in Figure 3. From the perspective of the project, particular emphasis will be placed on the intersection between the theoretical frameworks of well-being and social cohesion. This nexus has the potential to uncover new insights that may prove valuable both for academic research and policy development.

Figure 3. Conceptual framework of the WELLCOH project



Source: own figure

2.3 Subjective well-being

2.3.1 Components of subjective well-being

Since the 1970s, when the first attempts were made to link happiness and satisfaction with welfare (Easterlin 1974, Scitovsky 1976), the concept of subjective well-being has undergone a range of interpretations. Over time, the approaches and methodologies developed to understand what people believe they need in order to achieve a good quality

of life – and to measure how satisfied they are with the extent to which these needs are fulfilled – have grown more sophisticated (Diener 1984, 1994, Easterlin et al. 2010, Kahneman and Krueger 2006, King et al. 2014, McGregor et al. 2009, Veenhoven 2008, etc.). Whereas in earlier periods terms such as "utility", "pleasure", "happiness", and "subjective well-being" were used more or less interchangeably, there is now broad consensus that SWB should be regarded as "an umbrella term for the different valuations people make regarding their lives, the events happening to them, their bodies and minds, and the circumstances in which they live" (Diener 2006).

The following paragraphs summarise the most prominent approaches that focus on the cognitive, affective, or psychological dimensions of SWB. (For more details see Németh et al. 2023.)

The hedonic perspective of subjective well-being is grounded in the utilitarian notion of pleasure, and is typically operationalised through measures of life satisfaction and affect. Life satisfaction represents a ***cognitive*** and evaluative dimension, requiring individuals to make judgements about various life domains and life overall (Boyce et al. 2010, Christoph 2010, Dumludag 2014, etc.). It is generally conceived as a stable, enduring component of well-being.

Happiness, on the other hand, aligns more closely with the term of ***affective*** well-being found in psychological literature (Di Fabio and Palazzeschi 2015, Graham 2009, Layard 2005, etc.). Positive and negative emotions reflect a more corporeal and transitory state of well-being, which are typically surveyed with reference to a shorter timeframe, for instance the most recent two weeks. While in theory satisfaction and emotion can be separated, they are often intertwined in practice, as emotional experiences influence individuals' overall life evaluations (Dragolov et al. 2018). As Kahneman et al. (1999) succinctly put it, in a hedonic framework, subjective well-being serves as an index of psychological wellness, with happiness referring to the accumulation of pleasurable experiences and the absence of pain (Diener et al. 1999, Selezneva 2016).

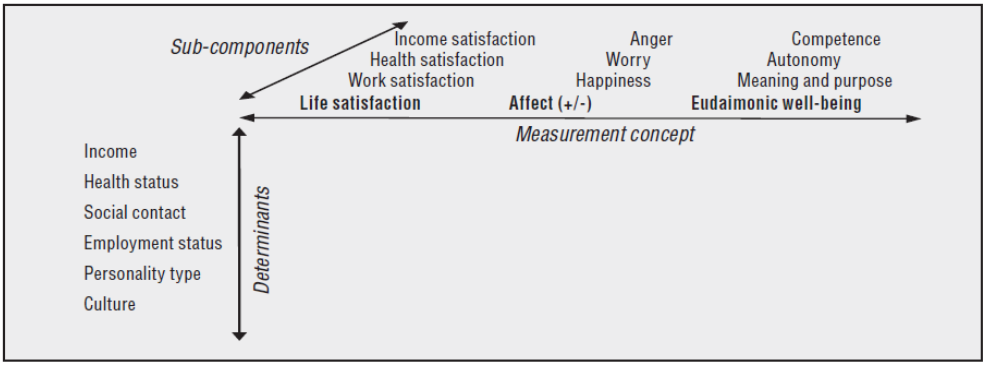
Eudaimonic well-being has its roots in the tradition of humanistic psychology. Unlike emotion or satisfaction, which typically refer to specific internal states, it encompasses a broader range of self-reported indicators necessary for human flourishing and self-fulfilment. This dimension includes meaning and purpose in life, accomplishment, as well as the aspects of autonomy, self-esteem, and self-actualisation (Clark et al. 2008, Di Fabio and Palazzeschi 2015, Vittersø 2016). As Ryan and Deci (2001) emphasise, the eudaimonic view is based on the idea of individuals living in accordance with their true selves (daimon), receiving both material and non-material rewards as they strive to build a good life. As Selezneva (2016) notes: Some of the actions might produce pleasure, but not enhance well-being if the actions contradict the daimon.

Despite the development of well-being studies over several decades, the absence of a consistent question set long impeded international data comparability. Addressing this challenge was a key motivation behind the OECD's publication of the ***Guidelines on Measuring Subjective Well-being*** (OECD 2013). These Guidelines offer a coherent, integrated framework and provide statistical agencies with a standardised structure and methodology for conducting surveys. Their primary role is to offer best-practice guidance and to "assist data producers in meeting the needs of users by bringing together what is currently known on how to produce high quality, comparable measures of subjective well-being" (ibid: 9).

The OECD defines subjective well-being as encompassing "good mental states, including all of the various evaluations, positive and negative, that people make of their lives and the affective reactions of people to their experiences." This broad definition integrates the three key components of SWB discussed above:

- Life satisfaction: a reflective evaluation of a person's life as a whole or specific aspects of it;
- Affect – emotional states or feelings, typically measured with reference to a particular point in time;
- Eudaimonia – a sense of purpose and meaning in life, or good psychological functioning (Figure 4).

Figure 4. A simple model of subjective well-being



Source: OECD 2013: 33

The OECD Guidelines offers support for survey designers "in developing questions on subjective well-being and to identify strategies for minimising bias due to different measurement effects – including not just how questions are worded, but also how surveys are implemented" (OECD 2013: 11). The document also provides practical

recommendations on how best to report SWB measures, as well as analytical strategies for interpreting the data.

This discussion is particularly relevant because the ***EU-SILC survey***, which is one of the most widely used international datasets among social researchers and forms the empirical basis of the WELLCOH project, is explicitly built on the theoretical foundations and methodological recommendations set out in the OECD Guidelines.

2.3.2 Objective factors of subjective well-being

For decades, social scientists have been concerned with one fundamental question in well-being studies: ***what objective factors*** ultimately influence people's satisfaction and happiness. Which of these factors can be considered universal, and which are more context-dependent, varying in significance across time and place? Large-scale international surveys such as EU-SILC, the EQLS, and the ESS have undoubtedly brought us closer to answering this question. However, these surveys share a common shortcoming: they tend to focus primarily on individual-level factors of SWB and include only a limited number of questions concerning people's social relationships.

The aim of the WELLCOH project is precisely to examine subjective well-being through the lens of social cohesion. We hypothesise that this perspective is particularly important in the context of migration and that the relational dimension should receive greater attention in well-being research.

Inspiration for this approach comes from the so-called ***WeD framework***,[2] which takes into account the interaction of three key dimensions of well-being. In this framework, material well-being refers to the objective conditions of life, including access to income, employment, and other resources. However, because people's goals and actions are always shaped by the social contexts in which they are embedded, well-being also has a relational dimension. This dimension reflects the social relationships that people need to form in order to meet their human needs. It "links the framework from the individual to the social" (Britton and Coulthard 2013: 32), encompassing personal connections such as friendships, family ties, and relationships with the wider community. The third, subjective dimension is concerned with "what it is that people themselves regard as important for their quality of life and their assessment of their level of subjective satisfaction in their achievement" (McGregor and Pouw 2017: 1135).

[2] The concept was developed by the ESRC 'Well-being in Developing Countries' research group at the University of Bath (Gough and McGregor 2007).

For the WELLCOH project, treating the relational dimension as an independent analytical category is of particular importance. This is precisely the aspect we intend to emphasise more strongly in the primary data collection phase. The objective factors of subjective well-being can thus be ***classified*** as follows (Figure 3):

- Individual factors, which refer to characteristics specific to the individual:
    - Personality traits: It is important to acknowledge that traits such as neuroticism, self-esteem, and optimism also account for a substantial share of the variance in individuals' subjective well-being. These are rarely addressed in quantitative surveys, and they may explain a significant part of the unexplained variance in causal models.
    - Material aspects, such as income and employment.
    - Immaterial aspects, such as health or work–life balance.
- Relational factors, which concern the quality of an individual's social relationships – e.g. the presence of a partner, frequency of contact with friends or with out-group members.
- External factors, which include influences ranging from macro-level phenomena (e.g. pandemic, political situation) to micro-level ones (e.g. neighbourhood crime).

Although personality traits are acknowledged as influential, it must be emphasised – both here and later – that this aspect is not a realistic objective for this sociological study. Such an undertaking would require methods rooted in psychology, including specialised tests, in-depth interviews, or long-term observation. In contrast, sociological research focuses on societal factors, life circumstances, and structural conditions. Thus, while we recognise the role of personality in shaping subjective well-being, the research must remain centred on social determinants.

Moreover, analysing all external factors is also not feasible, as doing so would require consideration of a virtually infinite number of influences from crime rates to light pollution. This would exceed the scope of the study. Therefore, our examination of external factors has been narrowed to a set of relevant, operationalisable variables based on people’s perceptions. For example, instead of relying on objective crime statistics, we refer to individuals’ perceived sense of safety in their neighbourhoods.

2.4 Social cohesion

Although its roots date back to the classic works of Durkheim (1897) and Tönnies (1887), social cohesion – in the modern sense of the notion – emerged as a relatively new concept in the 1990s (Pahl 1991, Maxwell 1996, Bernard 1999). Since then, it has become a central concern in both policy and academic discourse, particularly in contexts seeking to understand what holds diverse societies together in times of social, economic, and political change.

Contemporary ***definitions*** reflect its multidimensional nature, and this complexity is evident in policy documents as well. For instance, according to the Canadian Federal Policy Research Subcommittee on Social Cohesion, it is defined as the "ongoing process of developing a community of shared values, shared challenges and equal opportunity (...), based on a sense of trust, hope and reciprocity" (PRSCSC, 1999). Similarly, Eurofound (2018) describes it as "a central social quality of societies, characterised by togetherness and team spirit". The Bertelsmann Foundation (2013, 2016) further elaborates that a cohesive society is marked by resilient social relations, emotional connectedness, and a collective orientation towards the common good. In brief, it is "the glue of society".

Despite growing interest, social cohesion remains challenging to conceptualise and measure empirically even in academic circles (Chan et al. 2006, Dickes and Valentova, 2013, Schaeffer, 2014, Dragolov et al. 2016, Fonseca et al. 2019 etc.).

As opposed to the "catch-up concepts", some scholars advocate ***"slim approaches"*** with one or only a few core indicators in the focal point. Some studies use ***social capital*** as the core dimension of social cohesion (e.g. Alesina and La Ferrara 2000, 2002, Costa and Kahn 2003, Putnam 2007, Letki 2008). In fact, Kawachi et al. (1997) go so far as to treat social capital as essentially equivalent to social cohesion, interpreting the two almost synonymously. Social capital has been linked to "people's sense of community, their feeling of belonging to a neighbourhood, caring about the people who live there, and believing that those people care about them" (Portney and Berry 1997). Beyond this subjective dimension, it can also be understood in structural terms – as a network of relationships that fosters cooperation and coordination among both friends and strangers (Costa and Kahn 2003).

Manca (2014) also narrows the definition, identifying two key dimensions: a sense of belonging to a community and the strength of relationships among its members. Other researchers argue that even social capital is too broad, advocating for a focus on trust as the most essential component (Alesina and La Ferrara, 2002, Hooghe et al. 2009, Dinesen and Sønderskov, 2012).

Other researchers structure the concept of social cohesion along various dimensions and domains with the aim of defining it as precisely as possible through the broadest possible set of indicators. This ***multidimensional approach*** allows for a more nuanced and comprehensive understanding of social cohesion, capturing its complexity across different social, relational, and institutional contexts.

Below, without aiming for completeness, we highlight a few visions from the literature related to the structuring of social cohesion. Bernard (1999) distinguished three spheres of social cohesion based on their formal and substantive nature (social representations and behaviours). Chan et al. (2006) identified two dimensions: a horizontal one, referring to cohesion within civil society, and a vertical one, concerning hierarchical relationships within society. Furthermore, the authors added two elements: a subjective component, relating to individuals' attitudes, and an objective component, referring to their behaviours (Table 1).

Table 1. Two concepts of social cohesion: Bernard 1999 (above), Chan et al. 2006 (below)

Spheres of Activity Relation	**Formal**	**Substantial**
Economic	Insertion / Exclusion	Equality / Inequality
Political	Legitimacy/ Illegitimacy	Participation / Passivity
Sociocultural	Recognition / Rejection	Belonging / Isolation

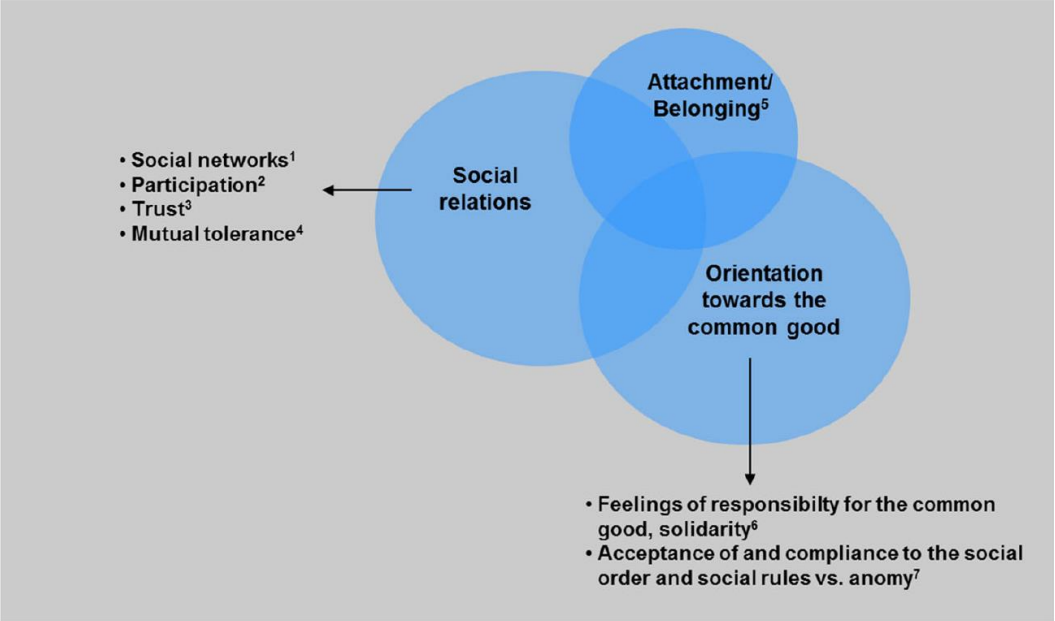
	Horizontal	**Vertical**
Subjective	Level of trust Cooperation will	Trust in public figures Trust in institutions
Objective	Social Participation Volontary work	Political participation

Source: Addeo et al. 2017: 235-236

Based on a literature review, Schiefer and Noll (2016) identified six core dimensions and altogether 14 subcomponents of social cohesion. Later they concluded that the essence of social cohesion can eventually be distilled into three core dimensions (Figure 5). This is a landmark study in the literature, which provided a comprehensive synthesis of the key insights from the theoretical and empirical work accumulated up to that point.

As they pointed out: social cohesion is "characterized by close social relations, pronounced emotional connectedness to the social entity, and a strong orientation towards the common good". They conceptualized cohesion as a gradual phenomenon, meaning that societies may exhibit greater or lesser degrees of cohesion.

Figure 5. Schiefer and Noll's model of social cohesion



[1]Quantity and Quality of social relations and social networks.
[2]Political Participation (e.g., voters turnout) and sociocultural participation (civic engagement).
[3]Horizontal (between individuals), vertical (in institutions).
[4]Intergroup attitudes, social distance.
[5]Self-perception as an integral part of the group, perception of the social group as an important part of one's self/identity.
[6]Act for the needs and benefits of the group, while restraining one's own personal needs and goals.
[7]Acknowledgement of societal institutions and compliance to the 'rules of the game' of living together (as well as the rules for changing the social order) versus deviance and norm violation.

Source: Schiefer and Noll (2016)

Moreover, it is important to emphasize that the term – in this multidimensional interpretation – denotes a collective quality. It cannot be a characteristic of individual societal members; rather that of a social or spatial entity: a neighbourhood, a settlement, a group, or the whole society. Thus, aggregate association membership rates, average levels of interpersonal trust and so forth can be used as proxies for social cohesion as a collective property (Bjornskov 2003, Delhey and Dragolov 2016).[3]

The threefold structure – although under different labels and with varying sets of indicators – also appears in other theoretical frameworks. For instance, Delhey and Dragolov (2016), drawing on the work of the Bertelsmann Foundation (2014), identified three variables under each of the following dimensions: Connectedness, Social Relations, and Focus on the Common Good. Similarly, Aruqaj (2023) grouped a total of eleven indicators under the dimensions of Social Trust, Institutional Trust, and Openness.

[3] It can manifest as cohesion within one's own group (so-called bonding), between different groups (bridging), or as a sense of cohesion extended to the wider population as a whole (linking) (Meer and Tolsma 2014; Stolle et al. 2008).

The WELLCOH approach

The WELLCOH project primarily follows the interpretation of social cohesion employed by Eurofound (2018), with the intention of further developing it in the later stages of the research. This framework is originally based on the work of Jenson (2010), which is a widely cited and broadly recognised conceptualisation of social cohesion. Importantly, it goes beyond a mere collection of indicators: it offers a logically structured framework that systematically organises key domains into five distinct dimensions, as outlined below.

1. *Perceived social exclusion*
   - Feeling excluded from society
   - Feeling that life has become so complicated it's hard to find one's way
   - Feeling that one's efforts or contributions are not recognised by others
   - Feeling looked down upon by others because of one's job situation or income
2. *Perceived tensions between:*
   - Poor and rich people
   - Management and workers
   - Men and women
   - Old people and young people
   - Different racial and ethnic groups
   - Different religious groups
   - People with different sexual orientations
3. *Trust*
   - General trust
   - Institutional trust:
     - Legal system
     - News and media
     - Police
     - Government
     - Local (municipal) authorities
     - Banks
     - Humanitarian or charitable organisations
4. *Participation in society*
   - Unpaid voluntary work in the last 12 months in:
     - Community and social services
     - Educational, cultural, sports or professional associations
     - Social movements or charities
     - Political parties or trade unions
     - Other voluntary associations
   - Participating in the following activities:
     - Attended a meeting of a trade union, a political party or a political action group

- Attended a protest or demonstration
- Signed a petition, including an email or online petition
- Contacted a politician or public official
- Commented on a political or social issue online
- Boycotted certain products

5. *Sense of community*
   - Feeling close to people in local area
   - Frequency of direct, face-to-face contacts with:
     - family members or relatives
     - friends or neighbours
   - Frequency of indirect contacts (telephone, the internet or post) with:
     - family members or relatives
     - friends or neighbours

2.4.1 Trust as a cornerstone of social cohesion

Among the dimensions mentioned above, many scholars consider trust to be the cornerstone of social cohesion. Therefore, it is worth outlining a few ideas regarding the conceptualisation of this notion. Trust is often seen as a foundational element that underpins other aspects of cohesion – such as cooperation, solidarity, and a sense of belonging. Its interpretation varies across disciplines, ranging from individual-level psychological dispositions to collective attitudes shaped by institutional performance and social norms. As such, trust plays a pivotal role in linking micro-level interactions with macro-level societal stability.

Larsen (2013) describes social cohesion as the belief among citizens that they share a common moral foundation, enabling mutual trust. More broadly, trust can be defined as the general expectation that others will not intentionally harm us and will act in our interest when possible (Delhey and Newton, 2005). Trust underpins social institutions, families, businesses, and even democracy itself (Fukuyama 1995, Seligman, 1997, Putnam et al. 1993).

Trust may be conceptualised in various forms (e.g. Sümeghy and Németh):

- Generalised trust, seen by some as a relatively stable value acquired early in life (Uslaner, 2002, Newton and Zmerli, 2011), while others view it as dynamic, shaped by lived experiences with "others" (Dinesen, 2012, Glanville and Paxton, 2007).
- Particularised trust, which is confined to close, similar others such as family and friends (Yamagishi and Yamagishi, 1994, Freitag and Traunmüller, 2009).

- Localised or community trust, defined by Wallman Lundåsen and Wollebæk, D. (2013), refers to trust in people living in the same neighbourhood or town. Their composite index includes trust in neighbours, residents of the local area, and members of the same settlement.
- Institutional trust, focusing on confidence in governmental and public institutions, is also essential and is commonly monitored alongside generalised trust in large-scale surveys.

2.4.2 Other dimensions of social cohesion

Social exclusion refers to the systemic denial of access to rights, resources, and opportunities necessary for full social participation. It encompasses economic, cultural, and political dimensions, and contrasts with the narrower concept of poverty (Silver, 1994, Atkinson, 1998). Since the 1990s, it has gained prominence within EU policy as a framework for analysing and addressing complex forms of inequality (European Commission, 2004). Importantly, perceived social exclusion captures how people feel about their inclusion in society, which may diverge from objective indicators. Experiences of being marginalised or undervalued can undermine trust, mental health, and civic participation – key pillars of social cohesion (Delhey and Dragolov, 2016, Böhnke, 2008).

Another important dimension involves ***perceived tensions*** between social groups. Although perceptions are subjective and may differ widely, they are nonetheless revealing. When significant intergroup conflict is perceived – across age, ethnic, economic, or other lines – it signals erosion in shared values and social solidarity. These tensions can weaken trust and cooperation, and foster polarisation within society.

"Participation in society" reflects the extent to which individuals are actively engaged in the civic and political life of their communities. Participation – whether through involvement in voluntary associations, clubs, or political activities – strengthens interpersonal connections and fosters a sense of belonging. It plays a crucial role in reducing social exclusion by providing individuals with opportunities to contribute to collective goals and to feel recognised as part of a broader community. Moreover, civic and political engagement cultivates a sense of responsibility and solidarity, reinforcing concern for others and for the public good. For these reasons, encouraging participation – particularly among underrepresented groups – has become a key objective in EU social policy.

The fifth dimension, ***"Sense of community"*** is also essential to social cohesion because it captures the quality and quantity of individuals' social connections – such as relationships with neighbours, friends, and others in the local area. This dimension reflects people's

attachment to their everyday surroundings and the social networks that provide emotional support, trust, and practical help. While it may initially seem far from EU level policymaking, strengthening the "sense of community" can counteract the negative effects of isolation and marginalisation, fostering mutual support and belonging, which are vital for both individual well-being and the stability of society as a whole.

2.4.3 Out-group attitudes: the sixth pillar?

Although it may initially seem like an abstract or elusive concept, attitude studies are supported by decades of robust theoretical and methodological work (e.g. Berg 2006, Eagly and Chaiken 1998). While not explicitly integrated into the core dimensions of the framework discussed above, out-group attitudes may represent an important additional aspect of social cohesion, particularly in the context of fostering integration.

Some researchers treat out-group attitudes as a distinct object of study, suggesting that they are shaped by levels of perceived social cohesion, particularly trust and the quality of social relations (e.g. Messing and Ságvári 2019). Others situate these attitudes firmly within broader theoretical models of social cohesion. For instance, Lancee and Dronkers (2011) conceptualise social cohesion as a network, in which attitudes function as nodes and the intensity and structure of social ties define the wires connecting them. In the framework proposed by Schiefer and Noll (2016), attitudes fall under the domain of mutual tolerance, examined alongside measures of social distance.

Attitudes can be broken down into affective, behavioural, and cognitive components. The affective component refers to emotional reactions toward out-groups – for example, feelings of sympathy or resentment toward migrants, often shaped by personal values and emotionally charged issues such as politics, religion, or identity. The behavioural component reflects how individuals act or would act in relation to out-groups – such as their willingness to support or oppose immigration policies. The cognitive component captures knowledge and beliefs, including perceptions of the number, diversity, and societal impact of migrants (Messing and Ságvári 2019).

2.4.4 Social capital or social cohesion?

Social capital is another multidisciplinary concept widely employed across the social sciences to explain how individuals derive value from their participation in social networks. These networks foster norms of reciprocity, cooperation, and trust, which, in turn, generate both individual and collective benefits (Bourdieu 1986, Coleman 1988, Tzanakis 2013). Fundamentally, the concept rests on the idea that investing in social

relationships yields potential returns in the form of resources, support, and opportunities (Lin 2001).

Putnam (1993, 1995) distinguishes two forms of social capital. Bonding social capital refers to the strong connections among close-knit groups such as family members, close friends, and neighbours. These ties are characterized by emotional support, trust, and solidarity, and they are crucial for maintaining social cohesion and providing access to immediate assistance. In contrast, bridging social capital encompasses weaker, more diverse connections that link individuals across heterogeneous social groups. These ties facilitate access to new information, broader perspectives, and resources beyond one's immediate circle, thereby fostering inclusivity and collective problem-solving. Later extensions of the concept (e.g. Woolcock 1998) introduced linking social capital as well, which refers to the vertical relationships that connect individuals to institutions and people in positions of power or authority. Unlike bonding and bridging ties, which operate primarily on a horizontal level, linking social capital enables access to formal resources, influence, and decision-making processes within hierarchies.

The distinction among bonding, bridging, and linking social capital is particularly relevant for understanding their differential effects. While bonding ties often enhance personal well-being and mutual support, bridging and linking ties are more strongly associated with broader economic development, social mobility, and civic engagement.

Social cohesion and social capital are closely related but conceptually distinct. In the literature social cohesion usually refers to a collective property of togetherness and solidarity, whereas social capital often denotes individual and meso-level resources that embed people within communities and institutions (Delhey and Dragolov, 2016, Puntscher et al. 2015, Neira et al. 2019). As Klein (2013) surmised, aggregated indicators of cohesion are more appropriate for macro analyses, whereas data on the individual level should be used to analyse the relationship between social capital and subjective well-being. Holtug and Mason (2010: 409) took a somewhat different approach. Drawing on a literature review, they concluded that quantitative theorists tend to speak of social capital and more qualitative theorists of social cohesion. Furthermore, these scholars focus on different aspects of social relations: social capital has generally been used to refer to trust, networks and reciprocity, whereas social cohesion has generally been used to refer to stability, inter-group cooperation and a common identity (Hooghe, 2007: 711).

Consistent with earlier research, we conceptualize social cohesion primarily as a collective attribute of a given territorial unit – in this case, Vienna and Budapest. What can be measured at the individual level is *perceived social cohesion*. These individual perceptions can later be aggregated to identify cohesion patterns characteristic of the

broader community or specific subgroups – such as native-born and foreign-born residents.

2.4.5 The nexus between social cohesion/capital and subjective well-being

The nexus between subjective well-being and the concepts of social capital (e.g. Puntscher et al. 2015, Hommerich and Tiefenbach 2018, Neira et al. 2019) and/or social cohesion (e.g. Manca 2014, Delhey and Dragolov 2016, Bottoni and Addeo 2024) has been gaining increasing attention. The literature advances two complementary theoretical moves. First, social embeddedness improves life evaluation and psychological functioning via collective conditions of togetherness and institutional context, which manifests in higher well-being at the country or region level (Delhey and Dragolov 2016, Bottoni and Addeo 2024). Second, social capital frameworks decompose social resources into cognitive and structural components – generalized trust, institutional trust, associational participation and close ties – each theorized to influence well-being through different pathways such as information exchange, norms enforcement, reciprocity and instrumental support (Puntscher et al. 2015, Neira et al. 2019, Musson and Rousselière 2019). Extending these models, Hommerich and Tiefenbach (2018) propose social affiliation as a subjective societal dimension, conceptually distinct from community-level capital, that mediates the relationship between capital and well-being.

Most studies show ***positive associations*** between social cohesion or capital and SWB (e.g. Anheier et al. 2004, Bjørnskov 2003, Dragolov et al. 2018). Multilevel analyses linking country cohesion indices to individual life evaluation report higher happiness and psychological health in more cohesive societies, with somewhat stronger effects in more affluent parts of Europe (Delhey and Dragolov, 2016, Bottoni and Addeo, 2024). Analyses of European regions show that various social capital components (general trust, institutional trust, associational activity, close ties) are important predictors of life satisfaction and happiness, sometimes outweighing income effects at the regional scale (Puntscher et al. 2015). Several case studies around the world links bonding and bridging capital, association activity, and neighbourhood cohesion to higher happiness and life satisfaction, though bridging capital sometimes shows null or context-dependent effects (Nugroho et al. 2022, Kamarudin et al. 2020, Hoogerbrugge and Burger, 2018).

Studies identify overlapping mechanisms through which cohesion and social capital affect subjective well-being.

- Social support and belonging. Bonding and bridging ties provide emotional support, practical help, and belonging, facilitating life satisfaction and happiness among migrants and refugees (Ziersch et al. 2023).

- Cognitive pathways. Perceived social affiliation, social trust, and perceptions of equity operate as cognitive mediators between social resources and life satisfaction, transmitting effects beyond structural network measures (Hommerich and Tiefenbach 2018, Ren et al. 2022).
- Chain mediation and indirect effects. Subjective socioeconomic status and social capital interact via perceived social equity and social trust to influence life satisfaction, suggesting multi-step pathways from resources to evaluations of life (Ren et al. 2022).
- Adverse network and exclusionary effects. Negative social events may reduce life satisfaction, and high bonding capital can be associated with lower satisfaction among immigrants (Piao et al. 2021, Chu et al. 2018).

The heterogeneity of ***measurement approaches*** is a major challenge for comparative studies. Generalized and institutional trust, associational membership and participation, contact frequency, and neighbourhood cohesion are widely used indicators (Puntscher et al. 2015, Neira et al. 2019, Musson and Rousselière, 2019). Some macro-level studies employ multidimensional composite indices, such as the Bertelsmann Cohesion Index, aggregating trust, shared values, integration, and civic engagement (Delhey and Dragolov, 2016, Addeo et al. 2017). In many studies factor analysis, regression models and dimension reduction techniques are used to test heterogeneous effects across SWB distributions, improving interpretability of which components matter for which subpopulations.

While most studies have found positive links between social connectedness and life satisfaction in general, relatively few have considered how social networks affect SWB within ***migrant communities*** (e.g. Xu and Palmer 2011, Tegegne and Glanville 2018, Chu et al. 2018). According to Zhu et al. (2019), cognitive social capital is positively associated with SWB, while both cognitive and structural social capitals were negatively associated with poor mental health. Social connectedness (social support, networks, community engagement) may benefit migrants' psychological well-being and life satisfaction, however, most studies are cross-sectional and focused on psychological outcomes (Song et al. 2024, Ziersch et al. 2023). Bonding and bridging ties often supply emotional and practical resources, while linking ties (connections to institutions) are scarcer and unequally distributed, creating inequities in integration and well-being (Ziersch et al. 2023, Maset-Llaudes and Fuertes, 2015). According to the literature review of Song et al. (2024), social connectedness, in the form of social support and social networks, is beneficial for SWB of refugees as well during resettlement. In addition to social support from individual network ties, community engagement can also enhance well-being by facilitating a sense of belonging.

Overall, empirical results underscore that social ties matter for SWB, but their impact is contingent on the operationalisation of the core concepts as well as the socioeconomic and spatial setting.

This topic will come to the forefront in a later phase of the WELLCOH project, which aims to examine causal relationships in greater depth. At that stage, a more thorough exploration of previous studies will also be necessary to contextualise and interpret the findings appropriately.

3. Sources and methods

3.1 Potential secondary data sources

While questions on life satisfaction, happiness, trust and other elements of subjective well-being or social cohesion are relatively frequent in international surveys, only a few data sources can be suitable for a comprehensive analysis of the subjective well-being–social cohesion nexus, particularly with a focus on the international migrants. Five potential data sources could be suitable for the WELLCOH project: the European Union Statistics on Income and Living Conditions survey (EU-SILC), the European Social Survey (ESS), and the European Quality of Life Survey (EQLS), the Hungarian microcensus and the Vienna Quality of Life Survey. After a short overview of these surveys we summarise the main obstacles and limitations – from the WELLCOH perspective – in Chapter 3.2

3.1.1 EU-SILC ad-hoc modules

The EU-SILC (EU Statistics on Income and Living Conditions)[4] was initially launched in 2003 with the goal of collecting timely and comparable multidimensional microdata on income distribution, poverty, and social exclusion. This instrument has received special attention since the European Council convened in June 2010. On this occasion, the European Union endorsed a new long-term strategy, titled "Europe 2020". Promoting social inclusion through the reduction of poverty was one of its headline targets, aiming to lift at least 20 million people out of risk of poverty and social exclusion. Therefore, measuring and monitoring the living standards of the target population[5] has got high priority.

EU-SILC is a representative sample survey of private households in the European Union. Under its umbrella, Eurostat has been collecting and publishing comparable multidimensional micro-data on income, poverty, social exclusion, housing, labour, education, and health from all Member States. In order to maximise data comparability, the whole procedure has been designed by a common conceptual framework, by harmonised lists of variables, by common requirements (for imputation, weighting, the calculation of sampling errors, etc.), and by harmonised classifications (ISCO, NACE, ISCED).

[4]Website: https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions

[5] The target population was identified by three selected indicators: at risk of poverty, material deprivation, and unemployed household (below the 60% median disposable income threshold, at or above the severe material deprivation threshold of 4, or in a household with work intensity below 20% threshold).

EU-SILC also contains cross-sectional and longitudinal data, collected at two different levels: the household and the individual level. Until 2021, the 'primary variables' were collected every year, while the 'secondary variables' were collected less frequently in the so-called ad-hoc modules. These ad-hoc modules covered specific topics, e.g. intergenerational transmission of disadvantages, access to services, health, social and cultural participation, material deprivation, housing conditions, or personal well-being.

In 2021, new legislation on the implementation of EU-SILC came into force. The core indicators are still collected every year, including income, deprivation, economic activity, demography, education, housing cost, and so forth. The other specific variables are structured into three-yearly rolling modules (labour market and housing, health, and children), six-yearly rolling modules (over-indebtedness, consumption and wealth, access to services, and quality of life), or ad-hoc policy modules, which are implemented only once.6

Indicators related to personal subjective well-being were collected and published in the 2013, 2018 and 2022 ad-hoc modules. These databases are considered among the best sources of internationally comparable SWB data (OECD 2017:128-130), which consist of nationally representative layered random samples of households and which contain more than 10,000 interviews from both Hungary and Austria.

The survey was conducted either in person (CAPI - Computer Assisted Personal Interviewing) or by telephone (CATI - Computer Assisted Telephone Interviewing), and participation in the survey was voluntary for the households. In Austria, the whole questionnaire was available in German, Turkish, and Bosnian/Croatian/Serbian. In Hungary, the respondents could fill in the questionnaire in Hungarian and in English, however, the core questions were translated into the languages of national minorities too. The compulsory target variables were defined at the EU level but each national statistical office had the right to add further, locally relevant variables.

While so-called proxy interviews (information provided by another person, typically a parent, a husband, or a wife) were permitted in case of the standard questionnaires, questions on subjective well-being were only asked personally during the face-to-face interviews with household members aged 16 or above.[7] Due to the relatively high

[6] More technical, methodological information on the Eurostat website: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_introduction and https://ec.europa.eu/eurostat/web/income-and-living-conditions/database/modules.

[7] "In contrast to other modules, proxy answers are not allowed since the module items are of purely subjective nature. Questionnaires provided by proxies were either discarded from the module sample or special efforts were made to collect the module data from the persons intended by telephone interview (EL, ES, FI, PT and SK). Romania was the only country to provide proxy answers for the module items. Proxy answers are not taken into

proportion (ca. 10% of the personal interviews) of third-party information in the standard questionnaire, the statistical offices applied weights to provide representative results for the entire population (Oismüller and Till, 2015). Those respondents who refused to answer the questions were excluded from the analysis.[8]

3.1.2 European Quality of Life Survey (EQLS)

The European Quality of Life Survey (EQLS)[9] is a comprehensive survey conducted by the European Foundation for the Improvement of Living and Working Conditions (Eurofound). The Eurofound, operates as a tripartite EU agency with a management board made up of representatives of governments and social partners (employers and trade unions) in the EU Member States, representatives of the European Commission and one independent expert appointed by the European Parliament. The central mission of this agency is to contribute to the planning and design of social policies in the European Union. It explicitly aims to support the policymaking activities of EU institutions, governments, employers, trade unions and civil society organisations.

To reach these goals, the European Quality of Life Survey has been designed to provide high-quality, comparable data about the social conditions and living standards across Europe. The first wave of the survey was conducted in 2003 and covered 28 countries, including the 15 EU Member States, 12 candidate countries, and Türkiye. Since its inception, the survey has been conducted every four to five years, with subsequent waves in 2007, 2012 and 2016. Each wave of the EQLS has expanded in scope, reflecting the EU's enlargement and changing social and economic landscape.

The EQLS employs a rigorous and scientifically robust methodology to ensure that the data collected is reliable and comparable across countries. (To ensure international comparability, data should be weighted to correct for any sampling biases.) The survey is conducted through face-to-face interviews with a representative sample of the adult population in each participating country. The sample size typically ranges from 1,000 to 2,500 respondents per country, depending on the country's size and population. The questionnaire is designed to cover a wide array of topics related to quality of life, using

account in the frame of the statistical analysis and are also excluded from the data validation procedure". (https://ec.europa.eu/eurostat/documents/1012329/1012401/2013+Module+assessment.pdf)

[8] "Do not know" answers could be studied separately, since they do not provide a definite subjective opinion of the respondent. Nevertheless, the extent of missing information is not significant. The highest share of missing values was about 1.3% (14,000 persons after extrapolation) for the category of satisfaction with the time available for the children (Oismüller and Till, 2015).

[9] Website: https://www.eurofound.europa.eu/en/surveys/european-quality-life-surveys-eqls

both objective indicators (such as income levels and employment status) and subjective measures (such as life satisfaction and perceptions of social support). The findings from the EQLS are made publicly available, allowing researchers, policymakers, and the general public to access and utilize the data.

3.1.3 European Social Survey (ESS)

Since 2002 the European Social Survey (ESS)[10] has become a cornerstone of social investigations in the EU. The primary purpose of the ESS has been to monitor and explain trends in attitudes, beliefs, and behaviors across Europe. It aims to provide a comparative picture of how Europeans view various aspects of their lives, including governance, democracy, immigration, religion, and so forth. By offering consistent and reliable data over time, the ESS helps understanding spatial macro-structural differences and long-term trends as well.

Each participating country is responsible for funding the survey but the European Commission also provides additional funding to support its coordination and implementation. The ESS is managed by a central coordinating team, in collaboration with national coordinators in each participating country. The decentralized structure allows the ESS to accommodate the specific needs of different countries.

Developed by a group of leading European social scientists, the first round of the survey was conducted in 2002. It has grown significantly both in terms of geographical scope and influence. Originally encompassing around 20 European countries, the survey now includes over 30 countries in each round. The survey is conducted every two years and covers a broad range of topics relevant to social science research and policy-making.

The ESS is renowned for its rigorous methodology. The questionnaires cover a wide range of topics, including core modules that remain consistent across rounds, as well as rotating modules that explore specific themes in greater depth. The ESS uses a probability sampling method to ensure that the survey results are representative of the adult population in each country. The sample size typically ranges from 1,500 to 2,500 respondents per country. Interviews are conducted face-to-face by trained interviewers, following standardized procedures to ensure consistency and reliability.

The ESS places a strong emphasis on minimizing non-response bias and ensuring that the survey is accessible to all segments of the population. The data collected is subjected to

[10] Website: https://www.europeansocialsurvey.org/

rigorous quality control processes, including pre-testing, validation, and weighting, to ensure that the results are both accurate and comparable across countries.

The involvement of a broad range of stakeholders, including national governments, research institutions, and funding agencies, ensures the sustainability and continued relevance of the ESS.

3.1.4 Quality of Life in European Cities (QLECS)

The "Quality of Life in European Cities" survey[11] is an initiative led by the European Commission, aimed at understanding the living conditions and quality of life across various urban areas in Europe. The survey seeks to provide valuable insights into how residents perceive their cities, covering various aspects such as economic conditions, environmental quality, social cohesion, and public services.

The inception of the survey arose from the European Commission's commitment to improving the quality of life in European cities, a goal that aligns with broader EU policies focused on sustainable urban development and social inclusion. The survey employs a combination of quantitative and qualitative methods, including structured questionnaires filled out by residents in selected cities across Europe. The main data collection is done through CATI, there may also be instances where CAPI or CAWI (Computer-Assisted Web Interviewing) methods are used.

The primary purpose of the "Quality of Life in European Cities" survey is to gather and analyse data on urban living conditions as perceived by citizens. By focusing on various quality of life indicators, the survey aims to identify key challenges faced by cities and to inform policy decisions at both local and European levels. The survey encompasses a wide range of topics, including environmental quality (e.g. air and noise pollution, green spaces, overall urban aesthetics), economic conditions (employment rates, income levels, access to economic opportunities etc.), public services and people's satisfaction with them, and social cohesion (community relations, social integration, and safety perceptions).

The survey has been conducted periodically, with subsequent rounds taking place in 2004, 2006, 2009, 2012, 2015, 2019, and most recently in 2023. The latest survey reached more than 71 thousand people in 83 cities across the EU, European Free Trade Association (EFTA) countries, the United Kingdom, the western Balkans and Türkiye and allows for comparison with the previous edition of the survey, conducted in 2019.

[11] Website: https://ec.europa.eu/regional_policy/information-sources/maps/quality-of-life_en

3.1.5 Hungarian microcensus (HMC)

A microcensus is a sample-based population enumeration which tracks social trends between two full-scope censuses. The last Hungarian microcensus[12] was carried out between 1 October and 8 November 2016. At the beginning of this period, questionnaires could be completed online, after enumerators did interviews using a laptop or tablet. The enumeration covered 440,102 personal addresses and about 500 institutions in 2,148 different settlements, which meant 10% of all households in Hungary. A key criterion for sample selection was that the results should provide representative, reliable information about the most important socio-demographic data even on the NUTS 3 level. The microcensus was ordered by law, the participation of the occupants of the selected dwellings was mandatory. In case of the sensitive questions, such as mother tongue, ethnicity and health status, the response was voluntary. Respondents had to provide data regarding their household's situation by 1 October 2016.

The compulsory Personal Questionnaires and Dwelling Questionnaires were supplemented by additional ones about five specific topics. Two of them concerned people who were either involved in international migration or had a disability or illness that caused difficulties in daily activities. In addition, households were randomly pre-selected to answer one of three additional sets of questions. These themes were social stratification, occupational prestige, and subjective well-being. Since these supplementary surveys also included questions on feelings, opinions, and individual experiences, people were free to choose whether they would answer the sensitive questions.[13]

The subjective well-being module collected accurate and reliable information about people's satisfaction with their life as a whole, with various aspects of their personal life, their emotional state, and many other aspects related to this topic. Measuring subjective well-being on such a large sample is unique at the international level too.

The international migration module focused not only on foreign citizens residing in Hungary, but also on the demographic and socio-economic characteristics of Hungarian citizens who have already emigrated from Hungary, who are currently in the process of emigration, or who have decided to return to Hungary.

[12] Website: https://www.ksh.hu/mikrocenzus2016/?lang=hu

[13] For more details see: https://www.ksh.hu/mikrocenzus2016/adatgyujtes

3.1.6 Vienna Quality of Life Survey (VQLS)

The Vienna Quality of Life Survey (VQLS) is conducted by the Department for Urban Development and Planning of the City of Vienna. The survey was launched in 1993 in order to monitor the living conditions of the inhabitants of the Austrian capital. The VQLS provides valuable insights into various aspects of life in the city, such as housing situation, health services, environmental quality, mobility, safety, the quality of public services and so forth. Therefore, the survey plays a crucial role in identifying areas where improvements are necessary. Over the years, the VQLS has become an important tool for the City of Vienna to track changes in the quality of life and evaluate the effectiveness of social policies.

Since its inception, the survey has been conducted every five years (2003, 2008, 2013, 2018). The Vienna Quality of Life Survey is funded and coordinated by the City of Vienna. However, the City of Vienna often collaborated with academic institutions in the past.[14] The results of the Vienna Quality of Life Survey are based on a representative sample of residents, typically involving around 8,000 to 9,000 respondents. The sample reflects the demographics of Vienna by age, gender, income, and geographical distribution (city districts). Data is collected through a combination of face-to-face interviews and online questionnaires. To ensure comparability over time, the core questions of the survey remained consistent across different waves. However, each waves included special modules to explore emerging issues of particular interest, such as the impact of technological changes on daily life or the effects of environmental policies.

The survey covers a wide range of topics, including objective indicators such as income, housing conditions, access to public services etc., as well as subjective measures such as overall life satisfaction or satisfaction with public services. The analyses of the VQLS database may be useful not only for social scientists but also for city planners and policymakers to guide decision-making and to develop initiatives aimed at improving the quality of life in Vienna.

3.1.7 Statistics Austria, Migration Survey (MgSur)

The Migration Survey[15] is a voluntary, national survey commissioned and financed by the Federal Chancellery. It has been conducted by the Statistics Austria in the form of an

[14] Since the cooperation with the University of Vienna expired, the latest available data are from 2018.

[15] Website: https://www.statistik.at/services/tools/services/amdc-mikrodaten-fuer-die-wissenschaft/scientific-use-files#c15278

online survey since 2021. As part of the survey, people with and without a migration background are asked how they perceive the integration process. The target group consists of people in Austrian households aged 16 and over who have lived in Austria for at least one year and were born in Austria or in selected countries (Afghanistan, Bosnia and Herzegovina, Iran, Romania, the Russian Federation, Serbia, Syria, Türkiye, and Ukraine). The basis for sampling is the Central Register of Residents (ZMR), from which people are randomly selected. The main results of the survey are published in the annual Statistical Yearbook Migration and Integration.

3.2 Obstacles and limitations

3.2.1 Fragmented knowledge

One of the most important obstacles to study the social cohesion–subjective well-being nexus – particularly its temporal dynamics – is the fact that the questionnaires did not always include both modules at the same time (Table 2). The *EU-SILC* questionnaires have usually included questions on subjective well-being or social cohesion only, so no direct comparative analysis is possible. 2022 was the only exception, but the number of relevant variables was already low in this round. The two surveys that have been consistently monitoring both topics are the European Quality of Life Survey and the European Social Survey. The problem with the *EQLS* is that the latest results on SWB and SC were published in 2016 and, according to the survey coordinators, is due to be repeated in 2026 only. The *ESS* survey rounds are more frequently conducted, but they have a lower number of variables relevant to our topic compared to the EQLS (see the next subsection). The same is true for the 2016 *Hungarian microcensus*. The *VQLS* did not include any questions related to social cohesion at all, and there are only two questions on trust in the *Quality of Life in European Cities* survey. The *Migration Survey* conducted by the Statistics Austria has numerous questions that are relevant for the study of social connections and social cohesion; however, they are not harmonised methodologically with any international surveys (see Chapter 3.2.3). In terms of survey frequency, the EQLS and ESS would be the optimal choice; however, a number of other considerations need to be taken into account.

Table 2. Years of data collection of the relevant surveys for WELLCOH. "Y" (yes) refers to survey rounds where at least one question is related to the topics of SWB or social cohesion.

	EU-SILC		EQLS		ESS		QLECS		HMC		VQLS		MgSur	
	SWB	SC	SWB	SC	SWB	SC	SWB	SC	SWB	SC	SWB	SC	SWB	SC
2002					Y	Y								
2003														
2004					Y	Y								
2005														
2006		Y			Y	Y								
2007			Y	Y										
2008					Y	Y					Y			
2009							Y							
2010					Y	Y								
2011			Y	Y										
2012					Y	Y	Y							
2013	Y										Y			
2014					Y	Y								
2015		Y					Y							
2016			Y	Y	Y	Y			Y	Y				
2017														
2018	Y				Y	Y					Y			
2019							Y							
2020					Y	Y								
2021													Y	Y
2022	Y	Y			Y	Y							Y	Y
2023							Y						Y	Y
2024													Y	Y

Own table. (SWB: subjective well-being, SC: social cohesion, Y: the surveys collected information)

3.2.2 Sample size

At the *national level*, the EQLS provides the lowest sample size (around 500-700 persons per country), while EU-SILC provides the highest. In Austria, more than 10,000 people were interviewed in each SILC rounds, while in Hungary their number was over 14,000 and even above 21,000 in 2013. The ESS falls somewhere in between with a typical sample of 1,500 - 2,000 people.

Accordingly, significant differences can be seen when focusing on Vienna and Budapest. In the case of the EQLS, only the 2016 round included regional-level data, but the number of respondents from these two cities was just over 100. In the ESS comparable city-level data have been available since 2014 with around 300 respondents. In comparison, the Vienna and Budapest sub-samples of EU-SILC contain data on a much larger number of people (1,500-3,000). The Quality of Life in European Cities survey reached typically ca. 500 people in both cities. The largest sample numbers, however, are found in the Budapest subsample of the Hungarian microcensus and the VQLS sample, with respondents above 6,000 and 8,000 respectively.

If the breakdown by country of birth is also taken as a criterion, the EQLS and ESS prove useless and the EU-SILC Budapest sub-sample also contains responses from less than 100 foreign-born individuals. Even smaller sample sizes can be found in the Quality of Life in European Cities survey, if the information on country of birth is available at all. From this point of view, the EU-SILC for Austria, the Hungarian microcensus and the Vienna Quality of Life Survey can be used for a deeper analysis. The analysis can be complemented by the Statistics Austria's Migration Survey with more than 1,000 foreign-born respondents in Vienna. However, this database has some caveats, e.g. the massive underrepresentation of native-born population, the limited period of time, which it covers, and the fact that the survey intentionally targeted immigrants from only nine pre-selected countries.

Table 3. Sample size in the relevant surveys by the years of data collection. (In the case of the Hungarian microcensus (HMC: only those number is indicated who completed the well-being module of the questionnaire.)

Survey	Year	Austria	Vienna	Foreign-born in Vienna	Hungary	Budapest	Foreign-born in Budapest
EU-SILC	2013	10,940	2,077	561	21,349	3,028	74
	2018	10,633	2,142	609	14,365	1,579	58
	2022	10,191	2,053	582	14,488	1,867	65
EQLS	2007	517	-	-	638	-	-
	2011	613	-	-	729	-	-
	2016	527	110	26	607	114	5
ESS	2002	2,257	-	-	1,685	-	-
	2004	2,256	-	-	1,498	-	-
	2006	2,405	-	-	1,518	-	-
	2008	-	-	-	1,544	-	-
	2010	-	-	-	1,561	220	-
	2012	-	-	-	2,014	319	-
	2014	1,795	361	-	1,698	304	-
	2016	2,010	398	-	1,614	291	-
	2018	2,499	515	-	1,661	208	-
	2020	2,003	387	-	1,849	298	-
QLECS	2009	-	500	?	-	500	?
	2012	-	503	?	-	502	?
	2015	-	500	?	-	502	6
	2019	-	500	?	-	500	?
	2023	-	1,112	124	-	998	16
HMC	2016	-	-	-	51,281	6,636	430
VQLS	2008	-	8,704	1,481	-	-	-
	2013	-	8,400	2,431	-	-	-
	2018	-	8,450	1,659	-	-	-
MgSur	2021	3,456	-	-	-	-	-
	2022	3,231	1,233	1,016	-	-	-
	2023	5,333	2,225	1,992	-	-	-
	2024	4,859	1,971	1,757	-	-	-

Own table.

3.2.3 Incompatible variables

Although each survey included questions about subjective well-being and/or social cohesion, the direct comparison of their variables is usually not possible. The length and content of the questionnaires were very different. Different questions were asked, formulated differently and often measured on different scales. An illustrative example is the simple question on overall life satisfaction, which is measured on five different scales in the six surveys listed above (see in details: Chapter 3.2.3.2). An important exception to this was the Hungarian microcensus, because its well-being module followed the same theoretical and methodological guidelines as the EU-SILC: the OECD Guidelines for Measuring Subjective Well-being (2013). (For more details see Chapter X). Furthermore, the questionnaires even from the same survey vary from year to year. For example, it is not the exactly same list of questions that was surveyed by the 2013, 2018 and 2022 rounds of EU-SILC. The following chapter provides an overview of the available variables and the way these surveys attempt to operationalize the key concepts.

3.2.3.1 Variables on subjective well-being

Due to its large sample size and the fact it explicitly follows the OECD Guidelines for Measuring Subjective Well-being (2013), the EU-SILC database is widely considered the best European source of internationally comparable SWB data (OECD 2017:128-130). Therefore, in this subchapter we will overview the SWB variables provided by the surveys listed above based on the OECD (and SILC) classification system.

Overall life satisfaction

Overall life satisfaction captures a comprehensive evaluation of one's life as a whole (Diener et al. 1985). While affective measures can fluctuate even daily, the cognitive assessment allows for a broad and stable measure of SWB. The question about overall satisfaction can be easily understood across different countries and populations, since it is less dependent on cultural norms (Veenhoven 1993, Oishi et al. 2007). The simplicity of the life satisfaction measure – often captured with just a single question – also contributed to its widespread use. Therefore, overall life satisfaction is the most frequently used indicator for assessing subjective well-being in large-scale surveys and longitudinal studies.

Accordingly, all of the surveys listed above include a question about the overall life satisfaction. The content is the same; however, the exact wording and the applied scales

may differ. The following questions are dedicated to grasp the general satisfaction with life.

- *"On a scale from 0 to 10, where 0 means 'not at all satisfied' and 10 means 'completely satisfied', how satisfied are you with your life overall?"* (EU-SILC, HMC).
- *"All things considered, how satisfied would you say you are with your life these days?* Scale: 1 to 10, where 1 means "very dissatisfied" and 10 means "very satisfied" (EQLS).
- *"All things considered, how satisfied are you with your life as a whole nowadays?"* Scale: 0 to 10, where 0 means "extremely dissatisfied" and 10 means "extremely satisfied (ESS).
- *"On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?"* Scale: 1-4, where 1 means "not at all satisfied" and 4 means "very satisfied" (QLECS).
- *"How satisfied are you with your life situation overall?"* Scale: 1 to 5, where 1 means "not at all satisfied" and 5 means "completely satisfied" (VQLS).
- *"How satisfied are you with your life overall?"* Scale: 1 to 5, where 1 means "very satisfied" and 5 means "not at all satisfied" (MgSur).

Domain satisfaction

While overall life satisfaction gives a broad assessment of life, domain-specific factors allows researchers to identify which areas of life have the greatest impact on personal SWB. People tend to weigh certain domains differently depending on their personal circumstances; for example, health satisfaction may have a greater impact on overall satisfaction for older adults, while satisfaction with work-life balance may be a stronger driver for younger generations (Steptoe et al. 2015).

Domain satisfaction always refers to an objective fact. Therefore, each subjective domain satisfaction variable should have at least one objective "variable pair". For example, measuring respondents' satisfaction with job is insufficient without the objective information on their employment status and other working conditions. However, it's important to emphasize that the number potential questions beginning with the phrase "satisfaction with…" is quasi-infinite. It can be measured in relation to numerous external conditions, e.g. satisfaction with air quality, public transport or the state of democracy in the country. Although these subjective variables may also contribute to the subjective perceptions of well-being, external sources would be necessary to find the appropriate objective "variable pair": for instance, O_3, NO_2, SO_2, and CO concentration in case of the air quality.

In this study we apply a narrow definition and argue that "domain satisfaction" should primarily refer to the variables that can be derived from the objective characteristics of the individual. In other words, only the respondents are able to provide the necessary background information about certain life domains (e.g. monthly income) and then the personal evaluation of these domains (e.g. satisfaction with financial situation). Tables 4-6 follow this line of thought by grouping the available domain satisfaction variables.

The variables for the subjective perceptions on social relations are shown separately because they are particularly relevant to this study. The objective questions typically measure the existence and intensity of people's social connections (e.g. frequency of meeting with friends) and these are relatively common in the national and international surveys. At the same time, the number of questions regarding the satisfaction with social relationships is comparatively low, and there is even less consensus on how this phenomenon should be measured than there is for the material conditions (Table 3).

Table 4. Satisfaction with objective (individual) factors of well-being

	SILC	ESS	EQLS	QLEC	HMC	VQLS	MgSr
financial situation of the household	Y			Y	Y	Y	Y
own income					Y	Y	
standard of living			Y				
accommodation	Y		Y		Y	Y	Y
job	Y	Y	Y	Y	Y	Y	Y
interesting work						Y	
health conditions at the workplace						Y	
job security						Y	
further training opportunities						Y	
promotion opportunities						Y	
weekly working hours						Y	
possibility of organising working hours						Y	
working atmosphere						Y	
overall work situation						Y	
own education			Y				
learning and further education activities						Y	
health					Y	Y	Y
commuting time	Y				Y		
time for things like doing	Y				Y		
time for leisure activities						Y	
work-life balance		Y					

Own table.

Table 5. Satisfaction with objective (relational) factors of well-being

	SILC	ESS	EQLS	QLEC	HMC	VQLS	MgSr
personal relationships / social contacts	Y				Y	Y	Y
family life			Y				
family situation						Y	
people in the neighbourhood						Y	

Own table.

Table 6. Satisfaction with objective (external) factors of well-being

	SILC	ESS	EQLS	QLEC	HMC	VQLS	MgSr
In the settlement							
GP, hospitals, care service, childcare service, school:							
quality of the facilities			Y				
expertise and professionalism of staff			Y				
personal attention were given			Y				
being informed or consulted about care			Y				
the curriculum and activities			Y				
public transport				Y			
health care services, doctors and hospitals				Y			
sport facilities				Y			
cultural facilities				Y			
green spaces				Y			
public spaces				Y			
schools and other educational facilities				Y			
the quality of the air				Y			
the noise level				Y			
cleanliness				Y			
the amount of time it takes to get a request solved by my local public administration				Y			
school or external childcare						Y	
pedagogical quality of care						Y	
In the neighbourhood / local area							
recreational or green areas	Y						
living environment	Y				Y		
local area as a place to live			Y				
proximity to green spaces						Y	
public transport connections						Y	
reputation of the neighbourhood						Y	
security						Y	
people in the neighbourhood						Y	
proximity to a kindergarten						Y	
proximity to a school						Y	
proximity to healthcare facilities						Y	
public open spaces						Y	
cycle lanes						Y	

shopping facilities					Y
sports facilities					Y
cultural facilities					Y
In the country					
commuting environment				Y	
present state of the economy in the country		Y	Y		
the way democracy works in the country		Y	Y		
government's handling of COVID-19		Y			
the way health services coped with COVID-19		Y			
national government		Y			

Own table.

Affective well-being

Measuring affective well-being aims to capture individuals' emotional states, which are important for understanding overall subjective well-being. The term reflects the frequency and/or intensity of emotions and feelings, such as happiness, anxiety, or stress, providing insight into human behaviour that may not be fully captured by life satisfaction measures alone (Diener et al. 1999). The affective well-being measurement is valuable because it allows researchers to assess the balance between positive and negative emotions, which has been linked to both physical health outcomes and life expectancy (Steptoe et al. 2015).

According to Kahneman and Krueger (2006), affective well-being measurements can reveal the impacts of specific situations or social interactions that influence mood and stress levels. While high levels of stress and negative affect may correlate with lower job performance, strained relationships, and poorer health outcomes, positive affect may support resilience and social connection. Therefore, including affective well-being metrics in surveys allows researchers to track the emotion-driven impacts and better understand how people truly feel on a day-to-day basis and how certain factors strengthen or weaken SWB.

In the *EU-SILC* and the *Hungarian microcensus* the following questions covered affective well-being. Answers could be given on a 1–5 scale, where 1: all of the time, 2: most of the time, 3: sometimes, 4: a little of the time, and 5: never.

- *"How often during the last four weeks were you…"*
    - *"very nervous?" (2013, 2018 + 2016 Hungarian microcensus)*
    - *"so sad that nothing could cheer you up?" (2013, 2018)*
    - *"calm and peaceful?" (2013, 2018 + 2016 HMC)*
    - *"downhearted or depressed?" (2013, 2018 + 2016 HMC)*
    - *"happy?" (2013, 2018, 2022 + 2016 HMC)*

- *"lonely?" (2018, 2022 + 2016 HMC)*

The 2013 the Austrian SILC questionnaire contained five additional questions on affective well-being.

- *"How often during the last four weeks were you…"*
  - *"full of vigour?"*
  - *"full of energy?"*
  - *"exhausted?"*
  - *"tired?"*
  - *"stressed?" (+ 2016 HMC)*

Interestingly, happiness and other positive or negative emotions are operationalized differently in the *EQLS* survey. Happiness is measured on a 1-10 scale, where 1 means that respondents are very unhappy and 10 means they are very happy:

- *"Taking all things together on a scale of 1 to 10, how happy would you say you are?"*

In the case of all other affective measures, a 1-6 scale is applied, where 1: all of the time, 2: most of the time, 3: more than half of the time, 4: less than half of the time, 5: some of the time, and 6: at no time. The main question was the following:

- *"Please indicate for each of the statements which are closest to how you have been feeling over the last two weeks."*
  - *"I have felt cheerful and in good spirits" (2007, 2011, 2016)*
  - *"I have felt calm and relaxed" (2007, 2011, 2016)*
  - *"I have felt active and vigorous" (2007, 2011, 2016)*
  - *"I woke up feeling fresh and rested" (2007, 2011, 2016)*
  - *"I have felt particularly tense." (2011, 2016)*
  - *"I have felt lonely." (2011, 2016)*
  - *"I have felt downhearted and depressed." (2011, 2016)*

The most interesting feature of the *European Social Survey (ESS)* is that happiness is operationalized by two variables. One measures how happy people are in general on a scale of 0-10, where 0 means they are extremely unhappy, and 10 means they are extremely happy. This has been a constant element of all questionnaires in all ESS rounds.

The other one was part of the affective well-being question blocks in 2012, 2014, and 2022. These questions were designed to assess people's emotional states over the past one week, and the potential responses can range from 1 to 4, where 1: none or almost none of the time, 2: some of the time, 3: most of the time, 4: all or almost all of the time. The questions on affective well-being are the followings.

- "During the past week how often you/your…"

- *enjoyed life (2012, 2014, 2022),*
- *felt anxious (2012),*
- *felt calm and peaceful (2012),*
- *felt depressed (2012, 2014, 2022),*
- *felt everything did as effort (2012, 2014, 2022),*
- *felt lonely (2012, 2014, 2022),*
- *felt sad (2012, 2014, 2022),*
- *sleep was restless (2012, 2014, 2022),*
- *could not get going (2012, 2014, 2022),*
- *had a lot of energy (2012),*
- *were happy (2012, 2014, 2022)?*

The *Quality of Life in European Cities Survey* does not paid attention to the affective dimension of SWB. Only two questions about loneliness were asked in the latest round of QLECS (2023) with a scale of 1-5, where 1: all of the time, 2: most of the time, 3: some of the time, 4: a little of the time, and 5: none of the time.

- *How much of the time, during the past 4 weeks, have you been feeling lonely?*
- *How much of the time, during the past 12 months, have you been feeling lonely?*

Table 7. Affective subjective well-being variables by surveys

	SILC	ESS	EQLS	QLECS	HMC	VQLS	MgSr
being very nervous	Y		Y		Y		
feeling down in the dumps	Y						
feeling calm / peaceful / relaxed	Y	Y	Y		Y		
feeling downhearted / depressed	Y	Y	Y		Y	Y	
being happy	Y	Y	Y		Y		
feeling lonely	Y	Y	Y	Y	Y		
feeling particularly tense			Y				
feeling active / vigorous			Y				
feeling cheerful / in good spirits			Y				
waking up fresh and rested			Y				
could not get going		Y					
enjoying life		Y					
feeling anxious		Y				Y	
feeling everything did as effort		Y					
feeling sad		Y				Y	
sleeping was restless		Y					

Own table.

In the *Vienna Quality of Life Survey* there is one explicit question about respondents' affective well-being. Unlike the surveys reviewed so far, this question brings together several negative emotions under the umbrella of one question. The number of categories is five, where 1 means never, 2 means rarely, 3 means sometimes, 4 means often, and 5 means almost always. However, this question does not ask about the last one or four weeks, as in the other surveys, but asks people to think about the last two weeks.

- *How often have you had negative feelings such as sadness, despair, anxiety or depression during the past two weeks?*

In the Migration Survey of the Statistics Austria there are no questions about affective well-being.

Eudaimonic well-being

Unlike hedonic well-being, which emphasizes pleasure and emotional experiences, eudaimonia refers to a life considered meaningful and the aspects of autonomy, self-esteem, and self-actualisation (Clark et al. 2008, Vittersø 2016). By measuring eudaimonic well-being, surveys can provide a more comprehensive picture of SWB and allow researchers and policy makers to take psychological factors into account that also contribute to individual and societal well-being. Since aspects like purpose and autonomy can be influenced by policies on education, employment, and social services, tracking psychological well-being helps identify opportunities for intervention that promote sustainable well-being and mental health (Huppert, 2009).

In general, eudaimonic well-being receives much less attention in surveys compared to the cognitive and affective dimensions. It is an elusive, soft and fluid topic, which is even more challenging to quantify than the previous indicators. It is not surprising, therefore, that the questions that attempt to grasp eudaimonic well-being are rarely comparable. The content and wording of the questions are also so different that it is not really possible to summarise them in a table by the surveys.

In the 2016 Hungarian microcensus and the 2013 EU-SILC surveys eudaimonic well-being was measured with the following question:

- *"To what extent do you feel that what you do in your life is valuable and useful?"* (0: not at all valuable and useful, 10: completely valuable and useful)

Three further relevant questions were added to the 2013 Austrian SILC; all of them measured on a 1-5 scale (fully agree, somewhat agree, neither agree nor disagree, somewhat disagree or completely disagree):

- *"I am optimistic about the future."*

- *"In general, I think that what I do in life is worthwhile."*
- *"I am free to decide how I live my life."*

In the 2018 Hungarian SILC, in addition to "meaning of life", one additional question reflected eudaimonic well-being:

- *"Overall, to what extent do you consider yourself an important and useful member of society?"* (0: I am not at all an important, useful member, 10: I am definitely an important, useful member)

The eudaimonic "landscape" of the European Quality of Life Survey (EQLS) is comparatively wider. Responses are scattered on a "traditional" five-point scale, where 1 means strongly agree, 2: agree, 3: neither agree nor disagree, 4: disagree, and 5: strongly disagree. The relevant questions are the followings:

- *To what extent do you agree or disagree with the following statements?*
  - *„I am optimistic about my future." (2003, 2007, 2011, 2016)*
  - *„I am optimistic about my children's or grandchildren's future." (2016)*
  - *„I generally feel that what I do in life is worthwhile." (2011, 2016)*
  - *„I feel I am free to decide how to live my life." (2011, 2016)*
  - *„In my daily life, I seldom have time to do the things I really enjoy." (2011, 2016)*
  - *„I find it difficult to deal with important problems that come up in my life." (2016)*
  - *„When things go wrong in my life, it generally takes me a long time to get back to normal." (2016)*

The EQLS applied a 1-6 scale (1: all of the time, 2: most of the time, 3: more than half of the time, 4: less than half of the time, 5: some of the time, and 6: at no time) in case of the following question:

- *"Please indicate for each of the five statements which is closest to how you have been feeling over the last two weeks."*
  - *My daily life has been filled with things that interest me. (2007, 2011, 2016)*

Only the 2012 wave of the European Social Survey (ESS) included a block of questions around self-esteem, self-actualisation and the perception of living a meaningful life. Although numerous questions are available, it is difficult to work with these variables because the measurement scales are somewhat confusing. The relevant variables in the 2012 ESS database are the followings:

- *At times feel as if I am a failure*
- *Feel accomplishment from what I do*
- *Feel what I do in life is valuable and worthwhile*
- *Free to decide how to live my life*
- *Little chance to show how capable I am*
- *Always optimistic about my future*

- *Hard to be hopeful about the future of the world*
  (1: strongly agree, 2: agree, 3: neither agree, nor disagree, 4: disagree, 5: strongly disagree)

- *Feel appreciated by people you are close to*
- *Feel people treat you with respect*
- *Make time to do things you really want to do*
  (0: not at all agree, 10: completely agree)

- *Absorbed in what you are doing*
- *Take notice of and appreciate your surroundings*
- *Interested in what you are doing*
- *Enthusiastic about what you are doing*
  (0: none of the time, 10: all of the time)

There are no eudaimonic variables in the datasets of the Quality of Life in European Cities Survey (QLECS) and the Statistics Austria's Migration Survey. Also, the eudaimonic approach is not explicitly present in the *Vienna Quality of Life Survey (VQLS)*. Nevertheless, there are some questions about people's habits, personality traits and behavioural patterns. Viennese people were asked to tell, whether the following statements about different areas of their life are completely true, somewhat true, less true or not true at all.

- *"I value modesty in my life."*
- *"I attach great importance to being thoroughly informed in order to better "understand backgrounds and contexts."*
- *"I take a wait-and-see approach to new things."*
- *"I have ambitious plans and goals and want to get ahead in life."*
- *"Good food and drink play a big role in my life."*
- *"I like to buy expensive things."*
- *"I feel uncomfortable when something changes in my life."*
- *"What I want is fun, variety and entertainment."*
- *"I enjoy talking about art and culture."*
- *"When making new purchases, I pay particular attention to high-quality materials or exclusive design."*
- *"I am disciplined and conscientious."*
- *"It is important for me to try out as many different things as possible in life."*
- *"I often have the urge to experience something great and new."*
- *"It is important to me to save at least a small amount every month."*

3.2.3.2 Variables on social cohesion

The EQLS provides the widest range of social cohesion variables. Therefore, in this subchapter, we will summarise the availability of variables according to the EQLS classification system.

Perceived social exclusion

In the EQLS survey the Q36 (earlier Q29) question block covered this topic. The main question was the following:

"To what extent do you agree or disagree with the following statements?"

- *"I feel left out of society."*
- *"Life has become so complicated today that I almost can't find my way."*
- *"I feel that the value of what I do is not recognised by others."*
- *"Some people look down on me because of my job situation or income."*
- *"I feel close to people in the area where I live."*

People could answer on a scale of five from strongly agree (1) to strongly disagree (5). Of course, refused and "don't know" answers were also coded.

In the VQLS, the QLECS, the MgSur and the Hungarian microcensus no similar questions were asked. In the EU-SILC only the first one was asked and only in 2018 and 2022 (PW240, "I feel excluded from society"). The other questions were asked only in the 2013 Austrian SILC.[16] (The EU member states have the right to include additional questions that are considered important in a given country. Thus, while the 'mandatory' variables are standardized in the cross-European EU-SILC database, there are country-specific variables too).

The approach of the ESS is slightly different. The range of questions on perceived social exclusion is narrower and wider at the same time. On the one hand, this survey focuses on perceived discrimination only but it digs deep into this issue with 11 questions (discrimination of respondent's group by: age, gender, disability, sexuality, colour or race, ethnic group, language, nationality, religion and other grounds). Additionally, there is a

[16] M005050: Ich fühle mich von der Gesellschaft ausgeschlossen.
M005060: Das Leben ist heutzutage so kompliziert geworden, dass ich mich kaum zurechtfinde.
M005070: Ich habe das Gefühl, dass die Leute in meiner Umgebung den Wert meiner Tätigkeiten nicht anerkennen.
M005080: Manche Menschen sehen wegen meiner Arbeitssituation oder meines Einkommens auf mich herab.
M005090: Ich fühle mich den Personen aus meiner Wohngegend verbunden.

variable whether the respondent is a member of a group discriminated against in a given country.

Perceived tensions

This block of questions is only available in the EQLS and contains the following questions (Q34, formerly Q25):

- *"In all countries there sometimes exists tension between social groups. In your opinion, how much tension is there between each of the following groups in this country?"*
    - *"Poor and rich people"*
    - *"Management and workers"*
    - *"Men and women"*
    - *"Old people and young people"*
    - *"Different racial and ethnic groups"*
    - *"Different religious groups"*
    - *"People with different sexual orientations"*

There were three options to answer: a lot of tension (1), some tension (2), no tension (3).

It is worth mentioning that the EQLS stands out as the only major European survey that systematically measures perceived social tensions, despite the clear relevance of this topic to understanding social cohesion. One reason may be that other surveys tend to focus more on objective indicators – such as income, employment, and living conditions (EU-SILC), or attitudes and values at the individual level (ESS) – rather than on the subjective perceptions of intergroup relations. The lack of similar questions in other European surveys highlights a potential gap in mainstream data collection, and underlines the unique contribution of EQLS in monitoring social cohesion in European societies.

Trust

Monitoring trust is undertaken by most international surveys. This is not surprising given that trust is widely considered a key component of social cohesion. In fact, some researchers argue that it is sufficient to focus on trust as a dependent variable. (For more on this topic, see Chapter X.) Two levels of trust can be distinguished in the surveys: generalised trust (trust in people) and institutional trust.

Regarding *generalised trust* the EQLS formulated the following question (Q43, earlier Q25):

- *"Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?"* (1: you can't be too careful, 10: most people can be trusted)

Except the VQLS all surveys included the same question on generalised trust (see e.g. PW190 in EU-SILC by 2013, 2018 and 2022). However, the European Social Survey measured this topic by three variables as well which are the followings:

- *"Most of the time people helpful or mostly looking out for themselves."* (pplhlp. 0: People mostly look out for themselves, 10: People mostly try to be helpful)
- *"Most people can be trusted or you can't be too careful."* (ppltrst. 0: You can't be too careful, 10: Most people can be trusted)
- *"Most people try to take advantage of you, or try to be fair."* (pplfair. 0: Most people try to take advantage of me, 10: Most people try to be fair).

Institutional trust covered the following questions in the EQLS (Q35, earlier Q28):

- *"Please tell me how much you personally trust each of the following institutions."* (1: you can't be too careful, 10: most people can be trusted)
    - *"The legal system."*
    - *"The news media."*
    - *"The police."*
    - *"The government."*
    - *"The local (municipal) authorities."*
    - *"Banks."*
    - *"Humanitarian or charitable organisations."*

In EU-SILC only the trust in the legal system, trust in police (PW140 and PW150 by 2013) and the trust in the political system (by 2013 and 2022) were measured. In the 2013 Austrian SILC round we have additional information about the respondents' trust in media (M010040) and their trust in the people living in local area (M010050). All of these questions were included in the 2016 Hungarian microcensus as well, with the addition of the trust in military.

Regarding the ESS, the following eight variables were dedicated to measure institutional trust.

- *"Trust in country's parliament."*
- *"Trust in political parties (except round 1)."*
- *"Trust in politicians."*
- *"Trust in the European Parliament."*
- *"Trust in the legal system."*
- *"Trust in the police."*
- *"Trust in the United Nations."*

- *"Trust in scientists."* (Only in round Nr. 10).

In QLECS there are only two questions about generalised trust, focusing on the local level (in the city, in the neighbourhood) but no questions targeted institutional trust. Interestingly, the Migration Survey in Vienna has chosen another strategy: they measure institutional trust (in the parliament, the legal system, the police, the authorities and bureaucracy in Austria), while do not measure generalised trust.

Civic engagement

This dimension of social cohesion usually refers to people's participation in voluntary work as well as their activities in public events. Regarding the EQLS these domains were covered by the following question:

- *"Please look at the list of organisations and tell us, how often did you do unpaid voluntary work through the following organisations in the last 12 months?* (Q29, earlier Q22):
    - "Community and social services."
    - "Educational, cultural, sports or professional associations."
    - "Social movements or charities."
    - "Political parties or trade unions."
    - "Other voluntary associations."
- *Over the last 12 months, have you done any of the following activities?* (Q30, earlier Q23):
    - *"Attended a meeting of a trade union, a political party or a political action group.*
    - *"Attended a protest or demonstration."*
    - *"Signed a petition, including an email or online petition."*
    - *"Contacted a politician or public official."*
    - *"Commented on a political or social issue online."* (by 2016 only).
    - *"Boycotted certain products."* (by 2016 only).

The EU-SILC survey also measured civil engagement; however, the activities were classified differently (Table 8).

Table 8. Questions on civic engagement in EU-SILC by survey rounds.

Code	Variable	2006	2015	2022
PS110	Participation in activities of political parties or trade unions	Y		Y
PS120	Participation in activities of professional associations	Y		
PS130	Participation in activities of churches or other religious organisations	Y		
PS140	Participation in activities of recreational groups or organisations	Y		

PS150	Participation in activities of charitable organisations	Y		
PS160	Participation in activities of other groups or organisations	Y		
PS100	Participation in informal voluntary activities	Y	Y	
PS101	Participation in formal volunatry work		Y	
PS102	Active citizenship (participation in activities of a political party, professional association, demonstration or peaceful protest, such as signing a petition)		Y	Y

Own table.

Sense of community

According to the EQLS framework the fifth aspect of social cohesion relates to citizens' attachments and contacts with the "relevant others" (Eurofound: 39). The respondents feeling attached to the people in their local community as well as their contacts with friends and neighbours are measured. Since social isolation as a growing problem in Europe (European Commission 2017a), it is important to gain more insights into the prevalence of this phenomenon, and its relationship with well-being.

The operationalisation of attachment uses the following item (Q36, earlier Q29):

- *"To what extent do you agree or disagree with the following statements?"*
    - *"I feel close to people in the area where I live."* (1: strongly agree, 5: strongly disagree)

The question on attachment is completely absent from all other surveys, except the 2013 Austrian SILC round (M005090: „Ich fühle mich den Personen aus meiner Wohngegend verbunden".)

The operationalisation of the contacts with "relevant others" uses two questions about the frequency of direct (face-to-face) and indirect (telephone, the internet or post) contact with friends and neighbours (Q38, earlier Q33).

- *"On average, how often do you have direct face-to-face contact with the following people living outside your household?"* (1: Every day or almost every day, 2: At least once a week, 3: One to three times a month, 4: Less often, 5: Never)
    - *"Any family members or relatives"*
    - *"Any of your friends or neighbours"*
- *"On average, how often do you have contact via telephone, the internet or post with the following people living outside your household?"* (1: Every day or almost every day, 2: At least once a week, 3: One to three times a month, 4: Less often, 5: Never)
    - *"Any family members or relatives"*

- *"Any of your friends or neighbours"*

The frequency of getting together with relatives and friends (PS050, PS060) as well as the frequency of contacts with relatives and friends (PS070, PS080) are variables available in the 2006, 2015 and 2022 EU-SILC database as well.

3.3 Methodology

During database construction, data analysis, and data visualization, we used a comprehensive and diverse methodological toolkit throughout the following phases.

Phase 1: Data Collection

The first step involved gathering the required datasets. *EU-SILC* data were obtained from two sources: complete micro-databases for 2013, 2018, and 2022 provided by Eurostat, and additional data specific to Austria and Hungary supplied by their respective national statistical offices (Statistics Austria and the Hungarian Central Statistical Office). This dual approach was essential, as certain data available in aggregated form through Eurostat were more detailed in the national datasets. For example, while Eurostat provides data for native and foreign-born people only, Statistics Austria offers a more granular classification by six groups of countries, enabling a deeper analysis.

The necessary *microcensus* data by 2016 were accessed in the research facilities of the Hungarian Central Statistical Office following the required data request procedures. The microdata of the *European Quality of Life Survey*, the *European Social Survey*, and the *Quality of Life in European Cities Survey* are available free of charge on the respective websites (see Chapter 3.1 for more details). The *Vienna Quality of Life Survey* is coordinated by the City of Vienna. As a cooperation partner, the University of Vienna has access to the microdata set regarding the first four rounds of the survey. The *Migration Survey* of the Statistics Austria is available for researchers

Phase 2: Data Integration

The next step involved linking the central EU-SILC database and the national SILC datasets using the SPSS software and the R programming environment. Harmonizing variable names and labels across these datasets was critical. This issue was especially important regarding the data from the Statistics Austria as the variable names were not always consistent with the central EU-SILC database. In addition, Austria asked several questions that were not asked elsewhere in Europe (e.g. satisfaction with housing conditions by 2022), so these variables had to be added separately and manually to the integrated WELLCOH database.

Furthermore, it's important to underline that the final subsample of the 2016 Hungarian microcesus was itself made up of three different sources: the general dataset (personal and household sheets), the subjective well-being module as well as the international migration module. Linking them together based on Id key was also essential right at the get go; it was conducted in the research room of the Hungarian Central Statistical Office.

To sum up, our analysis is founded on an integrated dataset derived from EU-SILC that target the entire populations of Austria, Hungary, Vienna and Budapest in 2013, 2018, and 2022. Consequently, each segment of the integrated dataset can be distinguished by the country of the survey, the two cities, the survey year, and the survey name.

Each segment of the integrated dataset considers the household member as the unit of analysis. To refine the identification of records, we can break down the data using the respondents' household ID and the respondent's anonymised personal identification number. While demographic data were collected for every member of the chosen household, the comprehensive questionnaire, which includes information about a person's socio-economic background and subjective well-being, is only provided for individuals aged 16 and older.

Due to the fundamental differences between the sampling methods, the survey structures, the variables, the applied scales and so forth, the data of the *other surveys* are not directly comparable. (About the obstacles and limitations see Chapter 3.2 for more details). Therefore, the integration of their datasets is not possible.

The use of the EQLS database was largely unproblematic, as the microdata from the 2003–2016 survey waves are available in an integrated and harmonised format. In the case of the *Quality of Life in European Cities* Survey, only selected variables from the 2023 dataset were used.

Phase 3: Spatial classification

The main objective of WELLCOH is to comparatively analyse social cohesion and subjective well-being in Budapest and Vienna. For this reason, the definition of the two capitals as territorial units is essential for the project.

As summarised in Table 2, some international surveys do not provide information at sub-national level at all, and foreign-born residents are not always defined in the sample. The Vienna Quality of Life survey, by definition, only included data from respondents in Vienna. In the case of the Quality of Life in European Cities Survey, filtering for the two capital cities posed no difficulties (although Graz and Miskolc were also included in the original dataset).

Therefore, while the spatial classification phase was unnecessary for most data sources, it was a key step for EU-SILC and the Hungarian microcensus. However, the fact that Eurostat only makes micro-data available at NUTS1 level posed a problem: Eastern Austria (AT1) includes Vienna and the federal provinces of Lower Austria and Burgenland, while Central Hungary (HU1) includes Budapest and Pest County as well.

In the case of Vienna, the solution was the Statistics Austria's SILC database, which includes a NUTS2 level breakdown as well. After harmonisation of the data, the spatial definition of Vienna was now possible.

In the case of Budapest, however, it was necessary to combine two variables: within the NUTS1 region, the degree of urbanisation variable had to be filtered. Only Budapest and its immediate neighbour Érd belong to the "densely populated" municipalities in the HU1 region. This means that when we refer to "Budapest" in this Research Report when analysing SILC data for 2013, 2018 and 2022, we are in fact referring to the joint cluster of Budapest and Érd. It is important to stress, however, that the population of Érd (ca. 70 thousand) is only 4% of the combined population of the two cities, so the SILC database includes only a negligible number of respondents from Érd (ca. 60-70). This does not bias the sample and does not invalidate the conclusions. Moreover, Érd is a settlement directly adjacent to Budapest, which in practice are contiguous, and the administrative boundary between them is more of an administrative line.

Phase 4: Variable Selection

In the next phase we identified the variables needed for secondary analysis. The definition of variables for subjective well-being and social cohesion was generally straightforward based on the theoretical background and the literature. (About the plethora of variables see Chapter 3.2.3).

To explore the general patterns of subjective well-being and social cohesion in Vienna and Budapest, additional background variables were also incorporated: gender, age, some migration-related information, including country of birth and duration of residence in the host country and so forth. Although respondents' exact places of residence are unavailable in the anonymised survey databases, information on their municipality's degree of urbanisation (as defined by Eurostat) and the respective NUTS1 region was available.

In selecting explanatory variables, we followed the logic that each subjective domain satisfaction variable should have at least one objective measure. Therefore, socio-demographic and socio-economic variables were grouped around the most important well-being domains (Chapter 5). This approach characterises, for example, the OECD conceptual framework too. However, as WELLCOH focuses on micro-level analysis, we

analysed individual-level indicators derived directly from microdata over aggregated national-level metrics, such as life expectancy at birth, long-term unemployment rate or income inequalities (Gini index), often used in large-scale well-being frameworks like the OECD How's Life report.

For the well-being variables, our general policy was to include all cognitive, affective, and eudaimonic SWB indicators, prioritising sources with the largest possible sample sizes – beginning with EU-SILC where available. In contrast, questions related to satisfaction with the external environment were more prominently featured in other surveys. In this case, comparability between Budapest and Vienna was a key consideration, which is why we selected the Quality of Life in European Cities Survey. This topic is analysed in Chapter 6.

For social cohesion, it was clear that the European Quality of Life Survey offers the most comprehensive and logically structured set of indicators. Where there was overlap between variables, we also visualised the EU-SILC data in Chapter 7, as its sample size remains a significant strength. Nonetheless, the internal structure of the EQLS largely guided the selection and organisation of indicators in this area.

Phase 5: Dataset Creation

The final integrated dataset was constructed using standardised labels and category names. The resulting dataset includes a total of 81,965 observations, i.e. survey respondents from Austria, Vienna, Hungary, and Budapest (plus the microcensus sample) along with ca. 120 variables. These comprise responses to selected questions, identifiers, weights, and other essential background variables.

The original integrated EQLS dataset contained 635 variables; however, for the purposes of this Research Report, we selected only 53 variables relevant to subjective well-being and social cohesion. The combined sample size across the two countries is 3,631 respondents. From the Quality of Life in European Cities survey, we included only a small number of satisfaction-related variables, reflecting the views of 2,110 respondents in total.

Phase 6: Weighting and Population Extrapolation

To address sampling bias and ensure national-level representativeness, all calculations were consistently adjusted using the personal sample weights provided by the source

surveys.[17] The results presented in this report are based on weighted data, allowing extrapolation to the entire populations of Hungary and Austria. Accordingly, our findings are representative of individuals aged 16 and over in the respective country and survey year. However, this representativeness does not extend to regional breakdowns – such as Vienna and Budapest – which is a common limitation of international surveys.

Phase 7: Data Analysis and Visualisation

The analysis primarily relied on descriptive statistics. The charts presented in Chapters 5 to 7 follow a standardised format. The available data were categorised according to respondents' place of residence: Vienna, the rest of Austria (excluding Vienna), Budapest, and the rest of Hungary (excluding Budapest). Temporal changes are also important. Therefore, where possible, multiple cross-sectional time points were included, based on earlier rounds of the surveys.

Where variables were coded as nominal or ordinal, the percentage distribution of each category is displayed. The "Don't know" and "Prefer not to answer" categories were systematically excluded, as their inclusion would have made cross-country and cross-city comparisons more difficult. For variables coded on ratio scales (including 0–10 scales), results are visualised using boxplots. These offer the advantage of showing the distribution of numerical data and skewness by illustrating quartiles, means, and medians. Due to space constraints, the textual discussion mainly focuses on average values; however, the charts also provide additional valuable insights.

It is worth noting that for all variables shown here, charts could also be generated based on respondents' country of birth. The most detailed breakdown for Austria includes: native-born, old EU member states, new EU member states, Türkiye, post-Yugoslav countries, and other countries. For Hungary, the categories are: native-born, EU-born, and non-EU-born. These charts, however, were not included in this Research Report for several reasons:

- The primary aim here was to provide context for the forthcoming analysis based on primary data. In other words, to highlight the fundamental similarities and differences between the two cities in terms of well-being and social cohesion. This provides the foundation on which WELLCOH Work Packages 3 and 4 will build.

[17] *PWEIGHT*: EU-SILC and microcensus; *WCalib_crossnational_EU28*: EQLS

- Displaying all variables using country of birth as the grouping variable on the x-axis would require four charts per variable – resulting in an analysis four times as long as the current one. Given space limitations, this was not feasible in the present report.
- While this information is undoubtedly of key importance to the project, we intend to include it in the WP3 Research Report. By then, we will integrate results from our own surveys and apply more advanced methodological techniques (e.g., cluster analysis, causal modelling) to examine differences between native-born and foreign-born populations in greater depth.

4. Population changes and migration dynamics

4.1 Population changes and migration dynamics in Austria and Vienna

4.1.1 Post-World War II period

While Austria was primarily a country of emigration for decades, in the post-World War II period, it transitioned into an immigration destination. Until the 1990s, the immigration was predominantly driven by the so-called *"**guest worker** programs"*, involving workers from Türkiye and Yugoslavia. Facing labour shortages, the Austrian government recruited foreign workers through bilateral agreements with these countries after 1963 and 1966 respectively. The majority of the Turkish and Yugoslavian people arrived to the cities, especially Vienna, and were employed in the industrial and construction sectors. At the height of this recruitment phase, annual arrivals reached 35,000 in Austria. Despite a consistently negative birth balance in the capital during the late 1960s and early 1970s, the population still grew each year by at least 6,000, reaching a notable increase of 15,000 in 1972. However, integration policies were not a priority for Austrian politics at the time, as these workers were largely seen as temporary, expected to return to their home countries depending on Austria's economic needs.

The 1973 oil crisis marked a ***turning point***. The economic downturn coincided with profound societal changes influenced by political reforms, such as the legalisation of abortion, access to contraceptives, a growing percentage of working women, and their rapid rise in education levels. During the 1970s, immigration slowed considerably, leading to stagnation of the population at around 7.5 million in the country. In Vienna the yearly population loss always exceeded 10,000 during the second half of the 1970s, and the negative figures started to improve from the early 1980s only. From the mid-1980s onward, migration began to increase gradually, driven primarily by family reunifications. At the same time, Austria experienced a notable rise in refugees from socialist countries in Eastern and Southeastern Europe.

4.1.2 Since the 1990s

With the opening of the Eastern borders a new situation has arisen. On the one hand, recruitment of guest workers was restarted in the ***early 1990s*** because of labour shortages of the growing Austrian economy. On the other hand, the number of asylum seekers increased considerably; the major flows of refugees came from Croatia and Bosnia and Herzegovina as a consequence of war and ethnic cleansing. In the second half of the 1990s the number of immigrants declined again due to the more restrictive legal requirements regarding employment and residence of foreign nationals. (With the

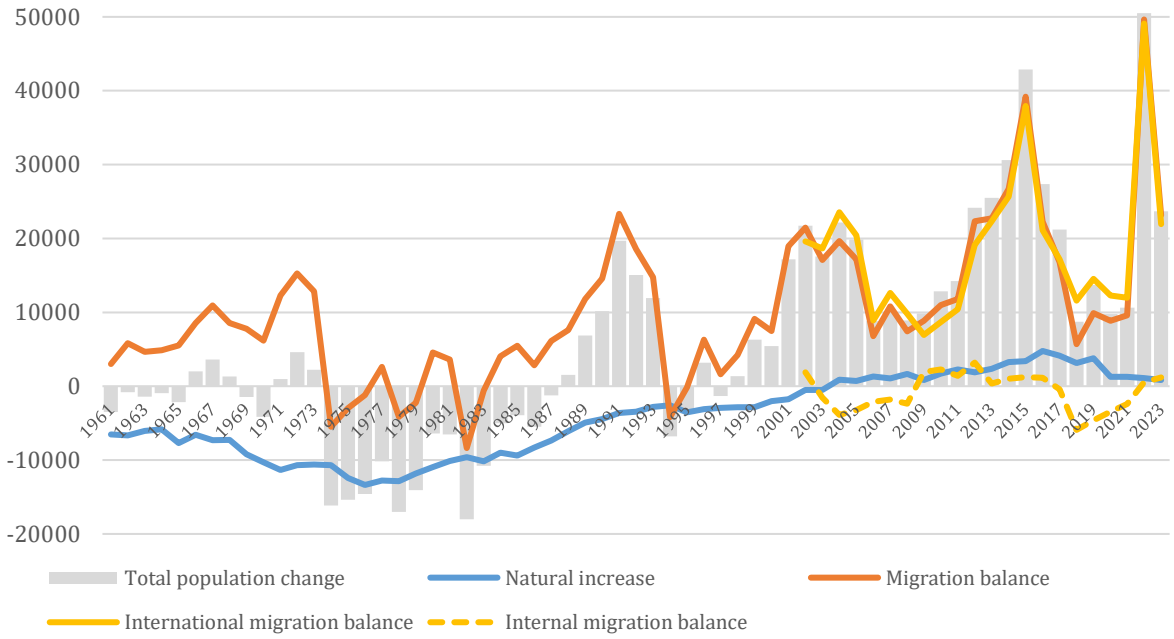
adoption of the Residence Act 1993 Austria introduced quotas for new immigration fixing the highest percentage of foreign workers to be employed at 10% of the total employees). The rights of labour migrants residing in Austria were improved after Austria's EU accession in 1995, and later by the EU-wide harmonization of migration and asylum policies through the Amsterdam Treaty in 1999, the Lisboa Treaty in 2009, the strategic guidelines like the Tampere (1999), Hague (2004), and Stockholm Programmes (2009) as well as the "European Agenda on Migration" published in 2015.

Migration flows began to rise again after the millennium, particularly after the European Union's ***Eastern expansion*** in 2004. However, Austria implemented transitional restrictions, denying citizens from the new EU member states full employment rights and barring them from protected sectors until 2011. For Romanian and Bulgarian nationals, these restrictions remained in place until 2013. Once these measures were lifted, immigration from the new EU states grew significantly.

A new wave of migration occurred in 2015 with the so-called European ***"refugee crisis"***. Between 2015 and 2017 Austria received approximately 156,000 asylum applications, with over 77,000 individuals – mainly from Syria and Afghanistan – granted asylum. The majority of these people arrived to Vienna, where the migration gain reached altogether 78,000 throughout these three years. The arrival of refugees from the Middle East created a new type of challenge for Austria, as these regions had previously played only a minor role in international migration flows to the country. The ***war in Ukraine*** in 2022 triggered the most recent large-scale migration wave, with a significant proportion of immigrants fleeing Ukraine. Over the past two years, Vienna's migration balance has surged once again, reaching nearly 73,000. By early 2024, the city's population had grown to 2,005,760 residents.

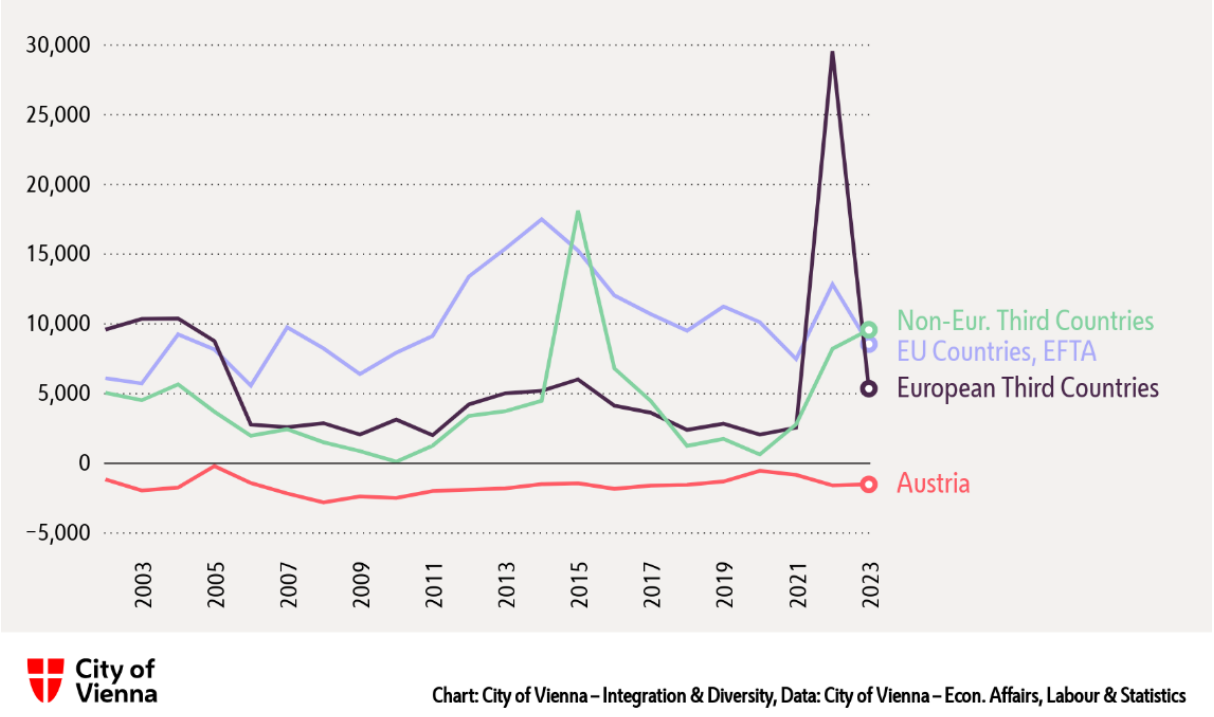
In summary, since natural increase remained negative until the turn of the millennium and has stayed relatively low in the years since, Vienna's population dynamics in recent decades have been fundamentally shaped by migration trends. Since the 1991 census, the city population has grown by about 503,000, and 97% of this increase attributed to migration gains. It is important to note that the migration balance is not solely the result of the difference between international arrivals and departures but also includes intra-Austrian migration. However, as illustrated in Figure 7, the volume of internal migration (from Vienna to other federal provinces or vice versa) is significantly lower than that of international migration.

Figure 7. Natural increase, migration balance and total population change in Vienna, 1961-2023.



Source of data: Statistics Austria. Own figure.

Figure 8. International migration flows in Vienna by place of origin, 2002-2023.



Source: City of Vienna – Integration and Diversity,
Data: City of Vienna – Econ. Affairs, Labour and Statistics. Link

4.1.3 Foreign-born population stock in Austria and Vienna

Unlike traditional census methods, ***Austria*** relies on a continuous population registration, which allows for "real-time" tracking of demographic changes.[18] According to the latest data, approximately 2.08 million foreign-born people lived in Austria on 1 January 2025, amounting 22.7% of the population.[19] This is an almost one million increase since 2002.

Today the highest proportion of foreigners in the Austrian population is people born in Germany, followed by Bosnia and Herzegovina, Türkiye, Romania, and Serbia. Figure 9. shows the annual data on the population stock by the Top 10 countries of birth since 2002. The size of the German- and Romanian-born population stock has been growing particularly rapidly. As a consequence of the violent conflicts, there is a remarkably fast increase in the number of Syrians since 2015 and Ukrainians since 2022. Before the wars approximately 5,000 Syrians and 13,000 Ukrainians lived in Austria; on 1 January 2024 their number already exceeded 58,000 and 81,000 respectively.[20]

At the beginning of 2024, 40.2% of ***Vienna****'s* residents were born abroad and 45.4% were of "foreign origin", which means that they either held a foreign citizenship or were Austrian nationals born abroad. The list of the main countries of origin have slightly changed over the past years: at the beginning of 2024 approximately 88,000 people were born in Serbia, 66,000 in Türkiye, and 62,000 in Germany. The number of Syrians, Romanians and Bosnians were almost exactly equal at around 47,000 (Figure 10).

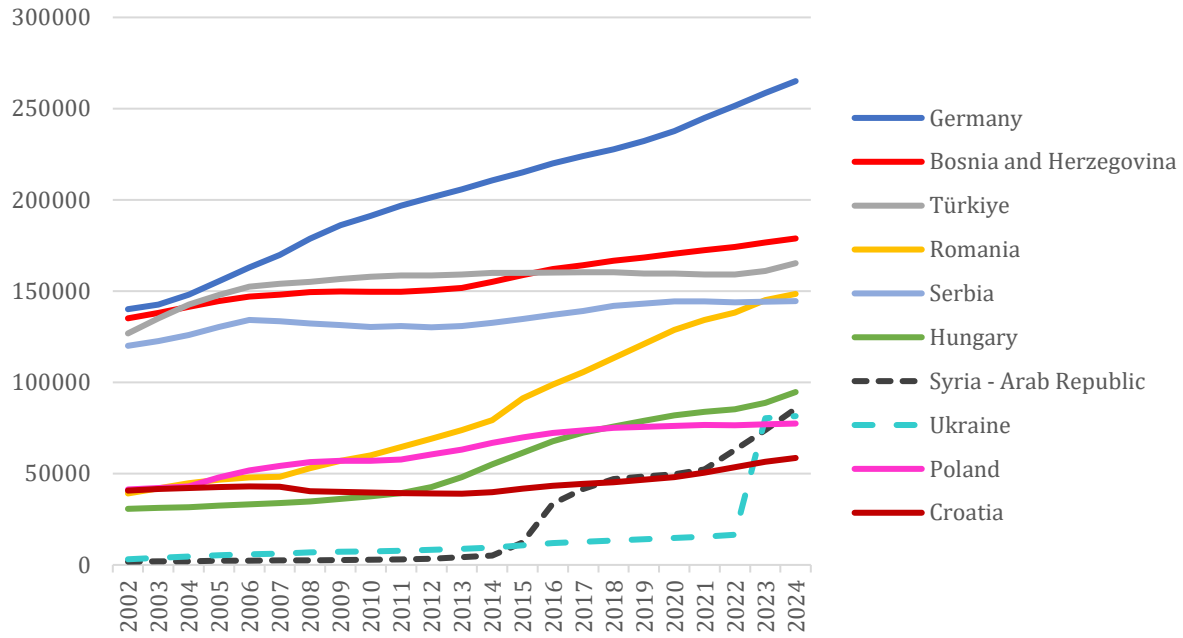
In one municipal districts, Rudolfsheim-Fünfhaus was more than half of the population foreign born. In the majority of districts (e.g. Brigittenau, Favoriten, Margareten or Meidling) their summarised proportion was 40-50%. The two South-western districts, Hietzing and Liesing, are below the Viennese average in foreign-born residents, with a share of ca. 30% (Table 9, Figure 11).

[18] The 2001 census was the last traditional population census in which enumerators and questionnaires were used (Reeger, 2009). Following a decision by the Council of Ministers in June 2000, and the subsequent approval of the relevant law by Parliament in 2006, Austria fully transitioned to register-based data collection from 2011 onwards. In October 2006, a trial census involving twenty thousand people was conducted, which revealed numerous errors and facilitated a smooth transition (Gisser, 2020).

[19] Source: https://www.statistik.at/en/statistics/population-and-society/population/population-stock/population-by-citizenship/country-of-birth

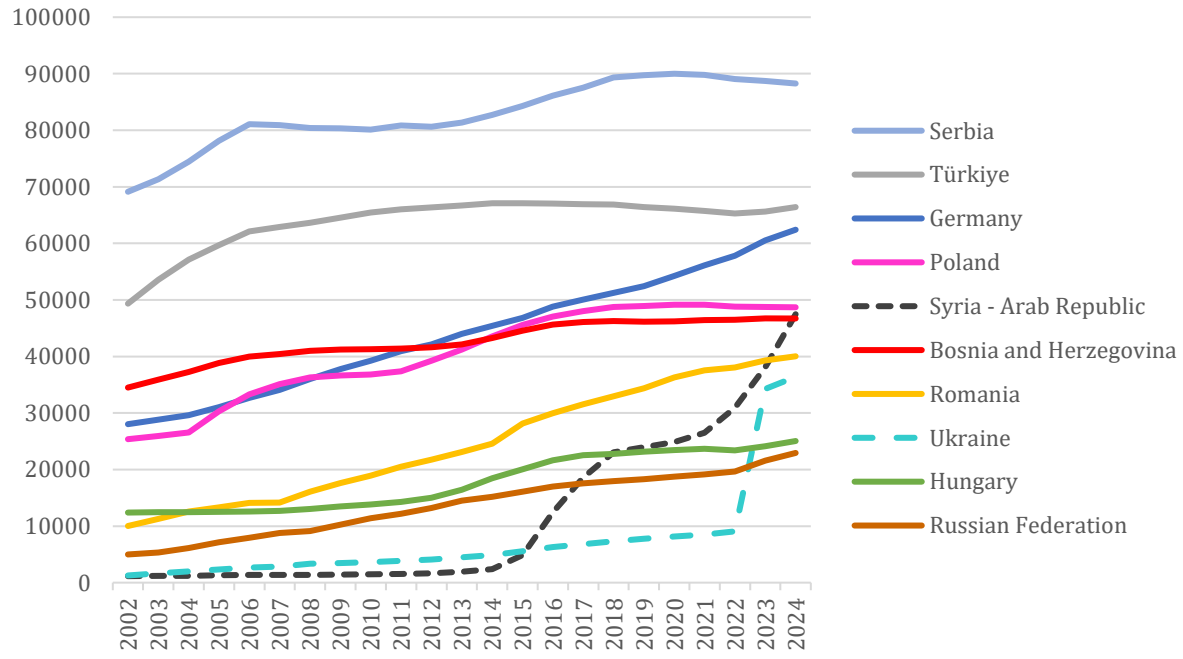
[20] Source: https://www.integrationsfonds.at/fileadmin/user_upload/OEIF_Factsheet_Ukraine_2025.pdf

Figure 9. Population number by the Top 10 countries of birth in Austria, 2002-2024



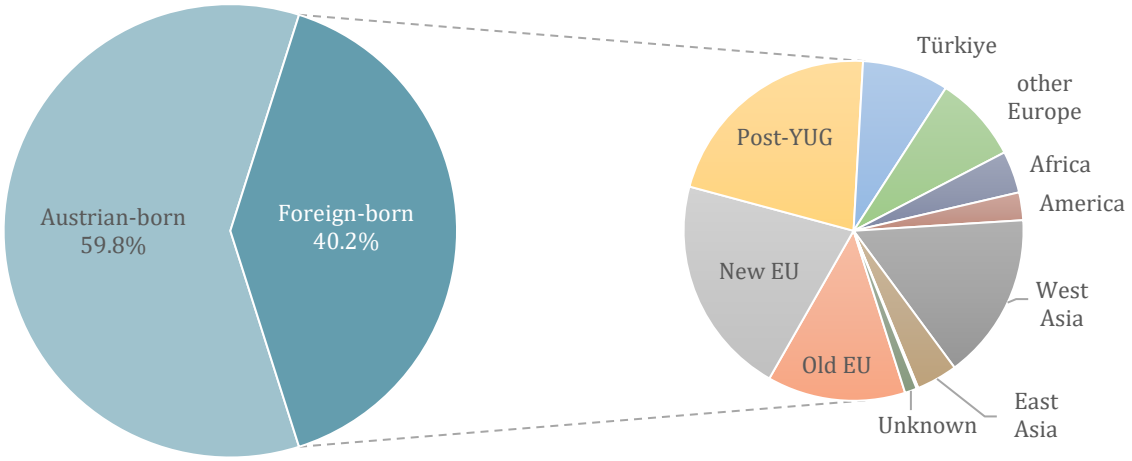
Source: Statistics Austria. *Own figure.*

Figure 10. Population number by the Top 10 countries of birth in Vienna, 2002-2024



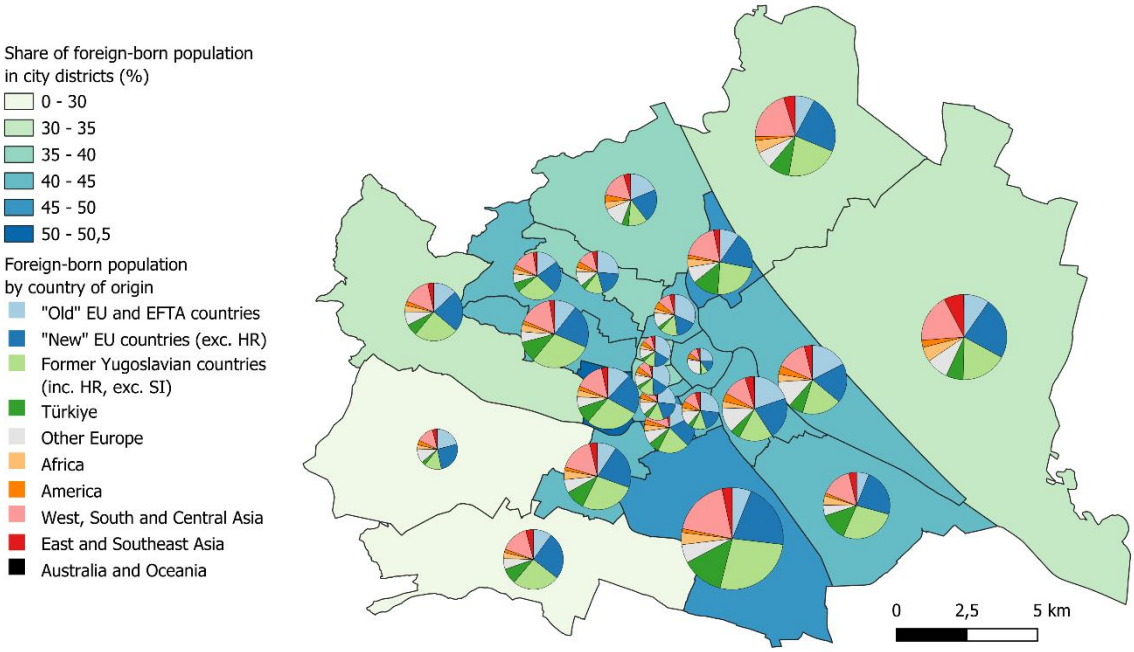
Source: Statistics Austria. Own figure.

Figure 11. Population by country of birth in Vienna by 2023 (%)



Source of data: Statistics Austria. Own figure.

Figure 12. Percentage of the foreign-born population stock (colours of the districts; 100% = all residents) and the share of foreign-born people by country of birth (pie charts; 100% = foreign-born residents) in Vienna by city districts in 2023. The size of the pie chart corresponds with the size of the foreign-born population stock.



Source of data: Statistics Austria. Own figure.

Table 9. Percentage of the foreign-born population stock in Vienna by city districts by 2023 (100% = all residents in the district)

District name (Population nr.)	AUT	Old EU	New EU	Post-YUG	TUR	Oth. Eur.	Afri-ca	Ame-rica	West Asia	East Asia	Ocea-nia
Vienna (2,005,760)	59.8	5.3	8.4	8.7	3.3	3.3	1.6	1.1	6,4	1,6	0.1
01. Innere Stadt (16,538)	59.3	10.2	5.9	3.3	0.9	10.9	0.7	2.7	4,2	1,5	0.2
02. Leopoldstadt (110,100)	56.5	7.5	8.0	8.0	3.0	5.4	1.6	1.7	6,3	1,6	0.1
03. Landstraße (98,398)	57.0	8.4	9.0	7.2	2.1	5.4	1.4	1.8	5,2	1,9	0.1
04. Wieden (33,155)	57.3	11.3	7.8	5.2	1.7	5.6	1.4	2.5	5,0	1,8	0.2
05. Margareten (54,400)	51.9	8.4	9.4	9.5	3.2	4.0	2.0	1.5	7,5	1,8	0.1
06. Mariahilf (31,386)	58.5	11.0	7.4	6.0	1.9	4.7	1.4	2.0	5,0	1,7	0.2
07. Neubau (31,513)	61.0	13.3	5.8	5.4	1.5	4.1	1.0	2.2	4,0	1,4	0.2
08. Josefstadt (24,499)	61.1	13.0	6.5	4.9	1.3	4.1	1.6	1.9	3,5	1,5	0.2
09. Alsergrund (41,631)	58.6	13.0	6.6	5.7	1.2	4.9	1.4	2.4	4,2	1,5	0.1
10. Favoriten (220,324)	52.3	2.8	9.7	12.7	6.2	2.7	1.8	0.6	8,7	1,5	0.0
11. Simmering (110,559)	59.4	2.4	9.3	11.0	5.4	2.1	1.8	0.5	6,1	1,5	0.0
12. Meidling (101,714)	55.3	4.1	9.4	11.9	4.2	2.8	1.9	0.8	7,4	1,6	0.0
13. Hietzing (55,505)	70.4	6.2	7.6	4.1	0.9	3.4	1.0	1.1	4,0	1,1	0.1
14. Penzing (98,161)	65.3	4.5	7.9	8.6	2.2	2.6	1.2	0.8	5,4	1,1	0.1
15. Rudolfsheim-Fünfhaus (76,381)	49.5	5.9	10.5	14.0	4.3	2.9	1.8	1.0	7,5	1,6	0.1
16. Ottakring (102,770)	55.2	4.7	9.2	13.0	4.4	2.3	1.6	0.8	7,1	1,1	0.1
17. Hernals (56,671)	58.9	6.1	8.9	10.9	2.6	2.5	1.5	1.0	6,0	1,0	0.1
18. Währing (51,395)	64.7	9.2	6.8	5.1	1.3	4.1	1.1	1.7	4,4	1,2	0.2
19. Döbling (75,400)	63.8	6.8	7.5	4.4	1.5	4.8	1.7	1.6	6,2	1,5	0.1
20. Brigittenau (86,930)	50.8	4.7	8.9	11.2	6.3	3.9	2.1	0.9	8,8	1,5	0.0
21. Floridsdorf (186,233)	65.1	2.7	8.1	7.4	3.0	2.4	1.8	0.6	7,1	1,6	0.0
22. Donaustadt (220,794)	66.7	3.2	7.7	5.8	2.2	2.8	1.8	0.9	6,1	2,5	0.1
23. Liesing (121,303)	70.1	3.0	7.6	7.6	2.5	1.7	1.0	0.5	4,6	1,2	0.0

Source of data: Statistics Austria. Own table.

4.2 Population changes and migration dynamics in Hungary and Budapest

4.2.1 Socialist era

Following World War II, the ***population*** of Budapest underwent significant changes, influenced primarily by natural population growth and domestic migration. In the 1950s, the city's population grew rapidly due to industrialization and urbanization. The creation of "Greater Budapest" in 1950, which incorporated seven surrounding towns and 16 smaller municipalities, led to a significant increase in population, surpassing 1.6 million people. During the 1960s and 1970s, Budapest's population continued to grow, reaching its peak in the early 1980s at over 2.06 million people. Natural population growth was still positive, meaning that the number of births exceeded deaths.

Additionally, significant internal migration occurred as rural residents moved to the capital in search of better job opportunities. This significant influx was associated with the post-World War II baby boom and forced collectivization policies. This migration was driven by rapid industrialization, which created a high demand for labour in the capital. Large-scale state housing projects, such as the construction of panel housing estates, further supported population growth. Internal migration to Budapest during the socialist era peaked in the 1960s, with nearly 250,000 people moving to the city.

Detailed statistics on *international migration* in the Post-World War II ***Hungary*** are scarce, especially on subnational level. Nevertheless, international migration flows remained relatively moderate during the socialist era. Emigration and immigration were allowed mainly for family reunifications, decided on a case-by-case basis (Gödri et al. 2013). Exceptions included politically favoured groups, such as Greek refugees in 1949 and Chilean refugees in 1973, who received settlement permits. Labour migration within the Eastern Bloc was also present; Hungarian engineers worked in the Soviet Union and the Middle East, while Hungary received Cuban weavers, Polish miners, and Russian industrial workers (Puskás 1991). Legal immigration during this period is estimated at around 52,000 people, whereas emigration reached approximately 430,000 in Hungary (Tóth 1997).

We know little about the international migration figures on ***Budapest*** but the majority of the nearly 200,000 Hungarians who emigrated following the 1956 revolution (Hablicsek and Illés 2007) were residents of the Hungarian capital. By the late 1980s, Hungary transitioned from a closed country with low migration rates to one experiencing significant immigration and transit migration. Budapest played an important role in immigration and transit migration, especially for people arriving from Eastern European countries. Many of these individuals used the city as a temporary stop before traveling to Western Europe.

4.2.2 Post-socialist era

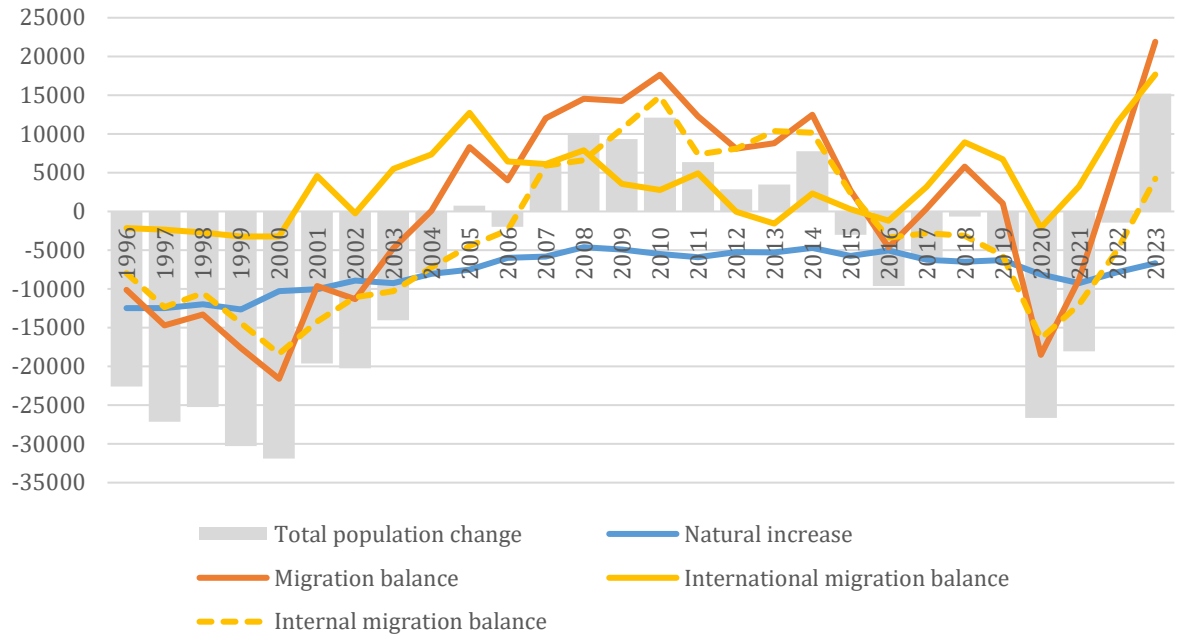
After three decades of growth, ***Hungary****'s population* peaked in 1982. Since then, the trend has reversed: as of January 1, 2022, only 9.73 million people lived in the country – 10% less than four decades earlier, marking a total population decline of nearly one million. While natural population decline has ranged between 30,000 and 40,000 annually since the early 1990s, migration surplus has helped offset its negative impact. Since 1996, Hungary has seen a net migration gain of over 450,000 people.

Ethnicity has been playing a significant role in Hungary's international migration patterns. A significant part of foreign-born arrivals has been Hungarian native speakers from Romania, Ukraine, Serbia, and Slovakia. (Hungarians in these countries – mostly in the southern part of Slovakia, Transcarpathia, Transylvania and Vojvodina – have been living as minorities since 1920, when these areas were ceded to Czechoslovakia, the Soviet Union, Romania, and Yugoslavia.) Although their share has declined, neighbouring countries still dominate the list of immigrants' birthplaces, alongside Germany, Türkiye, China, Vietnam, and the USA (Németh et al. 2023: 14).

The population of ***Budapest*** has been shrinking even faster than the national average. The 1980 census recorded 2.06 million residents, whereas by the 2022 census, this had dropped to 1.68 million – an 18% decrease of nearly 377,000 people. This decline was primarily driven by negative natural population change, with 5,000 to 10,000 more deaths than births annually since the early 1990s. Despite ongoing suburbanization, the city has experienced a net migration gain over the past 35 years. (Suburbanization peaked in the 1990s, slowed in the mid-2000s, but gained momentum again after 2020, fuelled by government housing policies and the COVID-19 pandemic – Dövényi and Kovács 1999, Bajmócy and Györki 2012, Pénzes 2024).

The *international migration* surplus of Budapest peaked in 2005, with a net increase of nearly 13,000 people. However, after the global financial crisis, this number declined. Between 2012 and 2016, net international migration stagnated around zero before rising sharply. Although the COVID-19 pandemic temporarily disrupted this trend, growth resumed after 2021. In 2023, Budapest saw a net migration gain of over 17,000 people from abroad (Figure 13).

Figure 13. Natural increase, migration balance and total population change in Budapest, 1996-2023



Source of data: Hungarian Central Statistical Office. Own figure.

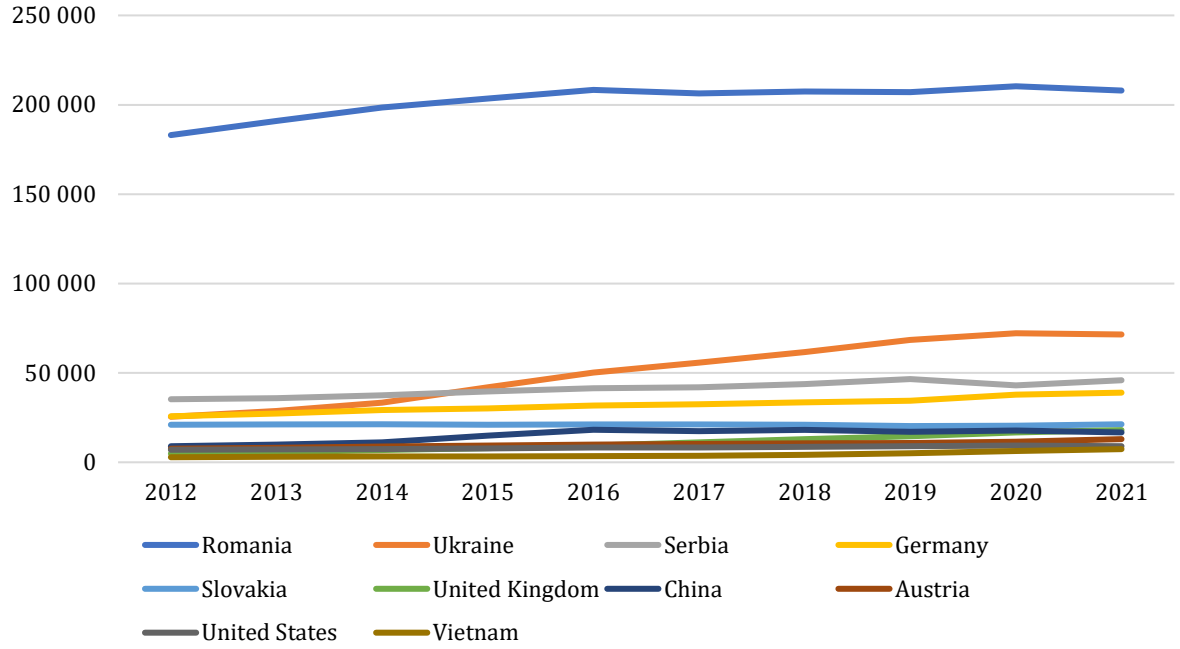
4.2.3 Foreign-born population stock in Hungary and Budapest

In ***Hungary***, censuses provide the most important and accurate cross-sectional data on the structure of the population. However, the 1990 census did not include a question regarding the country of birth (Rózsa 2017: 1162). In the 2001 census, 2.7% of Hungary's population was foreign-born, and by 2011, this figure had increased to 3.9% (approximately 383,000 people). The final results of the 2022 census are not yet available.

The Eurostat database reports slightly higher figures: according to these data, in 2013, there were 423,000 foreign-born individuals in Hungary, while on January 1, 2024, this number exceeded 677,000.[21] The largest proportion of the foreign-born people is from the four neighbouring countries: Romania, Ukraine, Slovakia, and Serbia (altogether 64% of the immigrant stock) as well as from Germany and China (Németh et al. 2023: 14).

[21] Source: https://ec.europa.eu/eurostat/databrowser/view/tps00178/default/table

Figure 14. Population number by the Top 10 countries of birth in Hungary, 2012-2021



Source: Eurostat. Own figure.

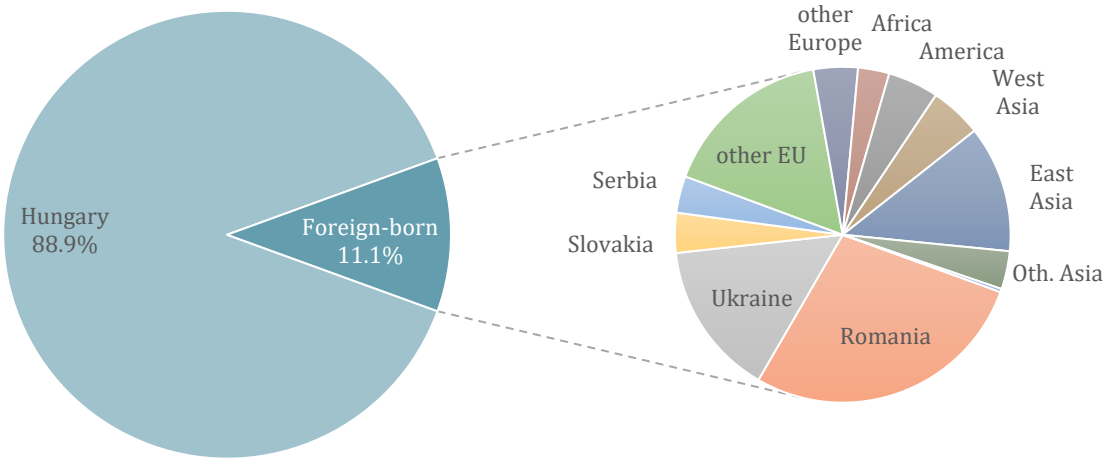
Budapest is the primary destination for immigrants arriving to Hungary. Therefore, it is not surprising that the proportion of foreign-born residents in the capital is higher than the national average and continues to grow. According to the 2011 census, they accounted for 7.5% of Budapest's resident population, while by 2022, this share had increased to 11.1%. In absolute terms, this represents a rise from 129,000 to 187,000 people. One in four foreign-born residents of the capital was born in Romania, and one in seven in Ukraine. Additionally, among the foreign-born population, those from China, Serbia, Slovakia, Russia, Germany, and Vietnam each accounted for more than 2%, in decreasing order. Figure 15 and Table 10 present their percentage distribution aggregated by global regions.

If we supplement this information with data on ***native language***, we get a better insight into the characteristics of the migration processes. Based on the 2022 census almost 37% of the foreign-born population in Budapest speaks Hungarian as their native language. Within specific groups, however, this proportion varies significantly. More than three-quarters of immigrants born in Romania and Slovakia, as well as more than two-thirds of those born in Serbia, are native Hungarian speakers. The proportion for those born in Ukraine would likely be similarly high, but due to the war that broke out in 2022, the number of Ukrainian native speakers has also increased. Notably, half of those born in Austria and a quarter of those born in Germany and the United Kingdom are also native Hungarian speakers. Since these are the main destination countries for Hungarian

emigrants, it can be assumed that a significant portion of them are children of Hungarian families who emigrated and later returned. At the other end of the spectrum are East Asian immigrants; for example, only 1-2% of those born in China, Vietnam, or India speak Hungarian as their native language.

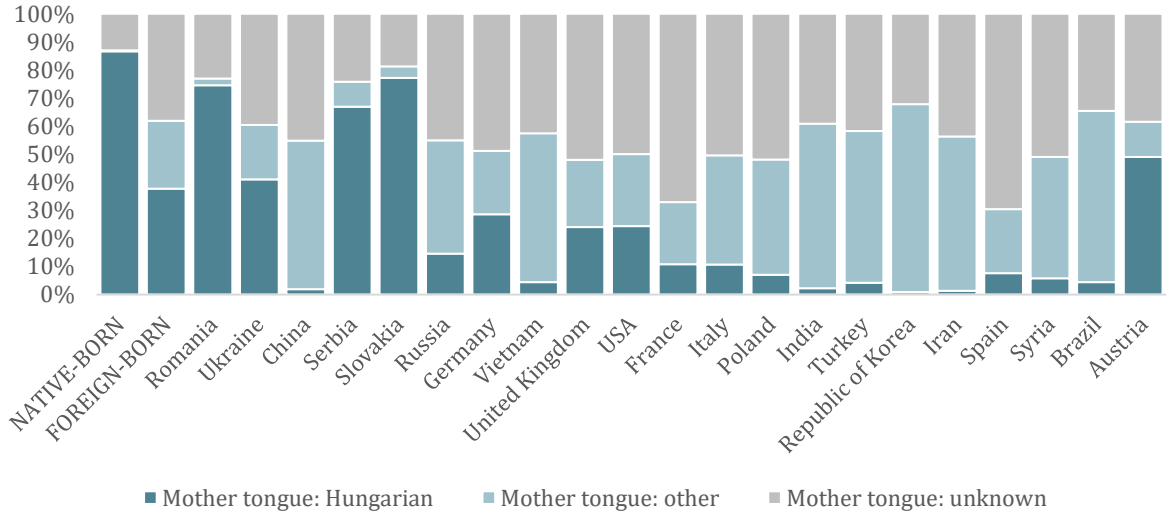
This aspect is crucial because the WELLCOH project is centred around the concepts of social cohesion and subjective well-being, and the presence or absence of language barriers is likely to have a strong impact on their dynamics and interactions.

Figure 15. Population by country of birth in Budapest by 2022 (%)



Source of data: Hungarian Central Statistical Office. Own figure.

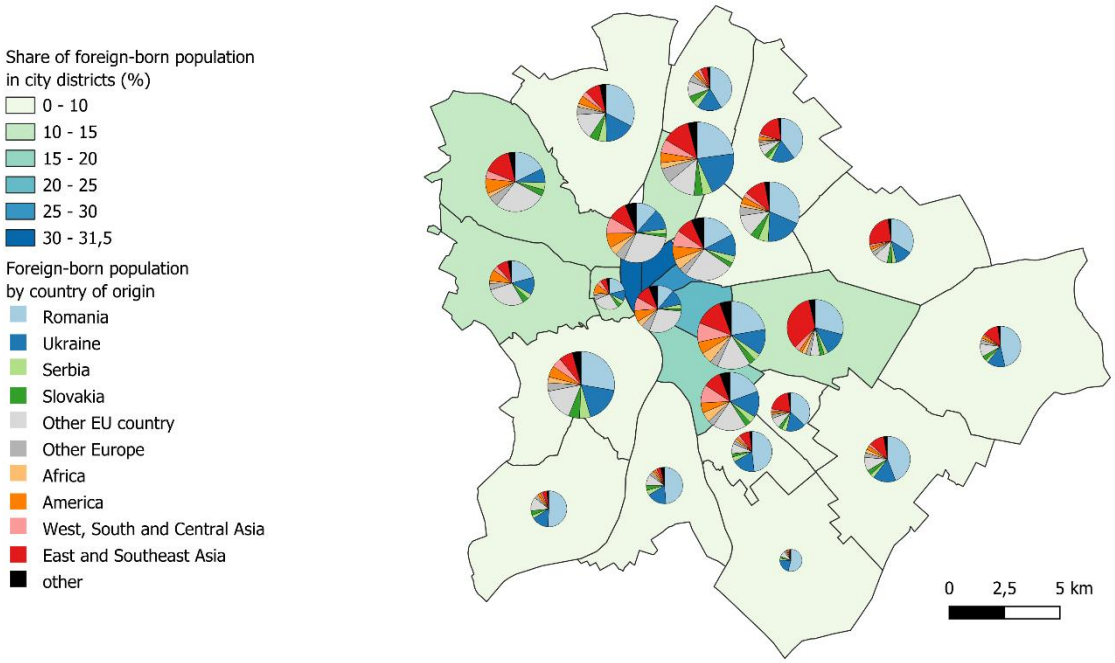
Figure 16. Share of people by mother tongue within the Top 20 foreign-born groups (in decreasing order based on population number) in Budapest by 2022 (%)



Source of data: Hungarian Central Statistical Office. Own figure.

The ***spatial distribution*** of the foreign-born population of Budapest is uneven. They are highly concentrated in four downtown districts: the 5th, 6th, 7th, and 8th districts, ie. in Belváros-Lipótváros, Terézváros, Erzsébetváros, and Józsefváros. In the 5th and 6th districts, their proportion exceeds 30%, while in the other two districts, it is around 25% and 20%, respectively. On the Buda side, the proportion reaches 10% in the 12th and 13th districts, which are areas characterized by high property values and a population of higher social status. Moving away from the city centre in any direction, the percentage of foreign-born residents gradually decreases. In Budapest's suburban districts, their share is below 10% everywhere (Table 10, Figure 17).

Figure 17. Percentage of foreign-born population stock (colours of the districts; 100% = all residents) and the share of foreign-born people by country of birth (pie charts; 100% = foreign-born residents) in Budapest by city districts in 2022. The size of the pie chart corresponds with the size of the foreign-born population stock.



Source of data: Hungarian Central Statistical Office. Own figure.

Table 10. Percentage of the foreign-born population stock in Budapest by city districts in 2022. (100% = all residents in the districts)

District name (Population nr.)	HUN	ROM	UKR	SRB	SK	Oth. EU	Oth. Eur.	Afri-ca	Ame-rica	West Asia	East Asia	Oth. Asia, Oce.
Budapest (1,498,272)	88.9	3.1	1.7	0.4	0.4	1.8	0.5	0.3	0.5	0.6	1.4	0.4
01. Várkerület (20,626)	87.1	2.7	1.4	0.6	0.6	3.6	0.7	0.3	1.2	0.6	0.9	0.4
02. kerület (75,444)	87.2	2.3	1.0	0.5	0.5	3.6	0.7	0.3	1.0	0.6	2.0	0.5
03. Óbuda-Békásmegyer (114,493)	91.8	2.7	1.4	0.4	0.4	1.2	0.4	0.2	0.4	0.3	0.7	0.3
04. Újpest (88,427)	93.7	2.6	1.1	0.3	0.3	0.7	0.3	0.1	0.2	0.2	0.3	0.1
05. Belváros-Lipótváros (15,055)	68.6	3.5	3.3	1.0	0.5	9.2	1.9	1.3	2.5	2.9	3.3	2.0
06. Terézváros (24,281)	68.5	3.6	3.6	0.8	0.6	9.3	1.7	1.4	2.5	2.8	3.3	1.9
07. Erzsébet-város (36,532)	74.6	4.4	2.9	0.9	0.6	6.4	1.0	1.4	1.8	2.1	2.2	1.7
08. Józsefváros (55,636)	79.4	4.6	2.5	0.7	0.6	3.3	0.8	1.1	1.2	1.9	2.8	1.1
09. Ferencváros (48,983)	82.2	3.5	2.6	0.7	0.6	3.3	0.6	1.0	1.0	1.8	1.8	1.0
10. Kőbánya (65,765)	87.0	3.8	1.8	0.3	0.3	0.7	0.3	0.3	0.2	0.4	4.4	0.5
11. Újbuda (127,120)	90.1	2.7	1.8	0.5	0.5	1.6	0.4	0.3	0.5	0.5	0.7	0.4
12. Hegyvidék (51,064)	89.1	2.3	1.4	0.4	0.5	3.1	0.5	0.2	0.9	0.4	0.9	0.3
13. kerület (106,186)	86.3	3.1	2.8	0.6	0.5	1.7	0.9	0.4	0.6	0.8	1.7	0.6
14. Zugló (107,558)	90.6	3.0	1.8	0.5	0.4	1.1	0.5	0.2	0.3	0.2	1.1	0.3
15. kerület (71,075)	92.2	3.1	1.3	0.2	0.2	0.6	0.2	0.1	0.2	0.1	1.4	0.2
16. kerület (67,190)	91.7	2.8	1.0	0.3	0.3	0.9	0.3	0.1	0.2	0.1	2.1	0.2
17. Rákosmente (79,755)	93.9	2.8	0.9	0.1	0.2	0.6	0.2	0.1	0.2	0.1	0.8	0.1
18. Pestszent-lőrinc, –imre (92,891)	93.5	2.9	1.0	0.2	0.2	0.6	0.2	0.2	0.2	0.1	0.7	0.2
19. Kispest (51,876)	91.8	3.0	1.4	0.3	0.3	0.7	0.2	0.1	0.2	0.1	1.6	0.2
20. Pesterzsébet (58,447)	92.0	3.8	1.5	0.3	0.2	0.6	0.2	0.1	0.1	0.2	0.7	0.2
21. Csepel (66,277)	94.1	2.9	1.0	0.3	0.3	0.6	0.2	0.1	0.1	0.1	0.2	0.2
22. Budafok-Tétény (52,498)	92.9	3.6	1.1	0.2	0.3	0.9	0.2	0.1	0.2	0.1	0.3	0.1
23. Soroksár (21,093)	93.3	3.7	1.4	0.2	0.2	0.6	0.2	0.1	0.1	0.1	0.1	0.1

Source of data: Hungarian Central Statistical Office. Own table.

5. Socio-demographic patterns and objective factors of well-being

Despite the availability of a wide range of sources for secondary analysis (see Chapter 3.1), we had to take into account various obstacles and limitations that impact the practical implementation of the proposed comparative analysis (see Chapter 3.2). After careful consideration of all factors, we concluded that this chapter should provide a detailed analysis of microdata from the 2013, 2018, and 2022 waves of the EU-SILC, as well as from the 2016 Hungarian microcensus.

The primary reason for this choice is the issue of sample size. Among the sources offering directly comparable demographic, socio-economic, and subjective well-being data for Budapest and Vienna, the EU-SILC dataset is the most extensive. Moreover, it allows for a distinction between native-born and foreign-born populations within each city – an option not consistently available in other comparable surveys. It is important to note, however, that the number of foreign-born respondents in Budapest remains low, even within the SILC dataset. This made it particularly important to incorporate data from the Hungarian microcensus, which was feasible due to the deliberate alignment of its questionnaire with the EU-SILC format.

It is essential to reiterate that WELLCOH employs weighted data (see Section 3.3 for methodological details), allowing for extrapolation from the representative sample to the total population. However, this representativeness holds only at the national level; it cannot be assured when focusing on sub-national analyses, such as those for Vienna and Budapest. This limitation is common in internationally comparable surveys, making sample size a critical factor in secondary analysis. Accordingly, the EU-SILC and the microcensus were selected as our primary data sources.

The objective of this analysis is to contextualize the subsequent empirical findings by examining key socio-demographic and socio-economic differences between the two cities using secondary sources. The following subchapters will investigate the objective determinants of SWB, identifying factors that may have substantial or limited relevance to life satisfaction, affect and eudaimonia.

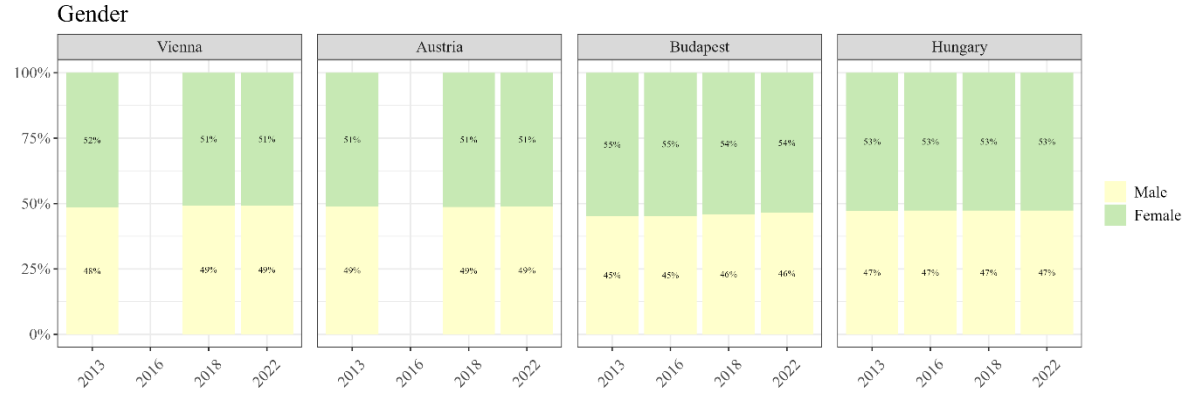
Our analysis takes a micro-level approach, focusing on individuals' subjective well-being in relation to their available resources, such as financial means, social relationships, and more. The selected indicators are drawn from secondary sources and reflect self-reported socio-economic conditions of respondents and their households. While our central focus is on individuals' subjective evaluations of life satisfaction, emotional states, and eudaimonia, the associated objective (both material and immaterial) factors at the individual or household level are expected to yield deeper insights into the interplay between SWB and social cohesion.

5.1 Demographic and spatial characteristics

Among the most important demographic variables, the distribution by sex and age is fairly consistent. This is primarily due to the fact that the surveys in both countries were representative with respect to these two indicators.

In general, the proportion of women is 2–3 percentage points higher in Austria and Vienna than in Hungary and Budapest. Vienna has the most youthful age structure, with 34% of the population under the age of 35 and 32% aged 60 and above in 2022. In comparison, the corresponding figures for Budapest were 26% and 37%, respectively. While Vienna stands out as more youthful even in comparison to other Austrian provinces, there is no significant difference in age structure between Budapest and the rest of Hungary.

Figure 18. Percentage of people by gender and years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Figure 19. Percentage of people by age categories and years

Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Based on the distribution by country of birth, it is clear that foreign-born people are somewhat underrepresented in these surveys. According to official statistics, their

proportion is approximately 23% in Austria and 40% in Vienna; however, in the weighted 2022 EU-SILC sample, these figures are only 17% and 38%, respectively. The discrepancy is even greater in Hungary, where the survey reached significantly fewer immigrants – 2% for Hungary and 4% for Budapest – compared to their actual proportions of 6% and 11%, respectively. The 2016 microcensus subsample for Budapest comes closest to reflecting the true figures.

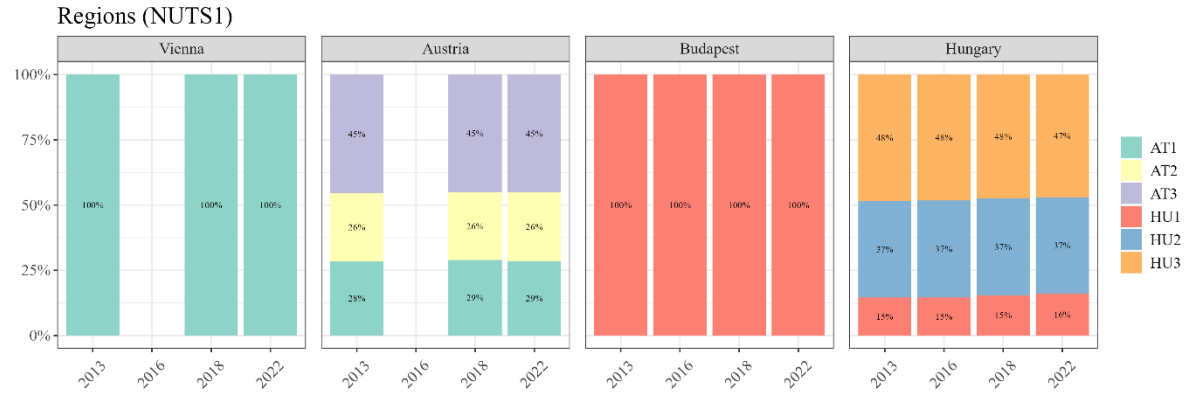
It is worth noting that, for the country of birth variable, the EU-SILC only publishes three categories: native, EU28, and other. A more detailed breakdown became available through Statistics Austria's own database (see Figure 20, chart below).

Figure 20. Percentage of people by country of birth categories and years

Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

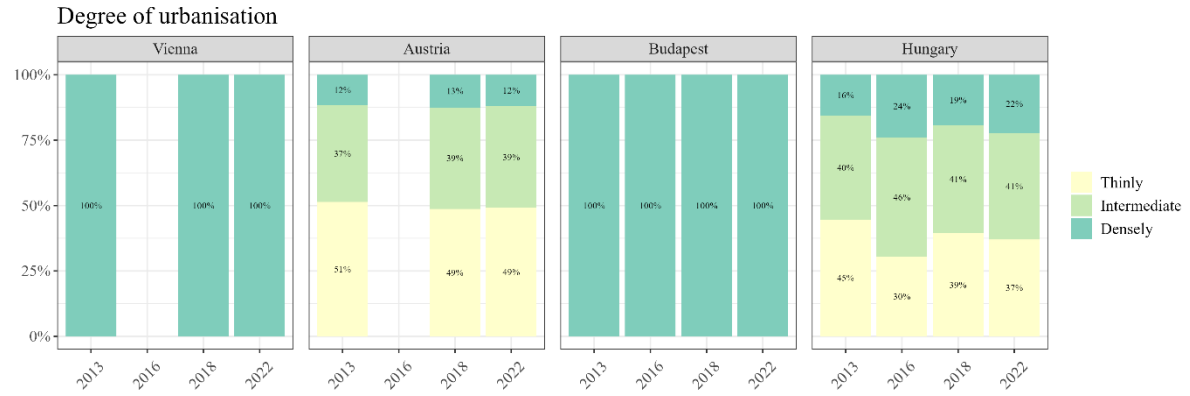
The regional distribution of the population and the degree of urbanisation variable are obviously only relevant on national level, excluding Vienna and Budapest. The sample distribution by NUTS1 regions closely follows the national distribution. Population density figures are also consistent; the only notable exception is a slightly higher proportion of urban respondents in the 2016 Hungarian data.

Figure 21. Percentage of people by NUTS1 regions and years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Figure 22. Percentage of people by the population density of the municipality they live in and years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

5.2 Individual factors of well-being. Material and immaterial components

The "Financial Situation" indicators assess the economic resources available to individuals and their households to meet daily needs and safeguard against economic vulnerability. The variables under "Economic Status and Job" are equally important for well-being, as quality employment not only enhances access to resources but also provides opportunities to pursue personal ambitions, develop skills, contribute to society, and build self-esteem (OECD 2013: 23). Lastly, "Housing Conditions" represent the third pillar of material well-being. Adequate housing not only satisfies basic needs but also influences health, social connections, and other non-material aspects of subjective well-being.

Beyond the material factors, we also consider certain immaterial indicators of SWB. The most readily available data relate to health status, work–life balance (including leisure activities), and social connections.

As previously emphasised, our primary focus is on variables that pertain to the individual or their social relationships. Taking into account external circumstances that may indirectly influence life satisfaction would exceed the scope of this analysis. A comprehensive examination of such objective factors would require external data specific to both cities and countries. While we fully acknowledge the significance of these elements in well-being research – ranging from air quality and crime statistics to the quality of public transport – it is not feasible within the limits of this research report to include all potential influences.

Nevertheless, some external factors do appear in Chapter 6.1, albeit through the lens of residents' subjective perceptions – for example, how safe they feel walking home at night, or how satisfied they are with cleanliness in their neighbourhood.

5.2.1 Financial situation

In this Research Report the financial situation has been operationalised with the following indicators.

- Total personal income in 2022 EU27-Euros
- Equivalised disposable household income in 2022 EU27-Euros
- At-risk-of-poverty status
- Severely materially deprived household status
- Low work-intensity status
- Financial burden of the repayment of debts from hire purchases or loans

The two income-related indicators reflect respondents' and their households' gross incomes in the survey year, encompassing both cash and non-cash incomes, as well as various benefits. (To ensure a meaningful comparison of personal income levels over time, we adjusted values for inflation and standardized them to 2022 local currency units, using the relevant official HCIP indexes.)

According to the 2013 EU-SILC survey, average ***personal incomes*** in Austria were approximately three times higher than in Hungary (around 27,300 EUR vs. 7,600 EUR). A similar discrepancy appeared in median income levels, with figures of about 22,000 EUR in Austria and 6,600 EUR in Hungary. However, this income gap narrowed until 2022, with mean and median incomes showing "only" a 2.3-fold difference between the two countries (approximately 27,600 and 22,800 EUR vs. 12,200 and 10,600 EUR).

The income gap between the two capitals is considerably smaller than the gap between the two countries in general, and has been steadily narrowing. In 2013, the income of a Viennese resident was on average 2.8 times higher than that of a Budapest resident; by

2022, it has fallen to 1.7 times, i.e., approximately 26,800 EUR in Vienna and ca. 15,600 EUR in Budapest (Table 11, Figure 23).

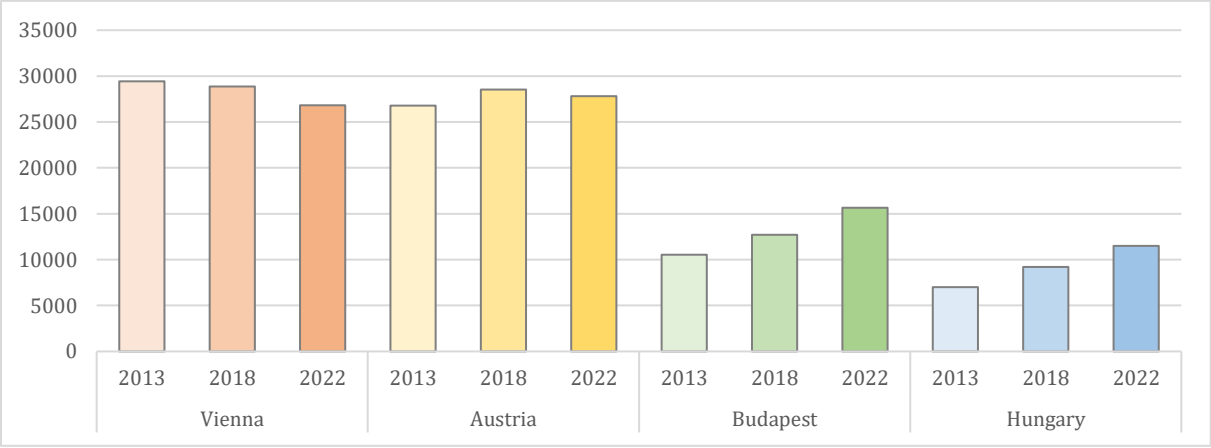
There are similar trends and similar ratios for equivalised disposable household income, where the average values indicated a 2.3-fold and 1.7-fold income advantage in Austria and Vienna, in comparison with Hungary and Budapest.

Table 11. Personal income and equivalised disposable household income in Vienna, Austria, Budapest, and Hungary (yearly, gross, EUR/per capita), considering all types of incomes and benefits, adjusted for PPP and inflation, and standardized to 2022 local currency units using the corresponding official HICP indexes.

	Year	Personal income		Equivalised disposable household income	
		Mean	Median	Mean	Median
Vienna	2013	29,429	22,915	26,986	22,391
	2018	28,867	21,608	27,864	24,420
	2022	26,819	21,153	25,716	22,516
Austria (without Vienna)	2013	26,783	21,852	26,657	24,610
	2018	28,532	24,257	28,177	26,038
	2022	27,812	23,112	27,454	24,871
Budapest	2013	10,537	8,390	10,781	9,336
	2018	12,709	10,251	12,537	10,513
	2022	15,654	13,693	13,979	12,050
Hungary (without Budapest)	2013	7,004	6,310	7,716	7,019
	2018	9,205	8,104	9,704	8,742
	2022	11,500	10,153	11,034	9,998

Source of data: EU-SILC. Own table.

Figure 23. Average total personal income in Vienna, Austria, Budapest, and Hungary (yearly, gross, EUR/per capita), considering all types of incomes and benefits, adjusted for PPP and inflation, and standardized to 2022 local currency units using the corresponding official HICP indexes.



Source of data: EU-SILC. Own figure.

Given these figures, it may seem paradoxical that the ***at-risk-of-poverty*** indicator does not show a significant difference between Austria and Hungary. This is due to methodological reasons. The at-risk-of-poverty rate is a relative measure, capturing the percentage of individuals whose equivalised disposable income falls below the at-risk-of-poverty threshold, set at 60% of the national median equivalised disposable income after social transfers. This methodological approach explains why the proportion of people living below this threshold appears similar in both countries. In Austria, roughly 12% of the population falls into this category, compared to 13% in Hungary, with these rates remaining relatively stable over time. Interestingly, EU-SILC data highlight that in Vienna, one in five residents falls below Austria's at-risk-of-poverty threshold, whereas in Budapest, only 8% of the population is below Hungary's corresponding threshold.

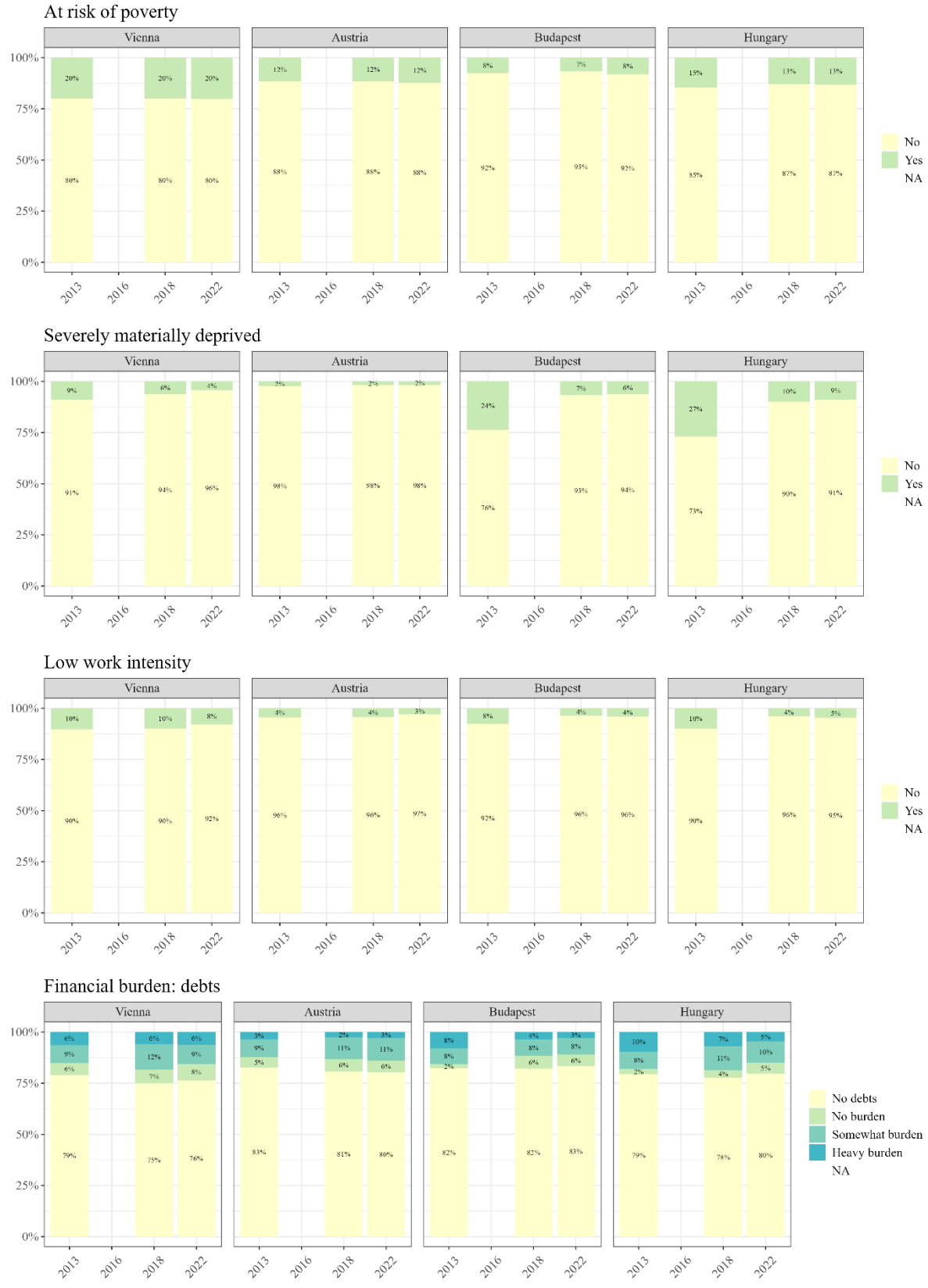
In 2013, the share of ***materially deprived*** individuals in Vienna was relatively low, at 9%, and further declined to 4% by 2022. In the rest of Austria, this indicator remained consistently low at approximately 2%. In contrast, about a quarter of Budapest's and Hungary's population experienced material deprivation in 2013. The significant decline to 6% and 9% by 2022, respectively, indicates notable improvements in living standards in Hungary (Figure 24). To fully grasp the underlying reasons, a review of the methodology is essential.

The severe material deprivation indicator measures the proportion of people unable to afford at least four out of nine predefined material items considered necessary for an adequate standard of living. These criteria include:

- ability to cover unexpected expenses,
- being confronted with payment arrears (mortgage or rent, utility bills, hire purchase instalments or other loan payments),
- afford a one-week annual holiday away from home,
- afford a meal involving meat, chicken or fish (or an equivalent vegetarian food) every second day,
- afford adequate heating of the dwelling,
- own durable goods like a washing machine, colour television, telephone and car.

Later, the Europe 2030 strategy expanded the list of deprivation items from nine to thirteen. However, for consistency and comparability, this Report adheres to the older definition above. As noted by Németh et al. (2023), improvements in Hungary were largely driven by two key factors: in 2013, only one-third of people could afford a one-week vacation, and merely a quarter could handle unexpected expenses without difficulty. Significant progress was made in these areas (by 2018, these indicators had risen above 60% and 50%, respectively), while other aspects showed little or no improvement.

Figure 24. Percentage of people by the AROPE indicators (at risk of poverty status, material deprivation, low work intensity) and their household's financial burden of the repayment of debts



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Low work intensity, measuring the share of individuals aged 0–59 in households where adults worked less than 20% of their potential working hours in the previous year, decreased in both cities between 2013 and 2022: in Vienna from 10% to 8%; in Budapest from 8% to 4% respectively. Compared to the capitals low work intensity seems to be a less relevant problem in Austria.

Finally, we analysed the proportion of individuals for whom ***debt repayment*** – excluding mortgages or loans related to their primary residence – poses a financial burden. The EU-SILC data shows that, overall, Viennese residents are more indebted than those in Budapest. Of those who responded to this question, 24% of respondents in Vienna said they had debts and 6% said they had a heavy burden to repay. In Budapest, 17% said they had credit and 3% had similar problems. As for the regions outside the capitals, in 2022, about 80% of Austrians and Hungarians reported having no such debts. However, financial strain from debt repayment persisted for around 3% of Austrians and 5% of Hungarians.

5.2.2 Economic status and job

In the OECD framework, key indicators for assessing and comparing countries in the "Jobs and Earnings" well-being domain included the employment rate, the long-term unemployment rate, and the average gross annual earnings of full-time employees. However, as highlighted in the OECD How's Life Report (2013: 29), significant data gaps exist in this area, and reliable, internationally comparable statistics on employment quality are lacking. Since the WELLCOH project focuses on analysing subjective well-being from a micro-level perspective, we prioritize individual-level data over aggregated macro-level statistics. These personal attributes are directly linked to job satisfaction.

- Highest level of education
- Self-defined current economic status
- Occupation (ISCO 08 categories)

The cross-sectional samples of the EU-SILC allow us to infer national socio-demographic and socio-economic trends, including those related to the highest level of ***educational*** attainment. It is evident that the proportion of individuals with primary education has been steadily declining across all the geographical units examined. At the same time, the share of those with tertiary education has been increasing. This trend is most pronounced in Budapest, where 47% of respondents fell into this category in 2022. Based on the 2018 and 2022 EU-SILC data, the proportion of tertiary-educated individuals in Austria remained stable, while in Vienna it showed a slight decline. However, this two-

percentage-point drop is not substantial. It may indicate emerging structural shifts in the city's demographic and educational composition, or it could simply reflect minor changes in sample characteristics.

The statistics on ***economic status*** are not entirely consistent, as the 2022 wave of the SILC survey does not include a distinct category for the self-employed. Therefore, when interpreting changes over time, it is advisable to merge the self-employed and employee categories. The combined share of these groups increased across all the territorial units examined – least notably in Austria and most significantly in Vienna, where the proportion rose from 52% to 54% and from 49% to 65%, respectively. In Hungary, an increase of 8 to 10 percentage points was recorded. Meanwhile, the number of unemployed persons remained stable in Austria and showed a slight decline in Hungary.

The economically inactive population includes individuals who are students, retired or disabled, or classified under "other inactive". In both countries, retired people and students represent the majority of this group. Their proportions remained relatively stable: around 30% and 5% in Austria, and 26% and 7% in Hungary, respectively (see Figure 25).

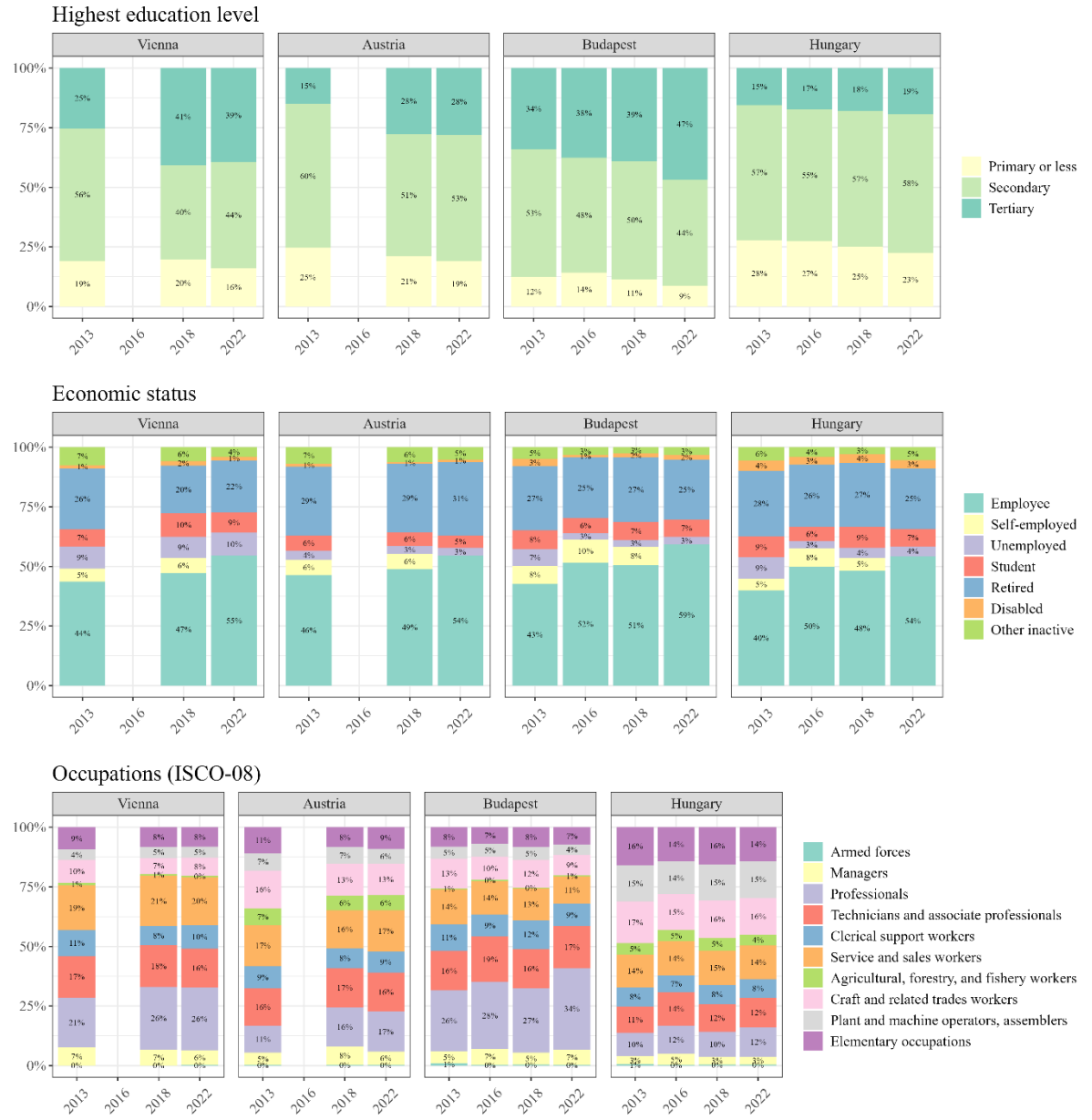
The ***occupational structure*** in Austria and Hungary shows differences. Austria has a higher proportion of workers in high-skill occupations, such as professionals, technicians, and managers, compared to Hungary. Over the years, Austria has seen a noticeable increase in these categories, especially professionals and technicians, while Hungary's occupational distribution has remained relatively stable. In Hungary, a much larger share of the workforce is still employed in elementary occupations, as well as in manual and technical roles like plant and machine operators or craft workers. This highlights a structural difference in labour market composition, reflecting Austria's more advanced service and knowledge-based economy.

When comparing Vienna to the Austrian average, Vienna stands out with a higher concentration of professionals and a larger share of service and sales workers. It also has slightly fewer individuals in elementary occupations and manual trades. This indicates that Vienna, as the capital and a global city, attracts more high-skill jobs and service roles, likely tied to its administrative, financial, and cultural centrality. However, Vienna also displays a unique occupational distribution by showing a consistently lower proportion of workers in agricultural and technical manual fields compared to the rest of the country, which reflects its urban, post-industrial labour market.

Comparing Budapest to the Hungarian national average, the differences are somewhat less pronounced than in Austria, but still notable. Budapest has a larger share of professionals and clerical support workers, and a slightly smaller share of people in

elementary and manual occupations. This points to a higher concentration of white-collar jobs and administrative roles in the capital, reflecting Budapest's central role in Hungary's economic and institutional life. However, the differences are more moderate than between Vienna and Austria, suggesting a more uniform occupational structure across Hungary.

Figure 25. Percentage of people by the highest level of education, economic status, and occupation (ISCO 08) by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

5.2.3 Housing conditions

In the OECD *How's Life* framework, housing conditions are measured using three main indicators: the number of rooms per person, housing costs, and the proportion of dwellings lacking basic facilities (OECD 2013). As the lack of basic facilities is not a widespread issue in the households in Vienna and Budapest, this Research Report focuses on reported housing problems that may directly impact individuals' satisfaction with their living conditions. Accordingly, this well-being domain has been operationalized using the following indicators.

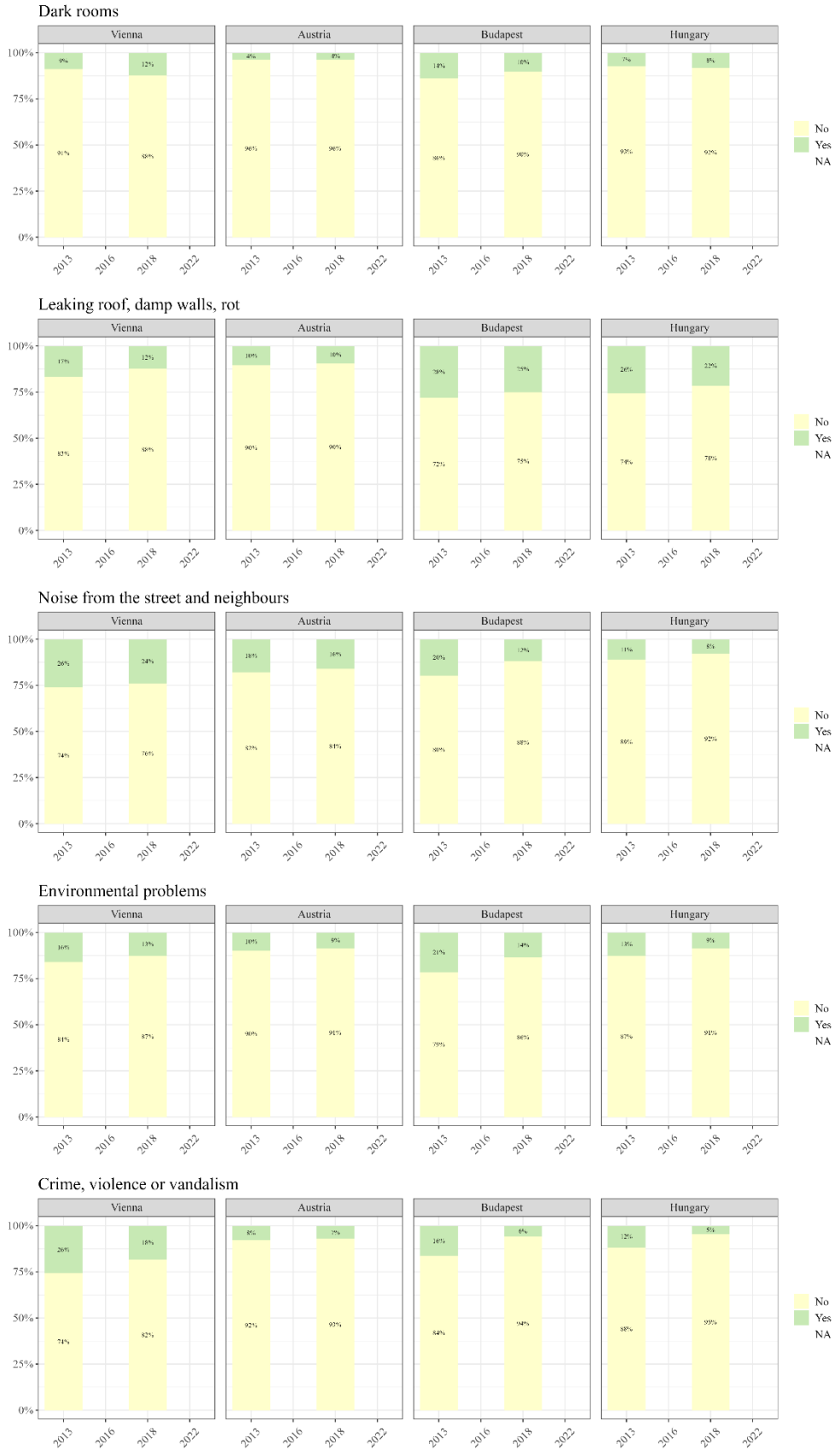
- Housing problems: too dark, not enough light
- Housing problems: leaking roof, damp walls/floors/foundation, or rot in window frames or floor
- Housing problems: noise from neighbours or from the street
- Housing problems: pollution, filth, or other environmental problems
- Housing problems: crime, violence, or vandalism in the area.

Questions related to housing problems were last included in the survey in 2018. These are not objective indicators, as accurate measurements – such as local noise levels or crime rates by neighbourhood – would be required for that. Rather, they reflect housing problems as perceived by residents. This also means that the threshold between what one considers "noisy" and "not noisy", for example, varies from person to person. Nevertheless, subjective perceptions can still offer valuable insight into housing quality, both in terms of internal issues and external negative influences.

It appears to be a universal phenomenon that housing-related indicators are worse in capital cities than in the rest of the country. Comparing the two countries, the main conclusion is that respondents in Hungary more frequently reported various types of internal housing problems. Issues such as leaking roofs, rot in window frames or floors, and dampness in walls, floors, or foundations were reported by 22% of Hungarian respondents, compared to just 10% in Austria. Similarly, dark rooms were mentioned twice as often in Hungary (8%) as in Austria (4%). In contrast, external negative factors – such as noise from the street, perceived crime and vandalism in the neighbourhood, pollution, and environmental degradation – were more frequently reported in Austria.

The difference between Vienna and Budapest is negligible regarding dark rooms (10–12%) and environmental issues in the surrounding area (13–14%). However, there was one aspect in which Vienna was clearly rated more positively in 2018: internal housing problems such as leaking roofs, rot, and damp were reported by only one in eight households, compared to one in four in Budapest.

Figure 26. Percentage of people living in an accommodation with different housing problems and years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Conversely, external disturbances originating from the neighbourhood were consistently perceived as worse in Vienna. A quarter (24%) of households there reported being negatively affected by noise, and 18% observed crime and vandalism in their area. These figures were significantly lower in Budapest, at around 12% and 6%, respectively. Notably, crime and vandalism were perceived to have clearly decreased in the Hungarian capital.

5.2.4 Health status

Health is one of the most critical factors influencing well-being, as it directly impacts individuals' ability to engage in everyday activities. In the absence of objective data on respondents' health conditions – such as information about illnesses or disabilities affecting their well-being – we can rely on their self-assessed health status and whether they feel limited in daily activities due to health issues. It is a subjective measure to some extent, reflecting a general sense of physical and mental health, rather than specific medical conditions. Similarly, individuals' self-reports on whether ongoing health issues hinder their usual activities also represent a subjective evaluation.

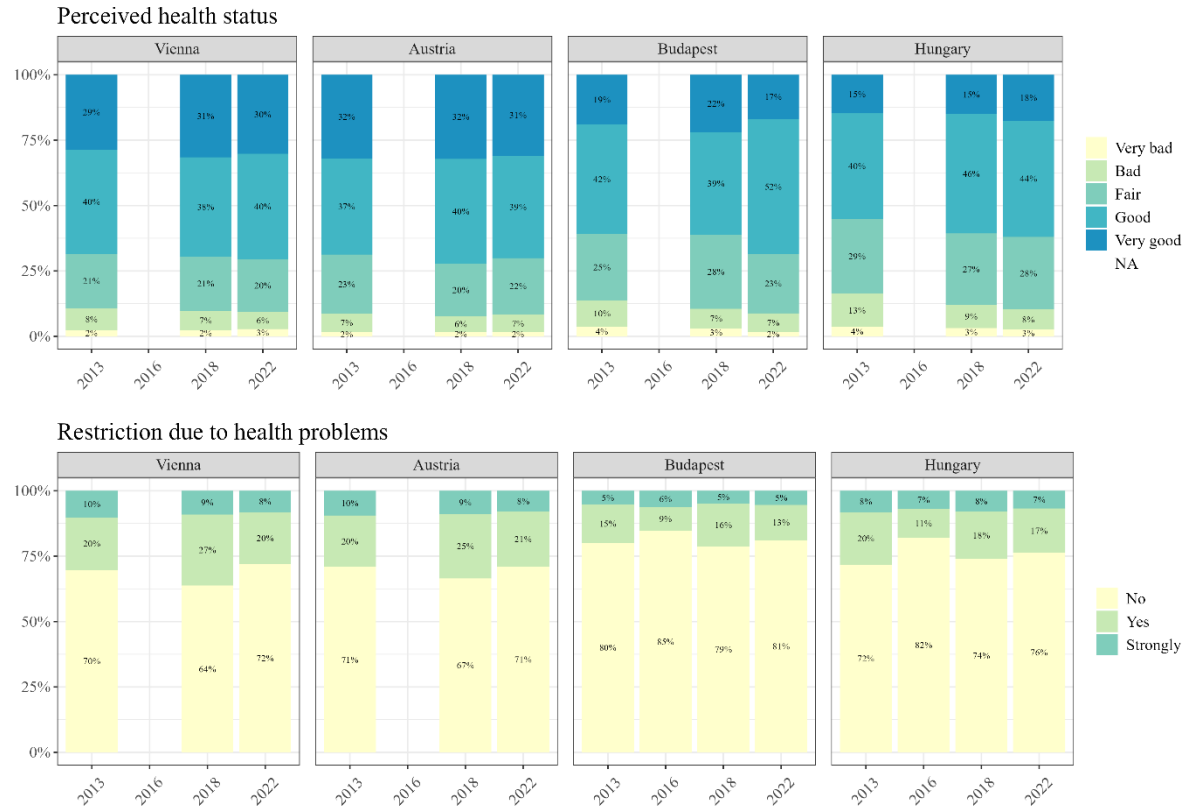
In general, ***perceived health*** is better in Austria than in Hungary. While 69% and 72% of Austrians rated their health as very good or good in 2013 and 2018 respectively, fewer Hungarians reported the same – 56% and 61% in the corresponding years. In Hungary, a smaller proportion of people rate their health as very good, while a larger share considers it only fair or even poor. Perceived health status remained relatively stable in both countries over the observed period (see Figure 27).

There is no significant difference in perceived health between people living in Vienna and those in the rest of Austria. Approximately 30% rate their health as very good, while around 9% consider it poor or very poor. These percentages have remained remarkably consistent throughout the study period. Perceived health in Hungary appears somewhat less favourable. Although poor health is reported just as infrequently as in Austria, only 17% of respondents in Budapest and 18% in the rest of Hungary described their health as very good. A relative majority of respondents rated their health as at best good or moderate.

No notable difference exists between the two countries in terms of the proportion of people reporting a severe ***limitation in their daily activities*** due to health problems; this figure stands at around 7–10%. However, when considering those who report being somewhat limited, Hungarians are slightly less likely to do so, with only 18–19% reporting such limitations, compared to 25% in Austria in 2018.

This finding somewhat contradicts the previous figure, which suggested a less favourable overall perception of health in Hungary. When we focus specifically on the share of individuals who feel limited in their everyday lives due to a health condition, no meaningful difference emerges between the two countries or their capital cities for those who report being severely limited. However, when looking at those who selected the more moderate "yes" response (i.e. somewhat limited), the difference becomes more apparent: 20% of people in Vienna reported such limitations, compared to just 13% in Budapest (see Figure 27).

Figure 27. Percentage of people by self-reported health status and by the restriction due to health problems by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

As Németh et al. (2023) note, "differences in the perception of limitations due to health condition might be partly shaped by different regulations and institutional and policy approaches in the two countries to the diagnostics and formal acknowledgement of such conditions. Different cultural contexts might also play a role."

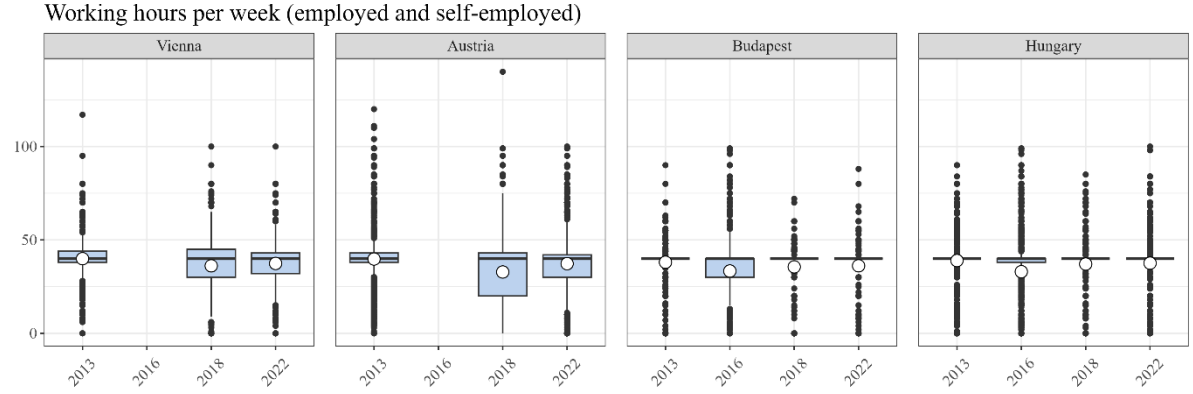
5.2.5 Work-life balance, free time

Work-life balance represents another key aspect of well-being, reflecting the amount of time individuals can dedicate to family life, leisure activities, and personal pursuits beyond their work. It is important to add, however, that few questions in the international surveys are explicitly related to this phenomenon. Therefore, the available variables only partially reflect the objective state of respondents' work-life balance. In our research, this is assessed using the following measures:

- Working hours per week
- Participation in leisure activities
- Regular get-together with friends or relatives
- Frequency of involvement in certain leisure activities
  - Creative activities
  - Visiting cultural sites
  - Attending live performances
  - Attending live sport events

In the two countries the average working hours per week were very similar in 2022: 37.4 in Vienna, 37.3 in Austria, 36.1 in Budapest, and 37.6 in Hungary. Since 2013, it has decreased by approximately two and a half hours in Austria and Vienna, by two hours in Budapest, and by just over one hour in other parts of Hungary. This is likely partly due to the increasing prevalence of part-time work, which is still less common in Hungary. In 2022, 10% of employed and self-employed people in areas outside Budapest worked no more than 25 hours per week, compared to 14.8% in the Hungarian capital, 13.8% in Vienna, and 18.6% in Austria. (The 2016 Hungarian microcensus figures are omitted here, as they likely differ significantly from the SILC averages for methodological reasons.)

Figure 28. Self-reported working hours per week of employed and self-employed persons by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

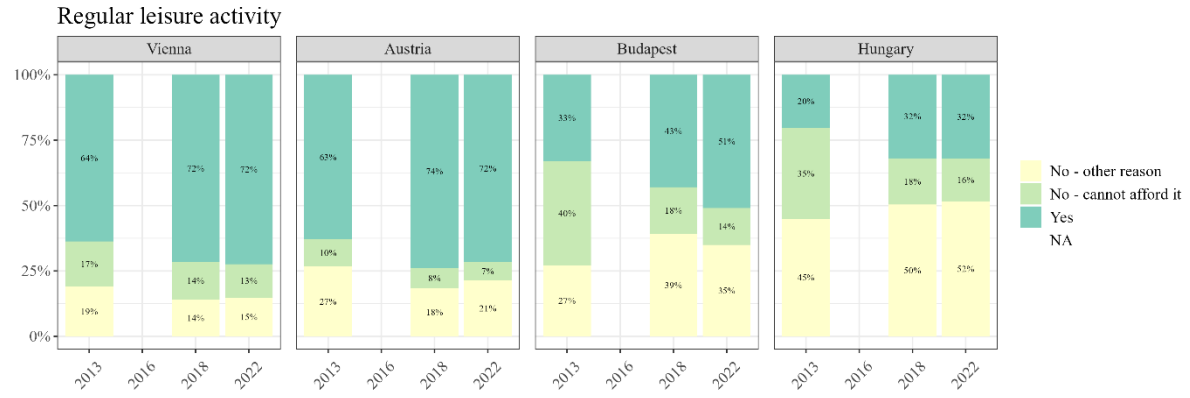
Although people in both countries spend a similar amount of time at work, there are substantial differences in how they spend their leisure time. The two variables below can be seen as "soft" indicators of relative deprivation, while also reflecting the conditions under which leisure time is spent.

In response to the question of whether they participate in any regular ***leisure activity***, 63% of respondents in Austria and 64% in Vienna answered affirmatively in 2013. In contrast, only 20% in Hungary and 33% in Budapest gave the same response. Although this share increased across all areas by 2022, the gap remains substantial: about three-quarters of people in Austria and Vienna reported engaging in regular leisure activities, compared to only around one-third in Hungary and half in Budapest.

As these activities – such as sports, going to the cinema, or attending concerts – often involve some costs (e.g. admission fees or transport), affordability can be a barrier for some. However, the proportion of people who explicitly stated that they cannot afford to participate is relatively low: 14% in Budapest and 13% in Vienna.

The share of respondents who do not take part in regular leisure activities due to other reasons remains significantly higher in Hungary and Budapest – over 50% and 35%, respectively – compared to Austria, where the figures are approximately 21% nationwide and 15% in Vienna.

Figure 29. Percentage of people by regular engagement in leisure activities (involving costs)

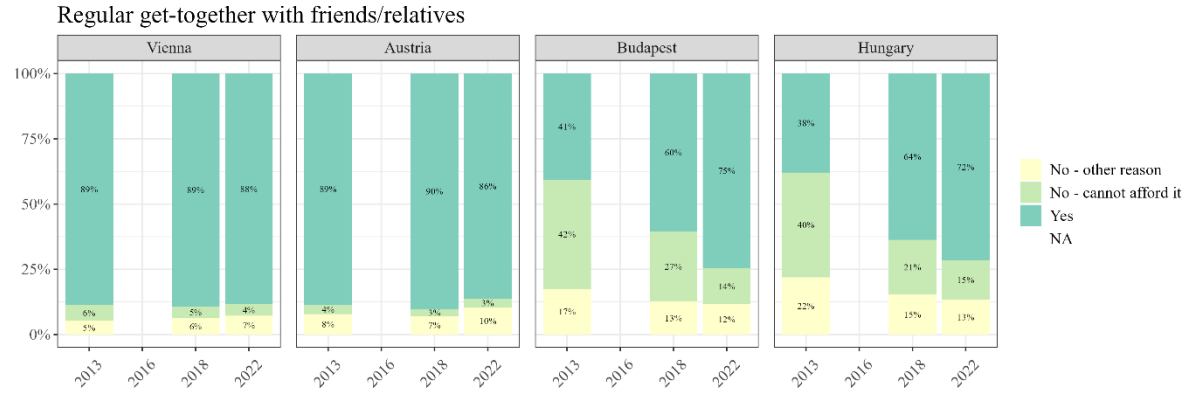


Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Another variable that may reflect individuals' engagement in leisure activities – and indirectly, their work-life balance – is the proportion of people who meet friends or relatives at least once a month to ***have a drink or a meal together***. The trend in Hungary closely mirrors the pattern observed with regular leisure activities: the share of positive responses increased significantly in both the capital and the rest of the country. Nevertheless, even in 2022, one in four respondents in Hungary answered no to this

question – a strikingly higher figure compared to Austria and Vienna, where only around 10% reported not engaging in such social interactions.

Figure 30. Percentage of people by meeting friends or relatives at least once a month to have a drink or a meal together



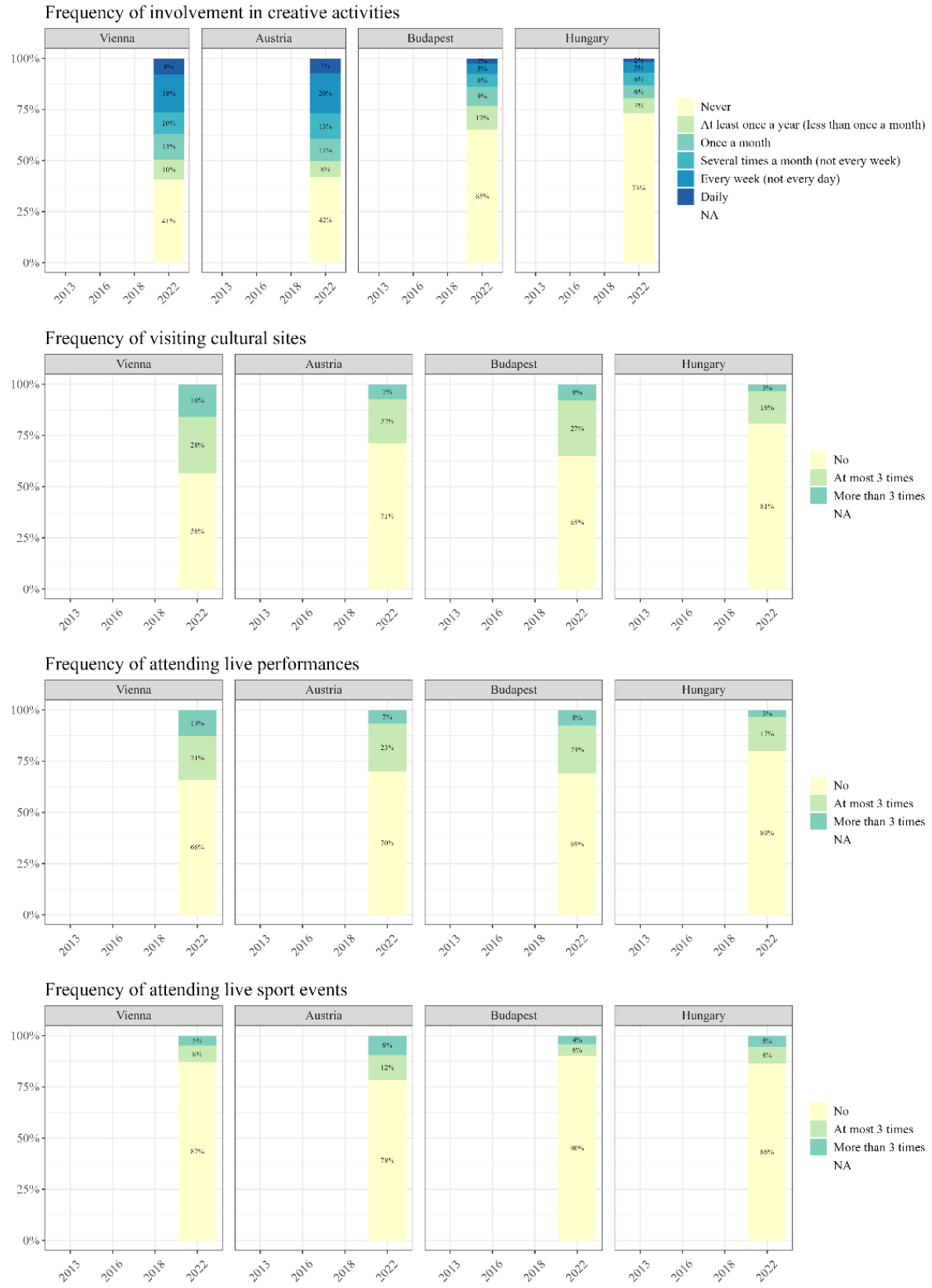
Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Another relevant aspect of this topic is the ***type of activities*** people engage in during their available free time (see Figure 31). Such activities can positively influence all dimensions of subjective well-being. In addition to contributing to relatively stable long-term satisfaction, they can enhance short-term affective well-being and are also closely linked to eudaimona. The latter refers precisely to the pleasure derived from engaging in activities we choose for their own sake – those that involve deep personal engagement and enable self-realisation. Ultimately, this can have a positive effect on self-esteem, confidence, and overall well-being.

This is especially true for the first item on the list, which measures the frequency of participation in any kind of creative activity. While there is little difference between capital cities and non-capital areas within each country, the contrast between the two countries is striking. In Vienna and the rest of Austria, 41–42% of respondents stated that they never take part in such activities. In comparison, the corresponding figures are much higher in Budapest and Hungary: 65% and 73%, respectively.

The disparity between the capital and other regions is more pronounced when it comes to attendance at cultural events or live performances, with urban residents being more active. When comparing Vienna and Budapest specifically, it is clear that people in Vienna are more active across all measured aspects.

Figure 31. Percentage of people by engaging in certain activities or visiting certain events by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

5.3 Relational factors of well-being. Social connections

As well-being and people's aspirations are always shaped by the social contexts in which they are embedded, we also consider the relational dimension in our research. This dimension refers to the social relationships that people must be able to enter into in order to meet human needs. It has objective as well as more subjective indicators.

In this subchapter we focus on the objective indicators of social connections on micro-level, including:

- Marital status
- Having a partner
- Household size
- Presence of children
- Having someone to discuss personal matters
- Access to help (material, non-material).
- Frequency of contacts with family members and friends
- Frequency of get-together with family members and friends

Marital status figures have remained relatively stable over time. Based on the representative EU-SILC survey, a clear trend is observable only in Vienna during the period under review. The most striking change there is the decline in the proportion of married individuals (from 45% to 41%) and the corresponding rise in the share of those who have never married (from 33% to 41%). In contrast, data from the rest of Austria, Hungary, and even Vienna itself show little change when comparing the figures from 2013 and 2022. Compared to Budapest, a significantly higher proportion of respondents in the Vienna sample are either single or living in a non-marital partnership (33% and 41%, respectively). At the same time, the share of widowed individuals is about five percentage points lower in Vienna.

Statistics on marital status are of limited use when assessing subjective well-being. Officially divorced or widowed respondents may still be in new and stable relationships, while the "never married" category includes not only those who are single but also individuals in informal partnerships or cohabiting relationships. It is likely that the presence of social relationships – and more specifically, a partnership – has a greater influence on levels of satisfaction and happiness than the official legal status.

The proportion of people ***in relationships*** has increased slightly everywhere compared to 2013. In Vienna, Budapest, and Hungary as a whole, this growth amounts to 1–2 percentage points, while in other parts of Austria, the overall increase is 4 percentage points. There is no significant difference between Budapest and Vienna: according to the

representative EU-SILC sample, 56% of people in Budapest and 55% in Vienna are in a relationship.

Figure 32. Percentage of people by marital status (above) and by living with a partner (below) by years

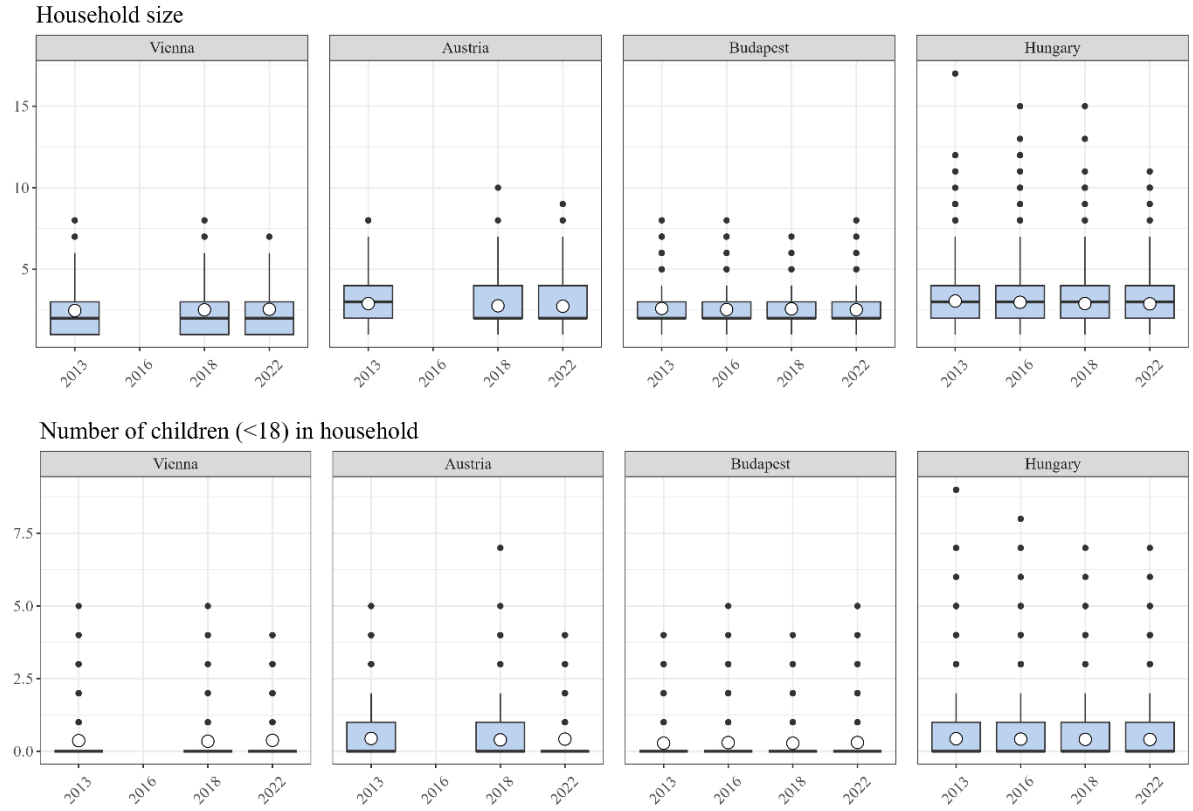
Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

The average ***household size*** in Vienna and Budapest was almost identical in 2022 (2.54 and 2.52 respectively). However, this reflects opposing trends: in Vienna, the figure increased from 2.47, while in Budapest it declined from 2.60. The divergence can be attributed to several structural and demographic factors. In Vienna, the increase is may be driven by immigration and family reunification. Additionally, cultural patterns among immigrant communities may also contribute to younger adults remaining longer in the parental home.

In contrast, Budapest's decline in household size may reflect population ageing, a growing number of single-person households (especially among the elderly), low fertility rates, and youth outmigration – either abroad or to suburban areas. It is worth noting that the average household size outside the capital is slightly higher in both Austria and Hungary (2.73 and 2.88 respectively).

A very pattern can be observed in the average ***number of children*** under 18 per household: 0.38 in Vienna and 0.30 in Budapest, compared to 0.42 and 0.41 respectively in areas outside the capitals.

Figure 33. Household size (above) and number of children (0-18 years old) in the household (below) by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

The ability to ***discuss personal matters*** and ***receive support*** from others is a widely used indicator in social surveys. In earlier rounds the SILC survey employed a single item to capture this dimension; subsequently, this was divided into two distinct components: material and immaterial support. For the sake of comparability, the figure below aggregates these two types of support. It is important to note that these indicators are not primarily designed to measure the quality or quantity of social relationships. Instead, they serve to identify whether individuals have access to a minimally sufficient level of social contact. The absence of such support may not only exacerbate feelings of loneliness but can also indicate a heightened risk of extreme marginalization, vulnerability, and social exclusion.

In both countries under examination, a consistently high proportion of respondents – between 95% and 97% – reported having someone with whom they can discuss personal

issues. A similarly high level of support was observed with regard to assistance more broadly. However, in Austria and particularly in Vienna, the proportion of individuals reporting no access to any form of help has risen notably: from 3% to 8% at the national level, and from 5% to 9% in the capital. In contrast, the 2022 data from Budapest and Hungary indicate a lower rate – around 5% – suggesting a favourable development in the availability of social support.

Figure 34. Percentage of people by the ability to discuss personal matters with (above) and to get material or immaterial help from another person (below) by years

Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

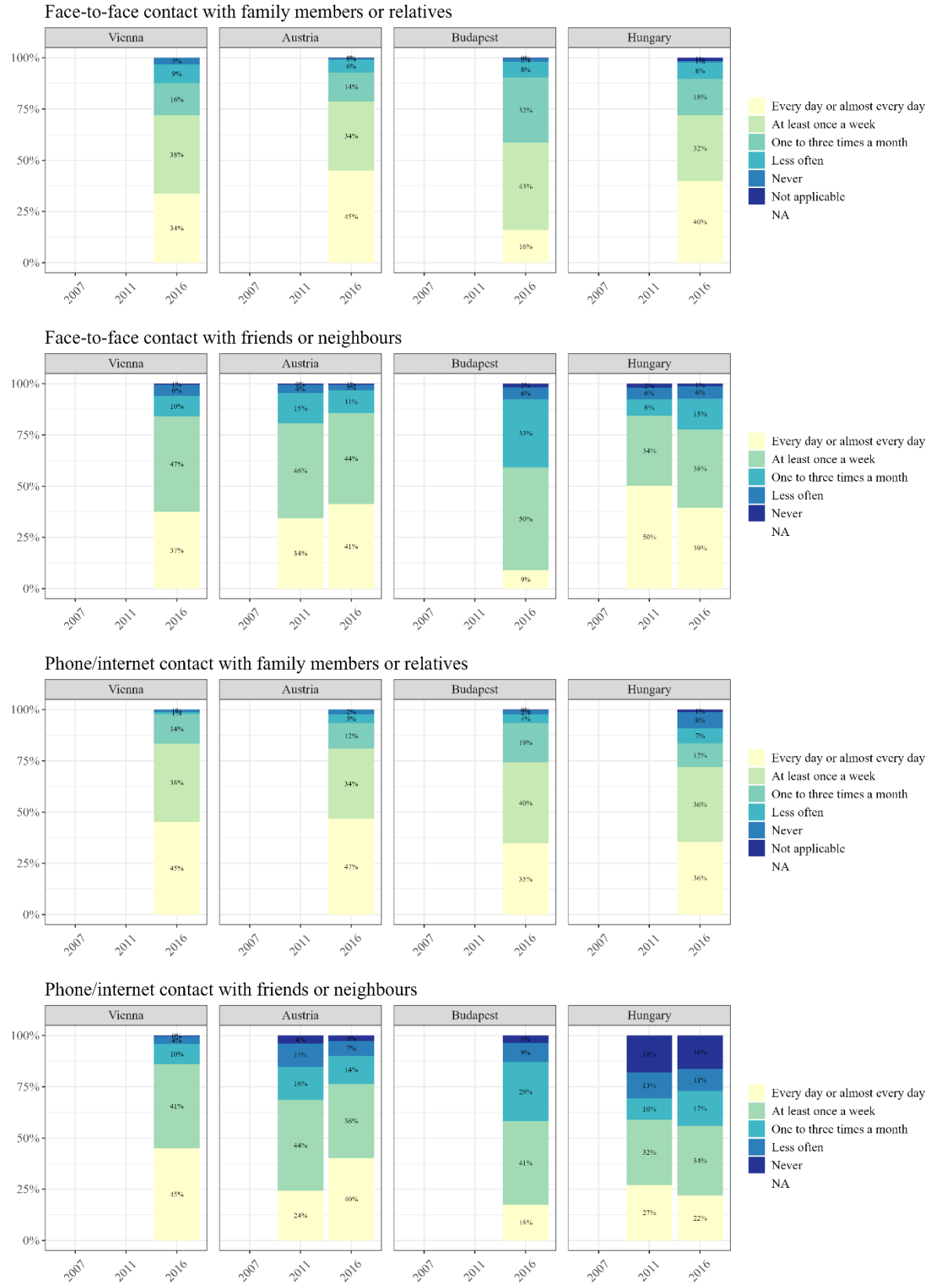
The intensity of ***contact with relatives and friends*** is a topic that could have been elaborated on in Chapter 7.5, under the fifth dimension of social cohesion. In fact, this is precisely the point where the concepts of well-being and social cohesion intersect.

The following descriptive analysis is primarily based on the EU-SILC database (Figure 35), which is more recent and offers a larger sample size. However, reference to the EQLS is also important (Figure 35) in order to validate the surprisingly large differences observed between the two capitals. It is worth noting that the EQLS coded responses to in-person and online contacts in separate variables, whereas the EU-SILC did not make this distinction – thus, the responses may refer to either or both types of contacts.

Figure 35. Percentage of people by the frequency of having contact (first and second) or meeting with their family members or friends (third and fourth) by years

Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Figure 36. Percentage of people by the frequency of having face-to-face (first and second) or phone/internet contact with their family members, friends or neighbours (third and fourth)



Source of data: EQLS. Own figure. (Non-respondents are not displayed)

Among respondents who provided valid answers, exactly four-fifths of people in Vienna reported that they have contact with their family and friends at least once a week. In contrast, this was true for only 58% and 48% of respondents in Budapest, respectively. This difference is also reflected in the EQLS data: in 2016, the proportion of people engaging in face-to-face contact at least once a week stood at 72% with family members and 84% with friends or neighbours in Vienna, compared to just 59% in both categories in Budapest. In both surveys, the Hungarian national figures are notably closer to the Viennese and Austrian averages than the capital city data.

It is worth noting that the gap between the two capitals is smaller when it comes to weekly online or phone contact; for instance, in 2016, Vienna had an advantage of "only" 8 percentage points over Budapest in maintaining regular contact with relatives through these means.

As for in-person meetings, in 2022, 36% of respondents in Vienna and 35% in Budapest said they met with relatives at least once a week – figures that are 10 to 20 percentage points lower than those observed in areas outside the capitals.

While this indicator appears relatively balanced between the two cities, the intensity of contact with friends is again significantly higher in Vienna, where nearly half of respondents meet with friends at least weekly. In Budapest, by contrast, fewer than one in four respondents reported the same.

These are striking differences, the causes of which cannot be fully explained based on the currently available data. However, exploring these disparities will be an important task for the next phases of the WELLCOH project.

5.4 Summary. Key patterns of objective well-being factors: Vienna vs. Budapest

To sum up, the financial situation in Vienna and Budapest has converged considerably over the past decade, with Budapest's income levels growing at a faster rate.

While Vienna still maintains a clear lead in both *personal and household incomes*, the income gap has narrowed. Material deprivation overall remains lower in Vienna than in Budapest. Despite this, Vienna has a higher share of people living below the national poverty threshold due to Austria's higher median income. Low work intensity has fallen in both capitals, especially in Budapest. At the same time, Viennese residents are more likely to carry debt and report heavier repayment burdens than those in Budapest.

Based on the EU-SILC database *employment* among the working-age population has slightly increased in both cities. Budapest, although more advanced than the Hungarian average, still lags behind Vienna in terms of the prevalence of knowledge-based

employment. Vienna's occupational structure is more strongly oriented toward high-skill, service-sector jobs, while Budapest retains a more mixed composition, with a greater presence of mid- and lower-skilled roles.

Regarding *housing*, Budapest residents report more internal problems like damp and structural problems, while Viennese respondents more often cite external disturbances such as noise and crime.

Health perceptions are generally more positive in Vienna, with more residents rating their health as very good and fewer reporting moderate limitations. However, severe health-related limitations are similarly reported in both capitals.

In terms of *work-life balance* and cultural engagement, Vienna stands out: a significantly higher share of its population participates in regular leisure and creative activities, and meets socially more often, compared to Budapest. This points to more accessible and active lifestyles in Vienna, possibly influenced by both affordability and cultural infrastructure.

Social relationship indicators show fewer differences. Both cities report high levels of perceived emotional and practical support. While marital status trends differ – Vienna having more people who have never married and fewer widowed individuals – the overall share of people in relationships is nearly identical. A significant difference is that Viennese respondents report much higher levels of weekly interaction with both family and friends.

Overall, while Vienna continues to lead in terms of income, leisure, and health, Budapest is catching up in employment and some other conditions, with some strengths in social support.

6. Subjective well-being

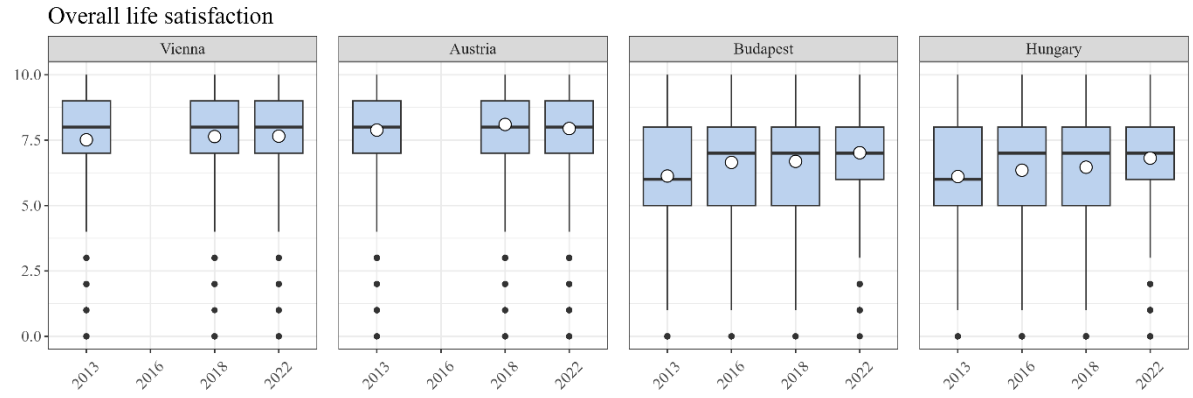
6.1 Cognitive dimension

6.1.1 Overall life satisfaction

Overall life satisfaction is the most commonly used indicator for assessing subjective well-being in large-scale surveys. According to the representative EU-SILC survey, Austria has consistently reported higher levels of life satisfaction than Hungary since the indicator has been measured. However, the gap between the two countries has been gradually narrowing. Measured on a scale from 0 to 10, the national average in Hungary rose from 6.1 in 2013 to 6.9 in 2022, while Austria's average increased slightly from 7.8 to 7.9 over the same period.

This narrowing of the satisfaction gap is also evident at the capital city level. In 2013, the difference in average life satisfaction between Vienna and Budapest stood at +1.38 points in favour of Vienna (7.51 vs. 6.13). By 2022, this advantage had decreased to just 0.63 points, reflecting the national trends noted above. In other words, while overall life satisfaction has remained stable at a high level in Austria and Vienna, it has been slowly but steadily increasing in Hungary and Budapest from a comparatively lower base level.

Figure 37. Overall life satisfaction by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

It is important to highlight here a methodological limitation of measuring subjective well-being, which constrains the interpretative validity of any such comparative analysis. Closed-ended scales, by their nature, tend to be slightly biased towards the upper and lower ends of the scale. As a result, it is inherently more difficult to register an equivalent degree of improvement when starting from a high baseline compared to a moderate or low one. For instance, even if someone becomes significantly more satisfied with their life, an initial score of 8 can increase by no more than two points, while an individual starting

from a score of 4 could realistically report a perceived improvement to 7. Respondents may associate a score of 10 with perfection, and such, they may deliberately avoid selecting this value, arguing that a perfect life does not exist. In such cases, a score of 9 may function as a de facto maximum on the scale.

Regarding the capital–non-capital divide, cross-sectional survey data reveal relatively small differences overall. However, the direction of the discrepancy varies. In Austria, general life satisfaction among residents of Vienna (7.65 in 2022) is slightly lower than in other parts of the country (7.95). By contrast, in Hungary, residents of Budapest report slightly higher satisfaction levels than those in other regions (7.02 compared to 6.81).

6.1.2 Domain satisfaction

As discussed in greater detail in Chapter 3, domain satisfaction scores refer to individuals' satisfaction with specific aspects of their lives. While overall life satisfaction is measured consistently across nearly all international surveys, questions pertaining to domain satisfaction are included only sporadically. This explains why the data presented in the following figures are often incomplete.

Satisfaction with the household's financial situation is the one domain consistently included across all surveys examined. In Vienna, satisfaction in this domain has been consistently around 0.5 points lower than in other parts of Austria. This is particularly notable given that there is minimal difference in average total personal income – taking into account all income sources and benefits, adjusted for purchasing power parity (PPP) and inflation, and standardised to 2022 local currency units (see Figure 23) – between the capital and the rest of the country (EUR 26,819 vs. EUR 27,812, respectively).

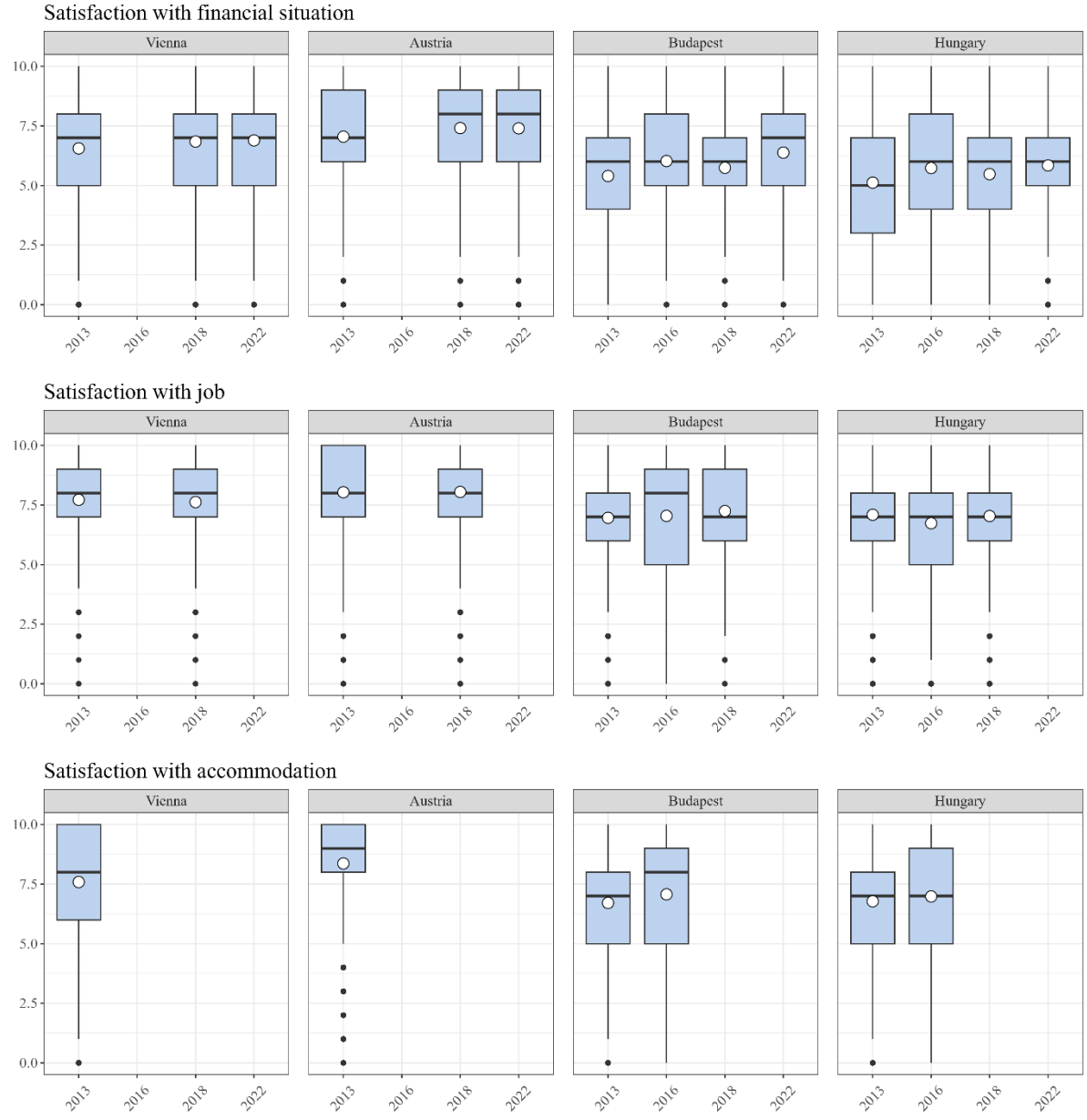
In Hungary, the opposite pattern emerges: residents of Budapest generally report satisfaction with income that is 0.3–0.5 points higher than the national average. This subjective difference aligns with objective income indicators as well, with average total personal income values of EUR 15,654 in Budapest and EUR 11,500 in the rest of the country.

The catching-up of PPP-adjusted incomes in Budapest, as discussed in Chapter 5.2.1, is also reflected in changes in satisfaction with financial situation. The satisfaction gap between Vienna and Budapest has narrowed from 1.2 points to 0.5 over the period examined (6.9 in Vienna vs. 6.4 in Budapest in 2022). A similar trend can be observed when comparing areas outside the capitals, though the disparity remains more pronounced in this case (7.4 in Austria vs. 5.8 in Hungary).

Changes in ***job satisfaction*** have been smaller in magnitude, but differences still favour Vienna and Austria. In 2018, satisfaction levels in these areas were higher by 0.4 and 1.0 points, respectively.

As for ***satisfaction with housing conditions***, in 2013 respondents in Vienna and Austria were more satisfied by 0.9 and 1.6 points, respectively. However, this question has not appeared in EU-SILC questionnaires since then.

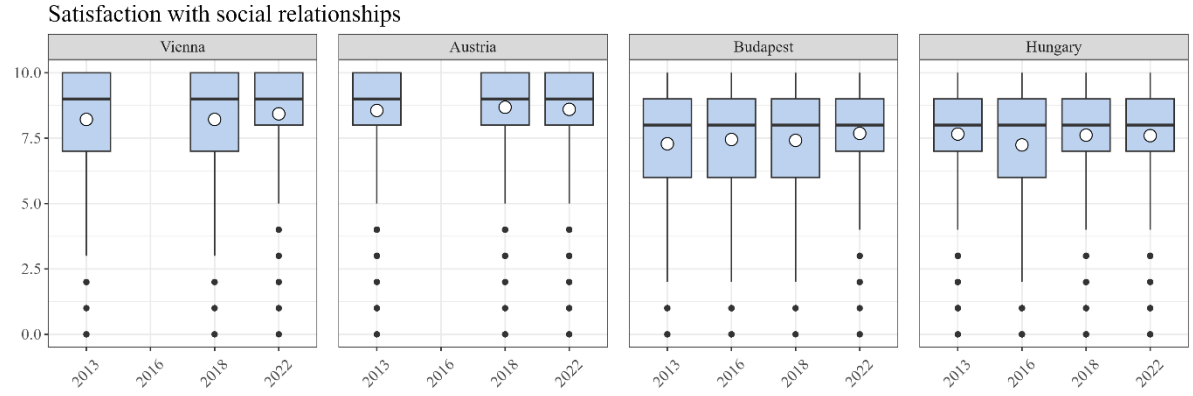
Figure 38. Satisfaction with objective (individual, material) factors of well-being by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Satisfaction with personal relationships typically receives the highest average scores among the cognitive dimensions of subjective well-being, and it appears to be relatively stable over time, showing only minimal fluctuations. Nonetheless, an SWB gap is still observable in this domain: for instance, in 2022, average satisfaction scores were 8.4 in Vienna and 8.7 in Austria, compared to 7.7 in Budapest and 7.6 in Hungary.

Figure 39. Satisfaction with personal relationships of well-being by years



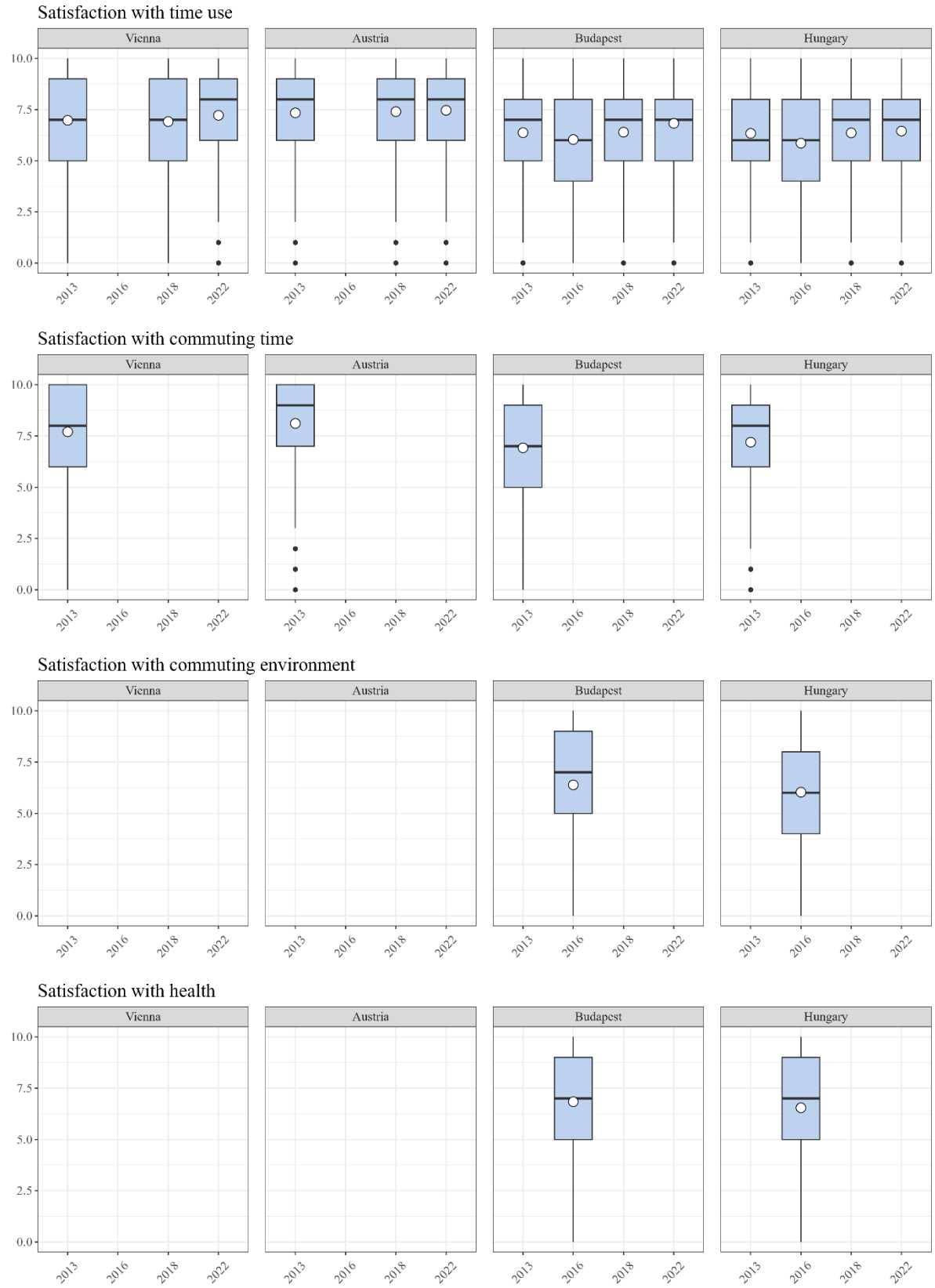
Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Satisfaction with the immaterial aspects of life receives noticeably less emphasis in the EU-SILC survey. Among these, only satisfaction with available free time is included with any regularity. Compared to previous years, respondents reported slightly lower levels of satisfaction when asked how content they were, overall, with the time they could devote to activities they enjoy. After household income, this is the aspect of life with which people report the lowest levels of satisfaction.

The gap in time use satisfaction between the two countries is, unsurprisingly, consistent with the trends observed in the previously discussed variables. What is more intriguing, however, is the opposing pattern observed in the capital–non-capital dichotomy. One might expect that urban lifestyles – often perceived as more stressful – would result in less free time and thus lower satisfaction. This assumption holds true for Vienna, where average satisfaction is 0.3 points lower than in other parts of Austria. However, Hungarian respondents expressed the opposite: in Budapest, satisfaction with leisure time is 0.4 points higher, on average, than among those living outside the capital.

This theme also relates to commuting, as time spent in traffic directly reduces individuals' available free time. Although comparable data are only available for 2013, they clearly show that commuting is perceived as more burdensome by capital city residents. Satisfaction with commuting was lowest among respondents in Budapest (6.9) and highest among those in Austria (8.1).

Figure 40. Satisfaction with objective (individual, immaterial) factors of well-being by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Satisfaction with the commuting environment and with health was measured only in the 2016 Hungarian microcensus, and therefore no comparable data are available for cross-national analysis.

6.1.3 Perceptions of external environment

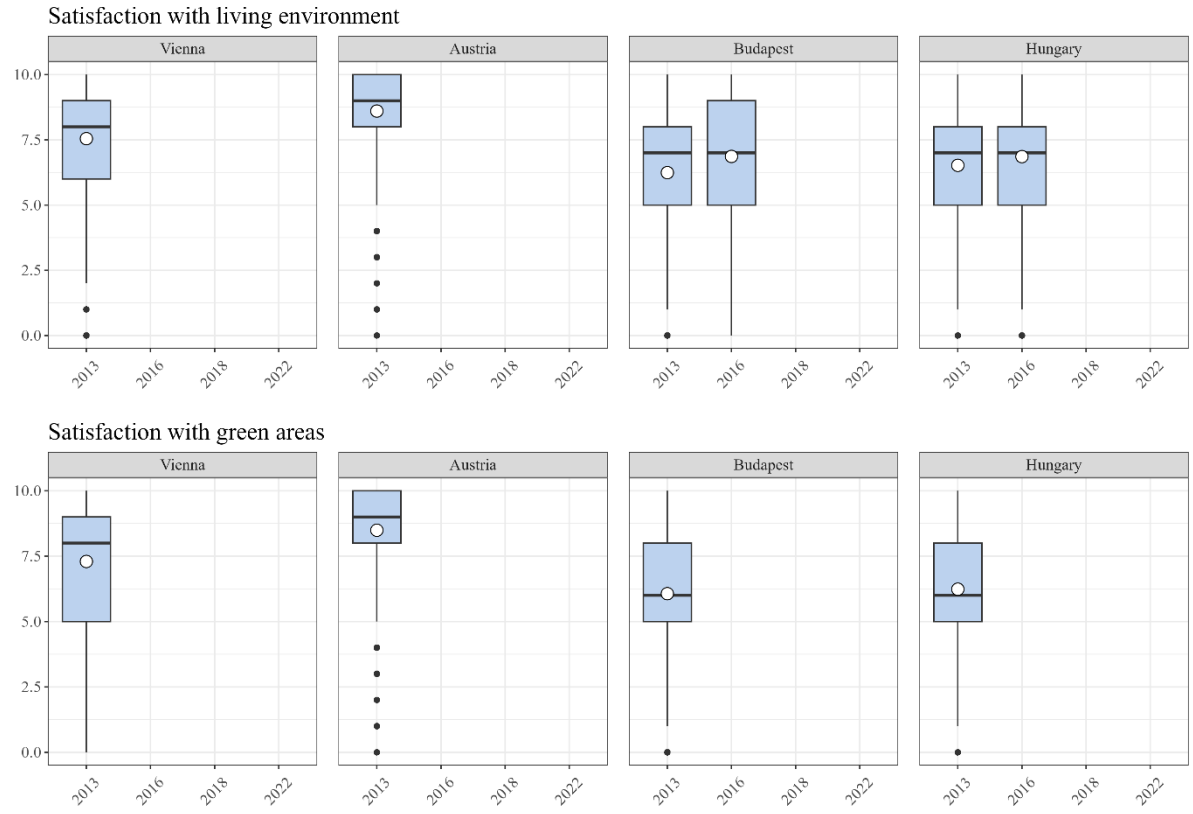
As discussed in Sections 3.2.3 and 5.2, this study does not primarily focus on satisfaction with external factors. These variables relate to broader phenomena – such as district, city, or country characteristics – that are not directly connected to individuals or their personal relationships. Although these factors are undoubtedly important, the scope of this report does not allow for a comprehensive examination of all possible influences. However, certain external elements are addressed in this chapter, interpreted through the subjective experiences of residents. The data presented are based on sources that enable comparisons between the two cities.

In the 2013 wave of the EU-SILC survey, only two relevant questions were included: ***satisfaction with the living environment*** and ***satisfaction with green areas***. For both satisfaction with the living environment and satisfaction with green areas, the observed gaps are greater than for any of the previously reviewed indicators – amounting to +2.0 and +2.3 points in favour of Austria, and +1.3 and +1.2 points in favour of Vienna over Budapest, respectively (Figure 41).

In terms of ***public safety***, Austria clearly holds a more favourable position: compared to Budapest and Hungary (20% and 17% respectively), more than twice as many respondents in Vienna and other parts of Austria stated that they feel very safe when walking alone in the dark (34% and 45% respectively) (Figure 42). This appears somewhat contradictory to what is described in Section 5.2.3, as respondents in Vienna reported slightly higher levels of perceived vandalism and crime in their neighbourhoods in the same year. An attempt will be made to resolve this contradiction in the later stages of the project, for example through narrative interviews and focus groups.

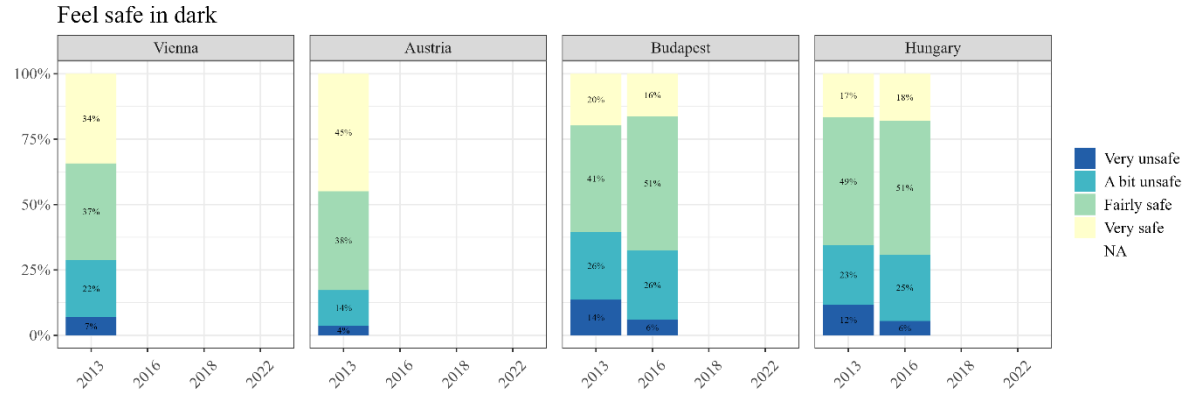
This question also appears in the Quality of Life in European Cities Survey, although as a categorical variable. The data show a similar pattern: residents of Vienna clearly perceive public safety in their city and neighbourhood more favourably than those in Budapest (77% and 80% in Vienna either strongly or somewhat agreed with this statement, compared to 59% and 72% in Budapest) (Figure 43).

Figure 41. Satisfaction with living environment and green areas by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Figure 42. Perceived public safety by years



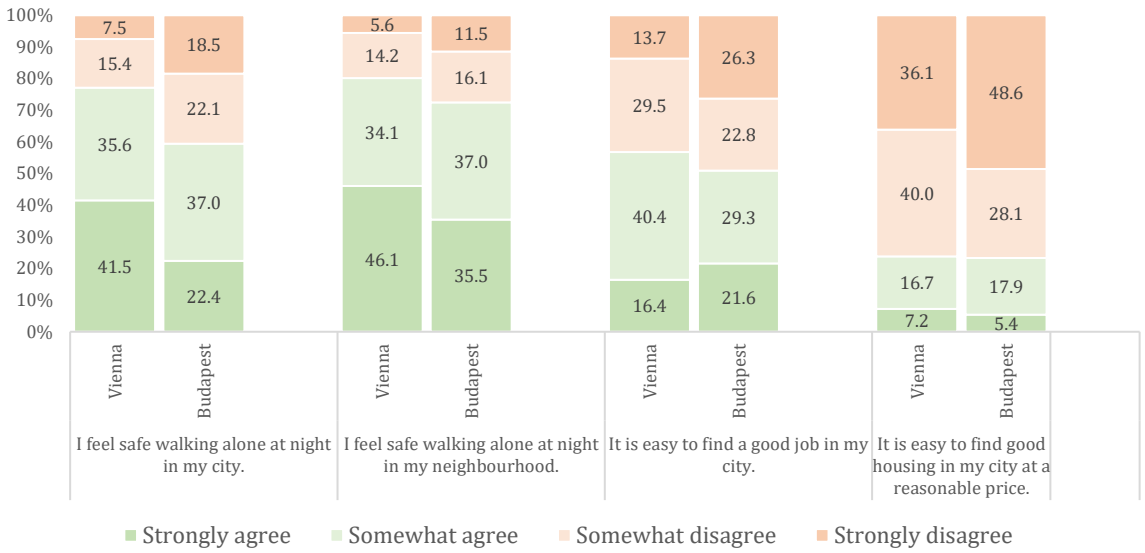
Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Finding suitable employment presents a greater overall challenge for people in Budapest, although opinions are highly polarised. For one fifth of respondents, it is an easy task, while for a quarter it is particularly difficult.

An even more problematic area is the ***access to affordable housing***. In both cities, three-quarters of respondents consider this to be a difficult task; however, the proportion of

those who are especially critical of the situation is 36% in Vienna, compared to 49% in Budapest. The relatively more favourable figure in Vienna may be partly due to the city's public rental housing system, which offers rental opportunities under more favourable conditions than market rates for many people.

Figure 43. Share of people by their experiences on public safety and the opportunity of finding appropriate employment and housing in the city by 2023



Source of data: Quality of Life in European Cities Survey. Own figure. (Non-respondents are not displayed)

The Quality of Life in European Cities Survey provides a detailed exploration of ***further external factors*** in well-being. Although the survey employs a different methodological approach – meaning the results are not directly comparable with those of other surveys – the distribution of responses allows for broadly similar conclusions to be drawn. The results, weighted by population and excluding non-responses, are summarised in Figures 43-45.

There is only one area in which no significant difference is observed between the two cities: satisfaction with sports facilities. This is likely related to the substantial investment made by the Hungarian government over the past 15 years in developing both professional and recreational sports infrastructure. The positive impact of this targeted support is clearly reflected in the data.

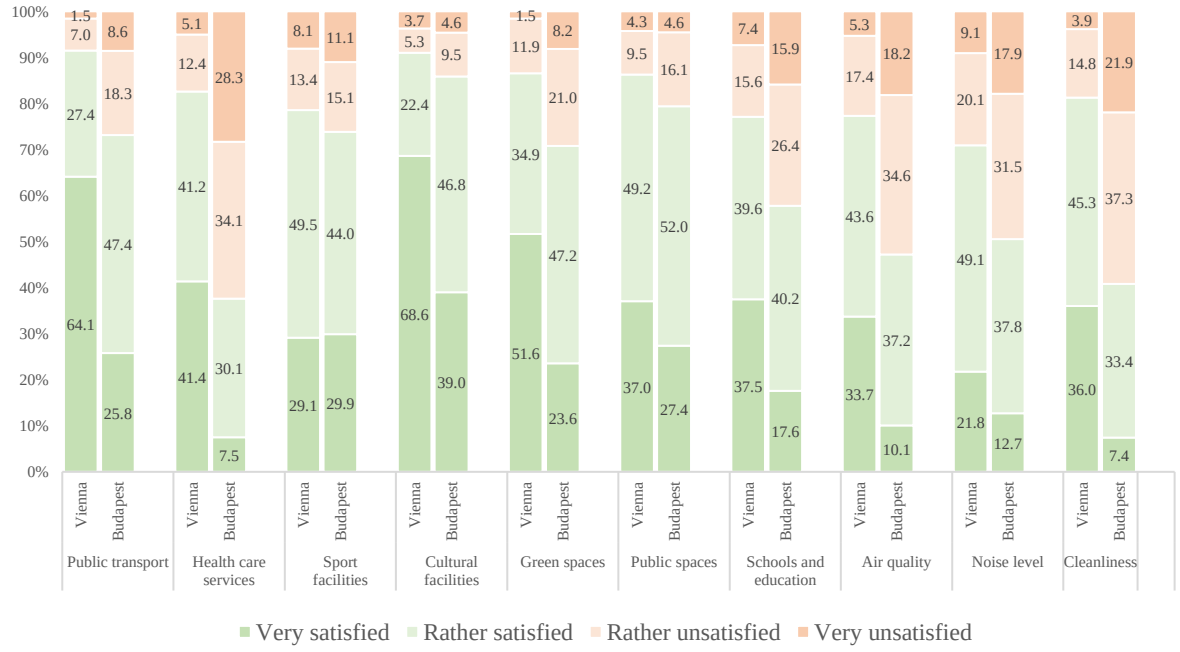
When combining the responses “very satisfied” and “rather satisfied,” the difference between the two cities remains relatively small in terms of satisfaction with cultural facilities – such as theatres and museums (91% in Vienna, 86% in Budapest) – as well as public spaces, including pedestrian zones and markets (86% and 81%, respectively).

However, in all other domains, Viennese residents consistently report a more positive perception of external factors of well-being.

For example, satisfaction with the healthcare system shows a stark contrast: 41% of Vienna's residents reported being "very satisfied" and a further 41% "rather satisfied," compared to just 7.5% and 30% in Budapest. A similarly pronounced gap is evident in perceptions of cleanliness, with 80% of Vienna's population expressing overall satisfaction, versus only 4 out of 10 residents in the Hungarian capital.

In Vienna, the most frequently cited problems relate to noise levels and shortcomings in the education system, while green spaces, cultural infrastructure, and public transport are the most positively rated aspects. In Budapest, by contrast, healthcare dissatisfaction stands out as the most prominent issue, followed by concerns about cleanliness and air quality.

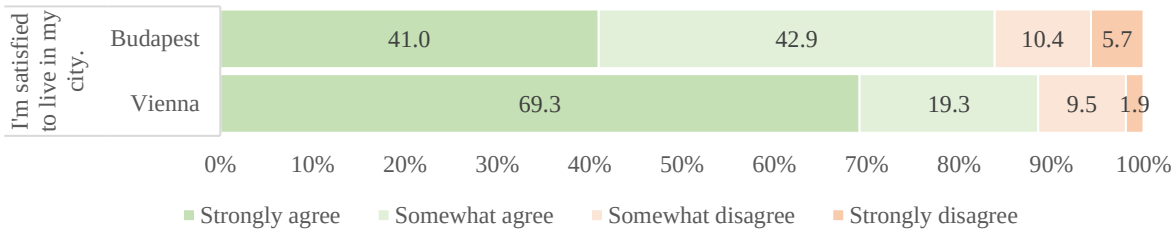
Figure 44. Share of people by their satisfaction with some external factors by 2023



Source of data: Quality of Life in European Cities Survey. Own figure. (Non-respondents are not displayed)

When aggregating all positive responses, overall ***satisfaction with the city*** as an external environment is broadly comparable: nearly 89% of Viennese and almost 84% of Budapest residents report a generally favourable view. However, a key distinction lies in the intensity of agreement – a clear majority of Viennese respondents strongly agree with the positive assessment, whereas in Budapest the relative majority selected only "rather agree" (see Figure 45).

Figure 45. Share of people by their satisfaction with living in the city by 2023



Source of data: Quality of Life in European Cities Survey. Own figure. (Non-respondents are not displayed)

6.2 Affective dimension

Some experts consider affective indicators to be of limited value in quantitative analysis, arguing that they are unstable, prone to rapid change, and typically reference much shorter and more specific time intervals than cognitive measures. Nevertheless, mapping the emotional state of the population remains a recurring element in surveys. While happiness often receives the most attention, it is important to note that the affective dimension of subjective well-being encompasses a range of questions addressing both positive and negative emotions.

Since emotional intensity cannot be meaningfully measured on, for example, a 0–10 scale, these questions attempt to capture affective well-being through the frequency with which certain emotions are experienced. In EU-SILC, two positive and three negative affective indicators have been surveyed in a more or less consistent manner. For the presentation of patterns in the data, we aggregate responses for "all of the time" and "most of the time" below.

Positive emotions. What proportion of the population reported feeling happy always or most of the time during the past four weeks? In Austria, the trend is similar to that observed in satisfaction indicators: a modest increase until 2018, followed by a slight decline (2013: 72%, 2018: 78%, 2022: 76%). Data for Vienna mirror this pattern, albeit with values around 10 percentage points lower (62%, 67%, and 65%, respectively). A similar distribution emerges in responses to the question on feeling calm and peaceful. In 2022, for instance, 67% of Viennese residents reported feeling this way frequently, compared to 77% of those living outside the capital.

In contrast, in Hungary, the difference between Budapest and other settlements has generally been small – around 2–3 percentage points. Moreover, apart from the baseline year, Budapest has consistently outperformed the rest of the country in this regard. The trend over time is clearly positive. (The only notable interruption, also seen with other affective variables, occurs in the 2016 microcensus. The reasons for this dip remain unclear yet.)

In 2013, 54% of Budapest residents and 56% of those living elsewhere reported feeling happy always or most of the time. By 2022, these figures had risen to 65% and 62%, respectively. A similar upward trend is visible in responses to feeling calm and peaceful, with minimal difference between the capitals and non-capital areas (2018: 67% in Budapest, 66% elsewhere).

These findings confirm that a clear SWB gap exists between the two countries in this dimension as well. However, there is no meaningful difference between the residents of Budapest and Vienna in terms of either reported happiness or calmness – both cities showing identical values in 2022 (65% and 67%, respectively).

Figure 46. Percentage of people by the frequency of positive feelings and emotions during the last four weeks by years

Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

In the case of ***negative emotions***, it is important to note that the meaning of the chart colours is inverted. Before reviewing the graphs, two methodological issues warrant attention.

Firstly, the 2016 Hungarian microcensus presents a worse picture of the population's affective well-being than the EU-SILC surveys across all variables. While the descriptive

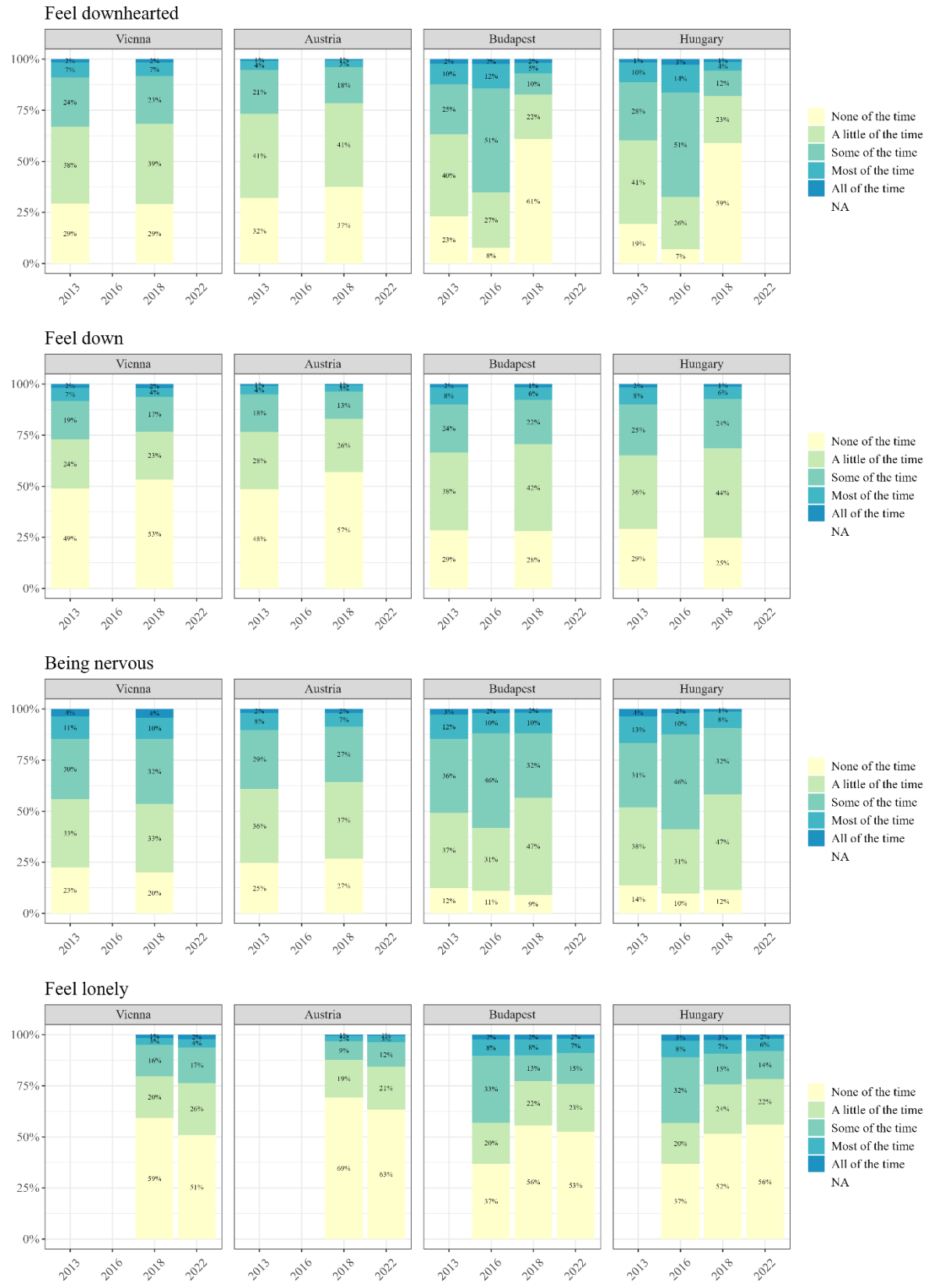
analysis alone cannot provide a definitive explanation for this, one noteworthy factor should be considered. During the microcensus, the rate of refusal was relatively low (2–3%), whereas in the 2013 and 2018 SILC waves, the non-response rate was typically around 13–18%, and in 2022, this figure exceeded 33% for certain questions, such as those on happiness or loneliness. It is plausible that respondents in a more frustrated, impatient, or negative emotional state were more likely to skip these questions, leading to their underrepresentation in the final results. While this remains a hypothesis, the project intends to explore this phenomenon further in a subsequent phase.

The clearest illustration of this issue can be found in the "feeling downhearted or depressed" variable, which is problematic in several respects in the Hungarian dataset. Not only does the 2016 microcensus yield markedly worse results (as noted above), but the unexpectedly positive 2018 results also require explanation. This discrepancy may be related to a change in the wording of the question in the Hungarian version of the questionnaire.

The PW080 variable was translated in the 2013 and 2016 surveys as: *"Az ezt megelőző négy hét során milyen gyakran érezte magát csüggedtnek és levertnek?"* This corresponds closely to the original English version, though it's worth noting that the Hungarian word "levert" carries a less negative connotation than "depressed" in English. A more significant change occurred in 2018, when the question linked to the same PW080 code was translated as: *"Az ezt megelőző négy hét során milyen gyakran érezte reménytelennek a helyzetét?"* This could be translated as: *"During the past four weeks, how often did you feel your situation was hopeless?"* While it aims to capture a similar experience, the concept of hopelessness implies not only a negative emotional state in the past but also a projected sense of despair about the future, which represents a marked shift in meaning. Due to these methodological concerns, the Hungarian values in the upper panel of Figure 47 are excluded from further interpretation.

The main conclusions echo the patterns observed in earlier sections. Negative emotions are least common among residents outside Vienna, and most prevalent in Hungary, outside of Budapest. According to the most recent data, the share of respondents reporting that they never experienced feeling downhearted, nervous, or lonely was 57%, 27%, and 63% in Austria, compared to just 25%, 12%, and 56% in Hungary. The greatest disparity is in the frequency of downhearted or melancholic feelings, while nervousness appears to be experienced at similar levels on both sides of the border.

Figure 47. Percentage of people by the frequency of negative feelings and emotions during the last four weeks by years *(About the methodological problems with the "feel downhearted" variable see the paragraphs above)*



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

The distribution of responses in Budapest largely mirrors national trends in Hungary. Overall, residents of Vienna report slightly more frequent experiences of negative emotions than the Austrian average, but still less frequently than those in Budapest. Interestingly, the proportion of people who experience negative feelings always or most of the time is roughly the same in both cities. However, the “none of the time” option was selected by twice as many people in Vienna as in Budapest.

In terms of temporal trends, between 2013 and 2018, most indicators show improvement, except for a slight increase in nervousness in Hungary. For 2022, only loneliness data are available.

6.3 Eudaimonic dimension

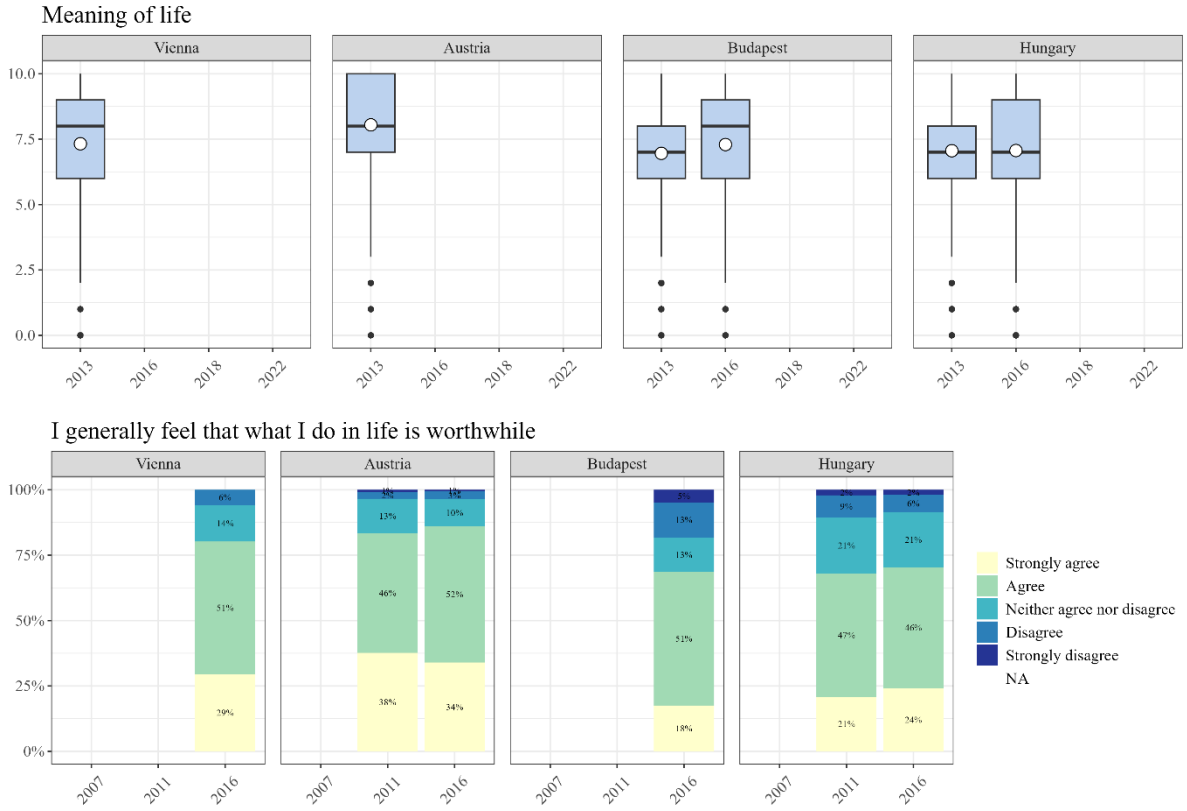
As mentioned earlier (see Chapter 2.3 and 3.2.3) eudaimonia refers to a form of psychological well-being centred on meaning, purpose, self-realization, and personal autonomy. It is often contrasted with hedonic well-being, which emphasizes satisfaction and the avoidance of discomfort. Although eudaimonia could capture deeper meaning of SWB that would be crucial for understanding human flourishing, it requires longer, more nuanced questions, often involving reflective or philosophical constructs that are difficult to operationalise in large-scale surveys.

Little wonder that the EU-SILC included only two eudaimonic questions in 2013, and these were later removed from the questionnaire. The EQLS in 2011 and 2016 provides somewhat more detailed insight into this topic, and the following charts present the findings of the two surveys.

Interestingly, the question "People’s feeling that things they do are ***meaningful*** / worthwhile" was measured using a ratio scale in the EU-SILC, while the EQLS used an ordinal scale. This indicator of eudaimonic well-being was by far the highest in Austria (8.05), while the average scores of residents in Vienna, Budapest, and other parts of Hungary were relatively close to each other (7.3, 7.0, and 7.1 respectively).

Similar conclusions can be drawn from the Hungarian microcensus, although at that time Budapest residents rated this slightly higher. According to the EQLS, the proportion of people who fully or somewhat agreed with the statement that their activities are useful and meaningful was 80% in Vienna, 86% in Austria, 69% in Budapest, and 70% in other regions of Hungary in 2016.

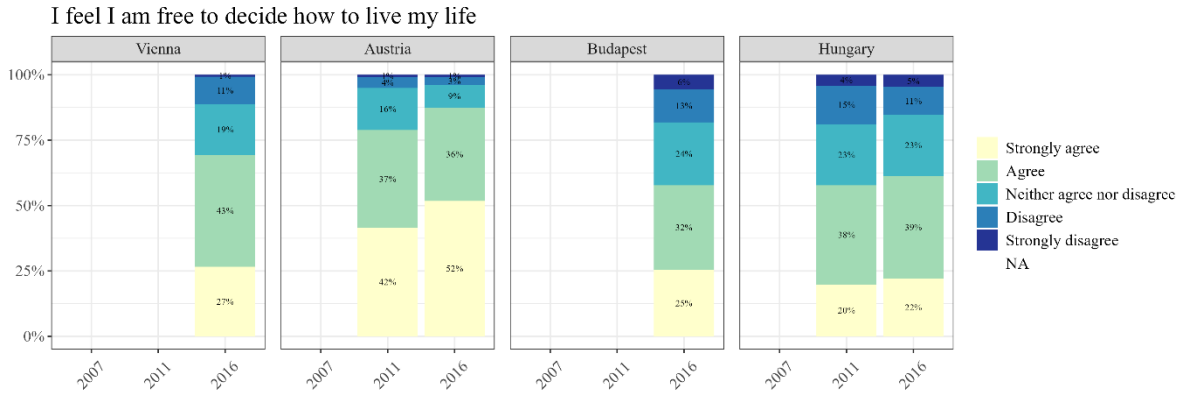
Figure 48. People's feeling that things they do are meaningful by years (above: 0 = not worthwhile at all, 10 = completely worthwhile).



Source of data: EU-SILC, Hungarian microcensus (above); EQLS (below). Own figure. (Non-respondents are not displayed)

With regard to other indicators of eudaimonic well-being, the gap between the two countries is even wider. For instance, when asked whether they ***feel free*** to decide how to live their lives, 26 percentage points more people answered affirmatively in Austria, and 13 percentage points more in Vienna, compared to Hungary and Budapest.

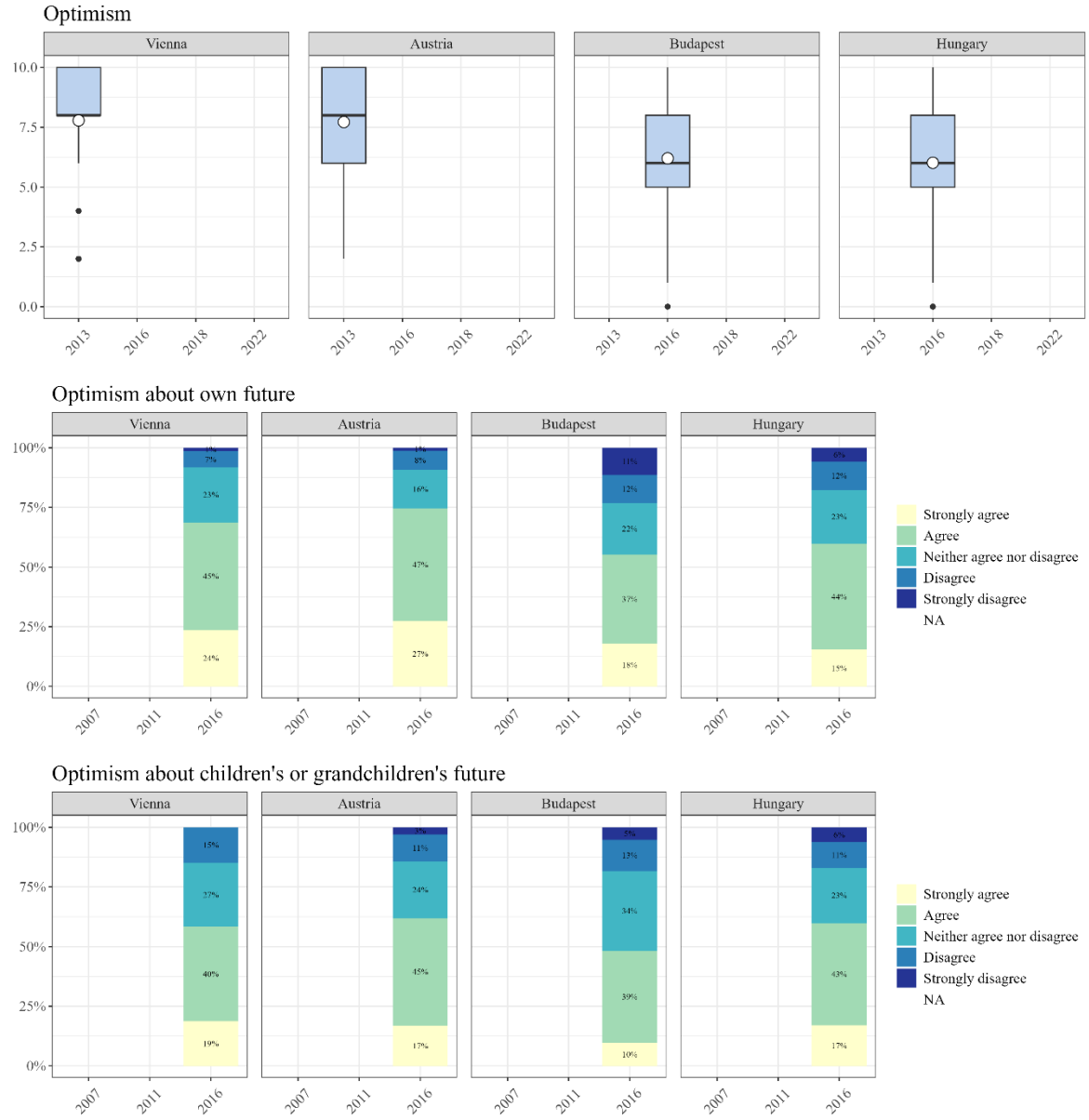
Figure 49. Percentage of people who feel they are free to choose how to live life by years



Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

In addition, in 2016 significantly more people in Austria and Vienna viewed their lives very or rather ***optimistic*** (74% and 69%) than in Hungary and Budapest (59% and 55%). It is interesting to note that residents of the capitals appeared more pessimistic both about their own future and about the future of their children and grandchildren than those living in other parts of the countries. In the EU-SILC, data about optimism is only available from 2013 and only for Austria (with average values above 7.5 on a 0–10 scale), but the 2016 Hungarian microcensus questionnaire also included such a question (with scores of 6.2 in Budapest and 6.0 in Hungary overall).

Figure 50. People's optimism about their future by years (above: 0 = not optimistic at all, 10 = absolutely optimistic).



Source of data: EU-SILC, Hungarian microcensus (above); EQLS (below). Own figure. (Non-respondents are not displayed)

6.4 Summary. Key patterns of subjective well-being: Vienna vs. Budapest

Across all three dimensions of subjective well-being – cognitive, affective, and eudaimonic – residents of Vienna consistently report higher scores than those in Budapest, though the gap has narrowed somewhat over time, particularly in overall life satisfaction and financial satisfaction.

Overall life satisfaction. Vienna has "traditionally" outperformed Budapest, but the difference has halved over the past decade. While Viennese *overall life satisfaction* has remained high and stable, Budapest has seen notable improvement, suggesting slow but steady convergence.

Domain Satisfaction. The clearest divergence is in satisfaction with financial situation – Vienna scores higher overall, though Budapest residents report higher income satisfaction than those in "rural" Hungary. Satisfaction with personal relationships received the highest average scores, and it appears to be relatively stable over time. However, Viennese residents rated it slightly higher than those in Budapest.

Satisfaction with External Environment. Vienna leads Budapest considerably in areas such as cleanliness, healthcare, green spaces, and public transport. Residents of Vienna feel significantly safer in their city and neighbourhoods than those in the Hungarian capital, despite somewhat higher reported levels of local crime. While finding suitable employment is more difficult in Budapest, access to affordable housing is a major challenge in both cities. Overall, people's perception of the quality of public services, infrastructure etc. is slightly higher in Vienna, with the key difference being in the intensity of agreement (more "strongly satisfied" responses in Vienna).

Affective Well-Being. Positive emotional states like happiness and calmness are higher in Austria overall, but Vienna and Budapest show similar levels by 2022. Budapest has seen improvement over time, especially relative to the "rest of Hungary". Viennese residents experience negative emotions less frequently than those in Budapest. However, for both cities, the proportion of people feeling down or nervous "most of the time" is similar. Where Vienna stands out is in the proportion of residents who report never feeling these emotions, which is about twice as high as in Budapest.

Eudaimonic Well-Being. Austrians – and especially Viennese – feel their activities are more meaningful than Hungarians do. The difference is particularly large in feelings of personal autonomy: far more Viennese feel free to decide how to live their lives. Austrians are much more optimistic about their lives and futures than Hungarians, with Vienna again outperforming Budapest. Interestingly, residents of the capitals tend to be more pessimistic about the future than those in other areas of the two countries, despite better objective circumstances.

In summary, while Budapest has shown progress, Vienna remains ahead in nearly every aspect of SWB. The greatest gaps persist in external environment satisfaction, personal autonomy, and emotional security. However, the closing of the life satisfaction gap signals meaningful change in Hungary's urban well-being landscape.

7. Social cohesion

The primary objective of the Research Report is to provide a comprehensive overview of the current socio-demographic and socio-economic characteristics, subjective well-being, and perceived social cohesion in Vienna and Budapest – and more broadly, in Austria and Hungary. This serves as the research framework, allowing for comparative analysis in the later stages of the project. In other words, the primary data collected through the WELLCOH survey can be integrated into these databases.

Thus, comparability is a key consideration when selecting the data sources used for analysing social cohesion as well. Although the sample size is largest in the EU-SILC, it is less suitable for analysing social cohesion, as the survey only addresses a few aspects of the concept. Meanwhile, the Quality of Life in European Cities Survey does not include such questions at all.

As detailed in Chapters 3.1 and 3.2, the European Quality of Life Survey (EQLS) contains the most comprehensive set of indicators for social cohesion: a total of 32 variables across five dimensions address this topic. Its drawbacks include the relatively low sample size and the fact that regional-level data was only provided in the most recent wave. Additionally, a further limitation is that the questions on social cohesion were last included in 2016, and the next relevant survey is not expected until 2026. In an ideal scenario, in the final year of the project it will be possible to update the existing database with the new EQLS data, which would serve as a relatively accurate cross-sectional reference point for the WELLCOH project. The European Social Survey (ESS) is based on a larger sample size and has provided city-level data since 2014. However, its drawback is that it contains few variables explicitly related to the concept of perceived social cohesion.

Taking the above considerations into account, we have chosen a hybrid approach. In Chapter 8, we examine the differences in social cohesion between Vienna, Austria, Budapest, and Hungary based on the dimensions defined by the EQLS. However, where possible and justified, EQLS data is supplemented or replaced with data from the EU-SILC. This flexible approach ensures that the analysis is optimized in the most effective way possible.

7.1 Perceived social exclusion

Surveying perceived social exclusion is important because it captures how individuals feel about their place in society – offering insights that go beyond objective measures like income or employment. Feelings of being left out, undervalued, or disrespected can

undermine mental health, social trust, and civic participation, all of which are vital for social cohesion and subjective well-being. Understanding these perceptions helps identify hidden forms of marginalization and supports the development of more inclusive and responsive policies.

In the EQLS respondents answered five questions related to perceived social exclusion. However, we chose to assign one of these items – "I feel close to people in the area where I live" – to the "sense of community" dimension (see Chapter 8.5). In our view, this statement primarily reflects feelings of belonging and social connectedness rather than exclusion. All responses were recorded on a Likert scale ranging from strongly disagree to strongly agree.

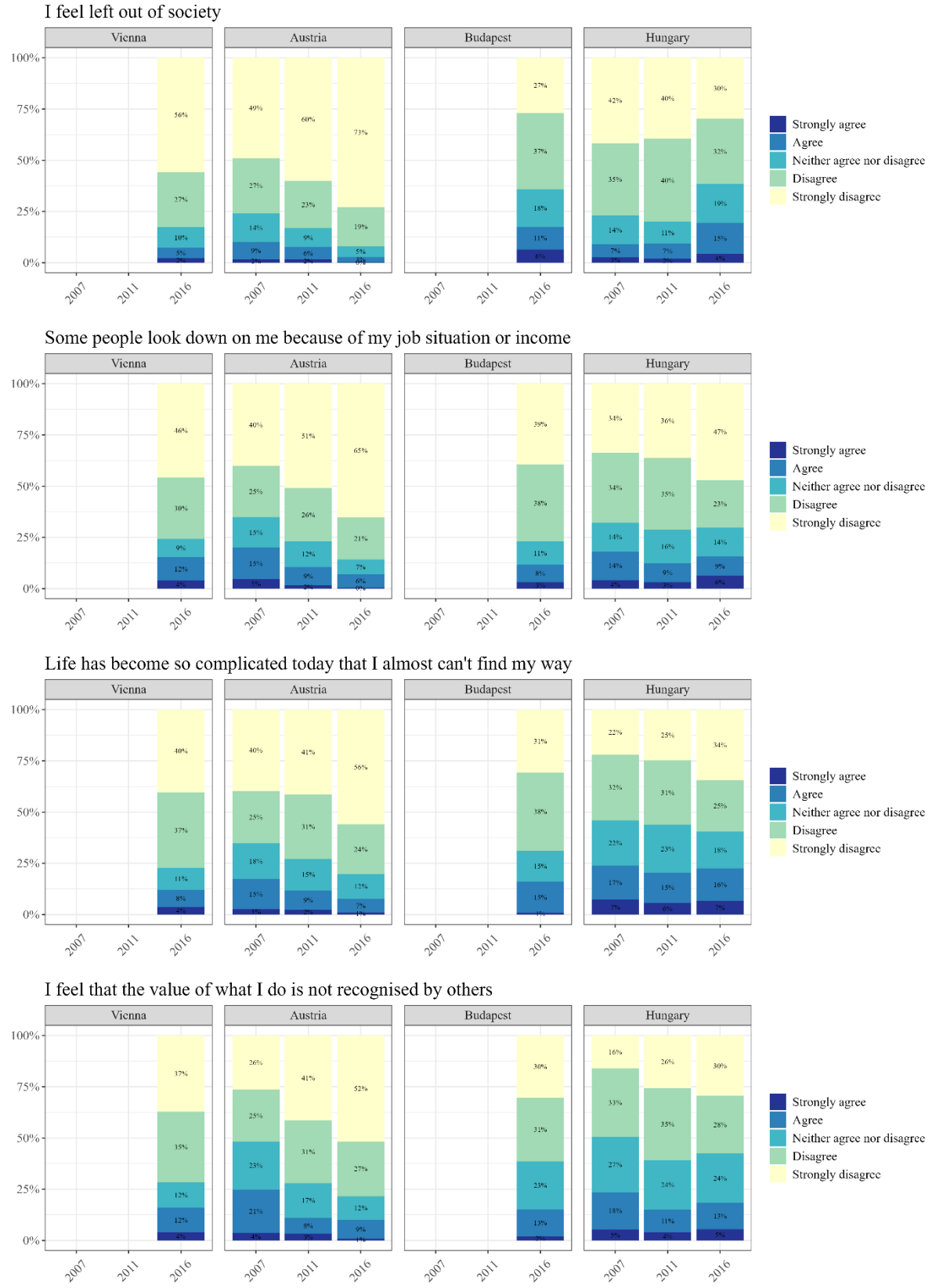
In the figures below, lighter colours represent positive responses. Based on data from the EQLS, a temporal comparison is possible for the period between 2007 and 2016. In Austria, a clear improvement is visible across all indicators examined. For instance, the proportion of respondents who strongly agree or somewhat agree with the statement "I feel excluded from society" fell from 11% to 3%. Similarly, the share of people who feel looked down upon because of their work or income situation dropped from 20% to 6%.

For Vienna, data are only available from 2016. These indicators are consistently worse in the capital across all four dimensions analysed. For example, 7% of Viennese respondents agreed with the statement about social exclusion, and 16% felt looked down upon – both figures higher than the national averages. This pattern, indicating that perceived social exclusion is a more prominent issue in Vienna than in other parts of Austria, is also supported by EU-SILC data. According to 2018 and 2022 results, the share of those who strongly or somewhat agree with the statement "I feel excluded from society" is, on average, three percentage points higher in Vienna compared to the rest of the country.

These results are likely linked to respondents' migration background, as the proportion of immigrants is remarkably higher in Vienna. However, a detailed breakdown of responses by the "country of birth" variable will be provided in the next Research Report of the WELLCOH project, supplemented by newly collected primary survey data.

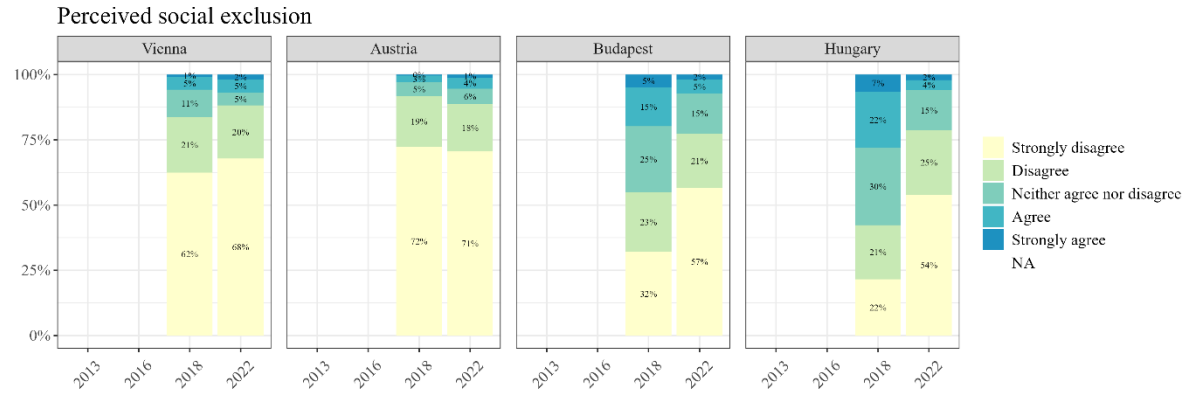
In Hungary, responses to the question "I feel excluded from society" show a slightly worsening trend between 2007 and 2016, according to EQLS data. In 2016, 19% of valid respondents agreed with the statement, compared to only 9% five and ten years earlier. This shift may reflect the lingering effects of the economic crisis. Unemployment, deepening poverty, and prolonged financial insecurity can reinforce the feeling of social exclusion – especially among those who were unable to reintegrate into the labour market or community life. In addition, increasing political polarisation and declining social trust may have contributed to a heightened sense of exclusion.

Figure 51. Percentage of people who agreed or disagreed with the following statements on perceived social exclusion by years



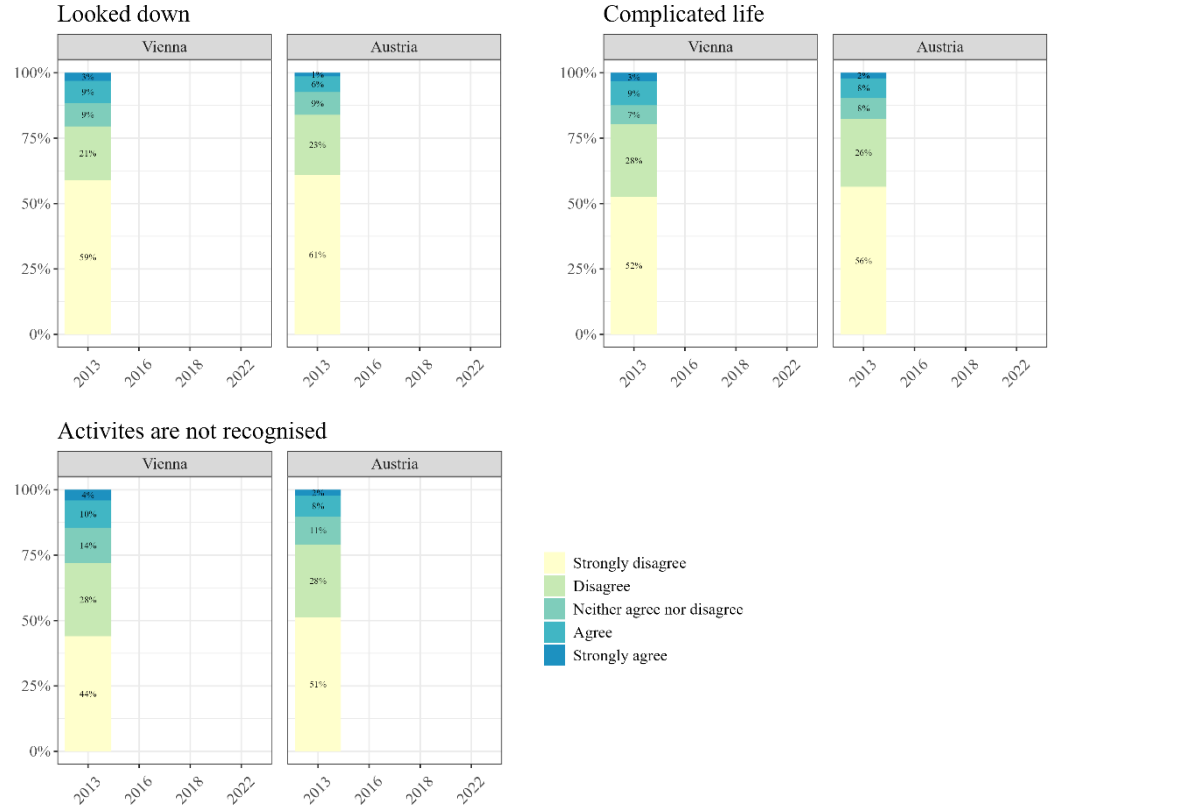
Source of data: EQLS. Own figure. (Non-respondents are not displayed)

Figure 52. Percentage of people who feel excluded from society by years



Source of data: EU-SILC. Own figure. (Non-respondents are not displayed)

Figure 53. Percentage of people who agreed or disagreed with the following statements on perceived social exclusion by years



Source of data: EU-SILC. Own figure. (Non-respondents are not displayed)

7.2 Perceived tensions

Measuring perceived tensions between social groups is an important part of understanding social cohesion, as it reflects how people view relationships and divisions within society. High levels of perceived conflict – e.g. between rich and poor, ethnic groups, or generations – can signal a lack of mutual trust and shared identity, even if the tensions are not always based on direct experience. Tracking these perceptions helps identify emerging social divides and offers insights into the impact of economic, political, or cultural change. It ensures a more complete picture of social cohesion, capturing not just individual belonging, but also how well different groups are seen to live together.

These questions were included exclusively in the EQLS questionnaire.

When assessing the perceived level of social tension by *age, gender, and sexual orientation*, the patterns observed across these dimensions are broadly similar. The overall trends point in a favourable direction: between 2007 and 2016, the proportion of people perceiving a high level of tension decreased everywhere, while the share of those who reported perceiving no tension at all increased. This change was particularly notable in Hungary, although it started from a worse baseline.

Austria consistently reported better figures, with the proportion of respondents perceiving high levels of tension being 7 to 11 percentage points lower across all three variables. In Vienna, opinions appear to be somewhat more polarised than in Austria as a whole: both the share of those who perceive a great deal of tension and those who perceive none at all are higher than the national average. In contrast, perceptions of the situation in Budapest are clearly more negative than in the rest of Hungary. It can therefore be concluded that the perceived level of social tension is significantly lower in Vienna than in Budapest.

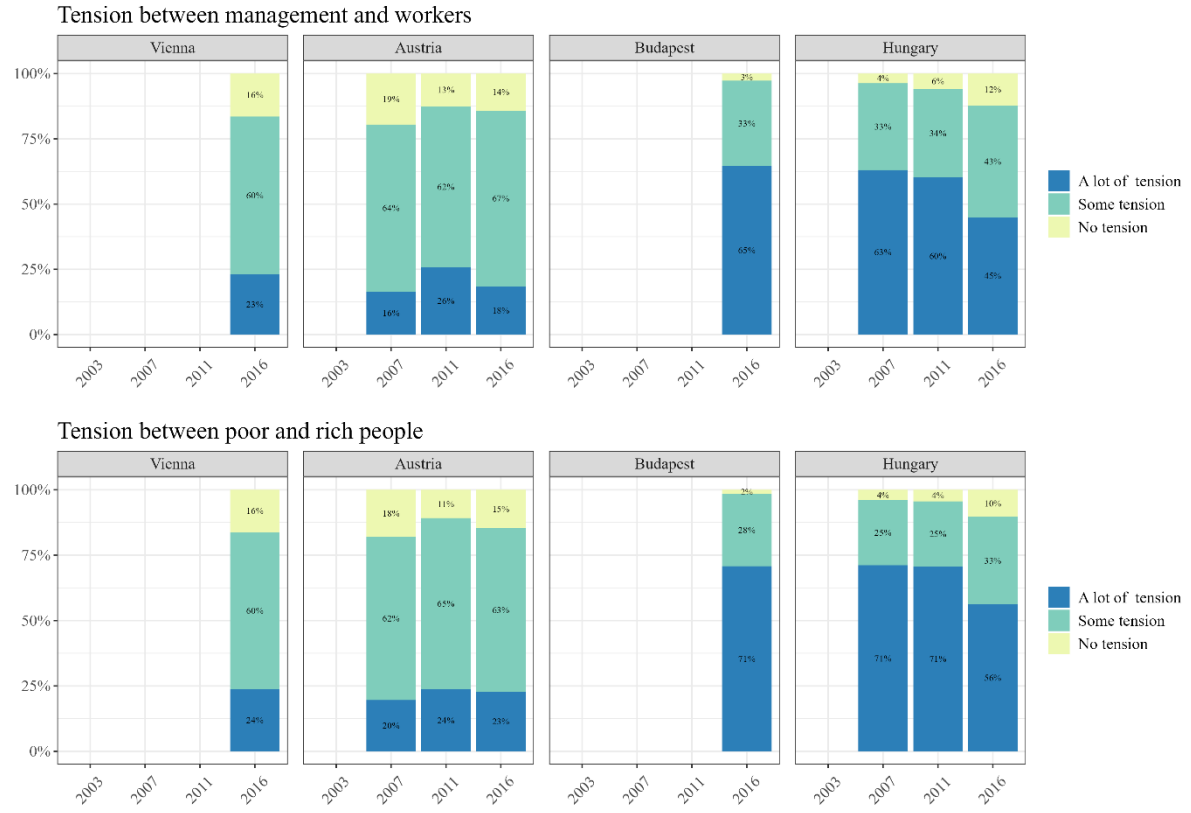
Figure 54. Percentage of people by perceived social tensions between men and women, old and young people as well as people with different sexual orientation by years

Source of data: EQLS. Own figure. (Non-respondents are not displayed)

When examining the *"vertical dimension"* of social tensions, the situation in Hungary – and particularly in Budapest – is markedly worse. Proportionally, around two and a half times as many people perceived significant tensions between social classes, and between the rich and the poor, compared to Austria and Vienna. This holds true despite a decline in the problem in Hungary since 2007 (from 63% to 45% nationwide and from 71% to 56% in Budapest), while in Austria the relatively low levels have risen slightly (to 18% and 23%, respectively). A key difference with regard to social cohesion in the two cities is that, in 2016, Vienna showed similar indicators to the rest of Austria, whereas in Budapest the

perceived tension between social classes was a far more serious issue – with only 2–3% of respondents reporting no such opposition.

Figure 55. Percentage of people by perceived social tensions between managers and workers as well as poor and rich people by years



Source of data: EQLS. Own figure. (Non-respondents are not displayed)

The third, *"horizontal dimension"* of perceived social tensions reflects the relationships between ethnic and religious groups. However, the dynamics of these two variables differ.

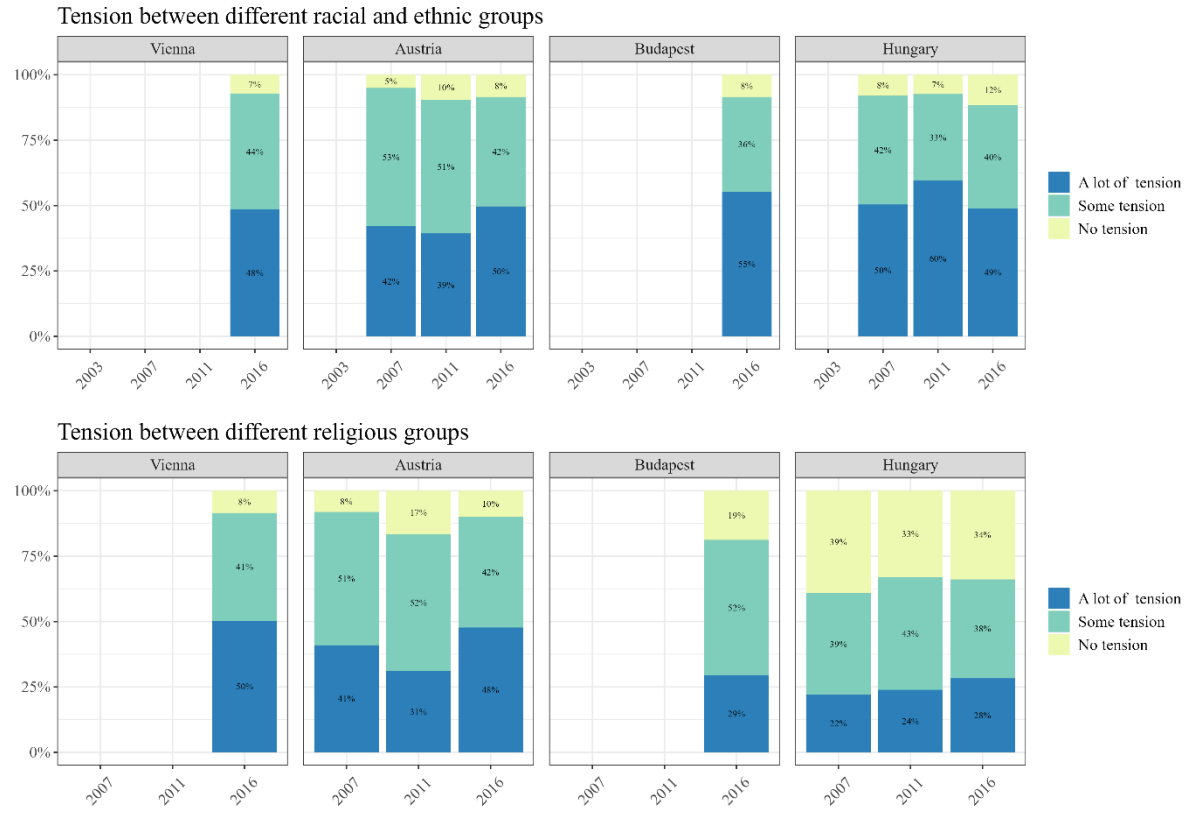
In the case of ethnic tensions, there was no significant difference between the two countries or their capital cities in 2016: nearly half of respondents in each context reported perceiving a high level of tension. In Austria, this marked a deterioration compared to 2011 – potentially linked to the so-called "refugee crisis" of 2015. Public opinion is often shaped not only – or not primarily – by personal experiences, but by images and narratives presented in the media.

This interpretation is supported by the sharp rise in perceived tensions between religious groups in Austria: the proportion of people sensing high levels of tension increased from 31% to 48%, while exactly 50% of respondents in Vienna reporting this in 2016. By

contrast, the corresponding figures in Hungary and Budapest were notably lower – "only" 28% and 29%, respectively.

A noteworthy phenomenon is that, despite the Hungarian government's anti-immigration rhetoric, the proportion of people perceiving high level of ethnic tension slightly declined, while the share of those reporting no tension at all increased.

Figure 56. Percentage of people by perceived social tensions between ethnic and racial as well as religious groups by years



Source of data: EQLS. Own figure. (Non-respondents are not displayed)

7.3 Trust

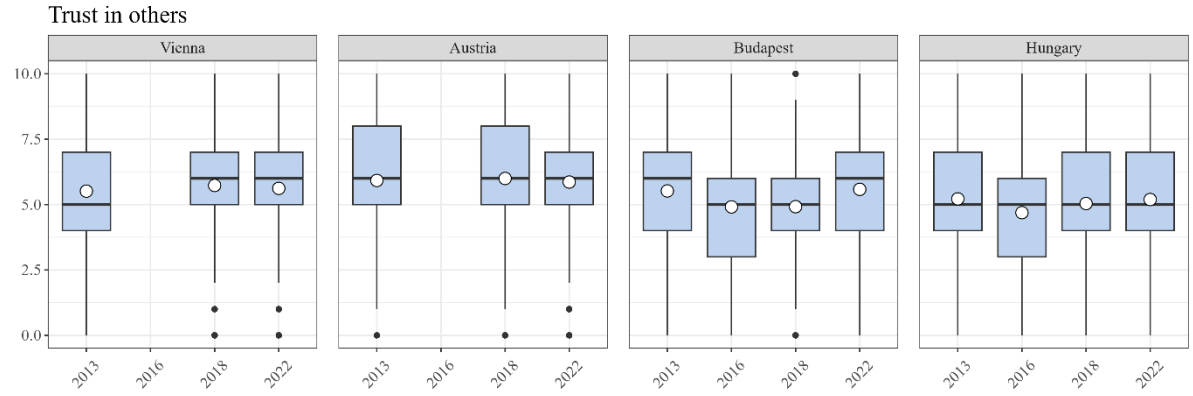
Generalised trust is one of the most commonly used indicators for capturing social cohesion – a topic discussed in greater detail in Chapter 2.3. It is therefore not surprising that, with the exception of the Vienna Quality of Life Survey and the Viennese Migration Survey, all the datasets analysed include this variable.

Based on the EU-SILC database, the gap between the two countries is clear: regardless of the year considered, people in Austria generally report higher levels of trust in others than those in Hungary (in 2022, for instance, the averages were 5.81 and 5.26, respectively).

Average and median values outside the capitals are relatively consistent, with the notable exception of Budapest, where trust levels declined after 2013 but rose again by 2022.

An intriguing difference between the two countries is that average trust levels in Vienna are slightly lower than in the rest of Austria (5.62 vs. 5.86), whereas in Budapest, they are slightly higher compared to other parts of Hungary (5.58 vs. 5.16).

Figure 57. Generalised trust by years



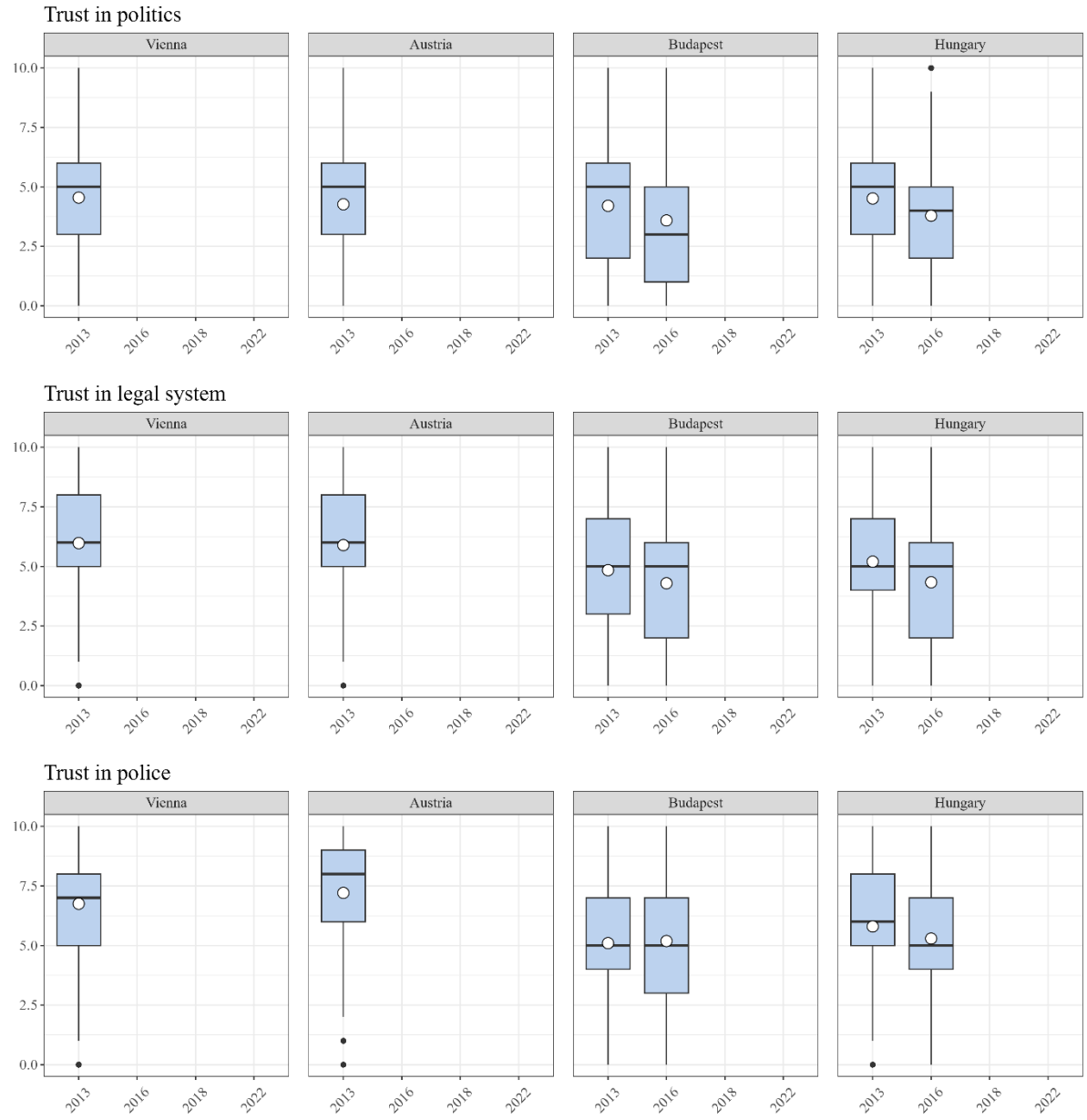
Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

The EU-SILC database contains few variables that reflect different aspects of institutional trust and allow for direct comparisons between the two countries and their capital cities. Moreover, the available data is somewhat dated, as parallel data collection of this kind occurred only in 2013 among the years examined.

The key conclusion is that when people are asked to give a general opinion about trust in politics, the average scores are almost identically low in both Austria and Hungary (4.3 and 4.4, respectively). However, when more specific questions are posed, the Hungarian averages are noticeably worse. For example, the average level of trust in the legal system in Hungary is just 5.14, and in the police, 5.58 – compared to 5.91 and 7.12, respectively, in Austria.

Furthermore, data from the 2016 microcensus – which had a much larger sample size – indicated even lower levels of trust in Hungary (e.g. trust in politics at 3.75, trust in the legal system at 4.33).

Figure 57. Institutional trust by years

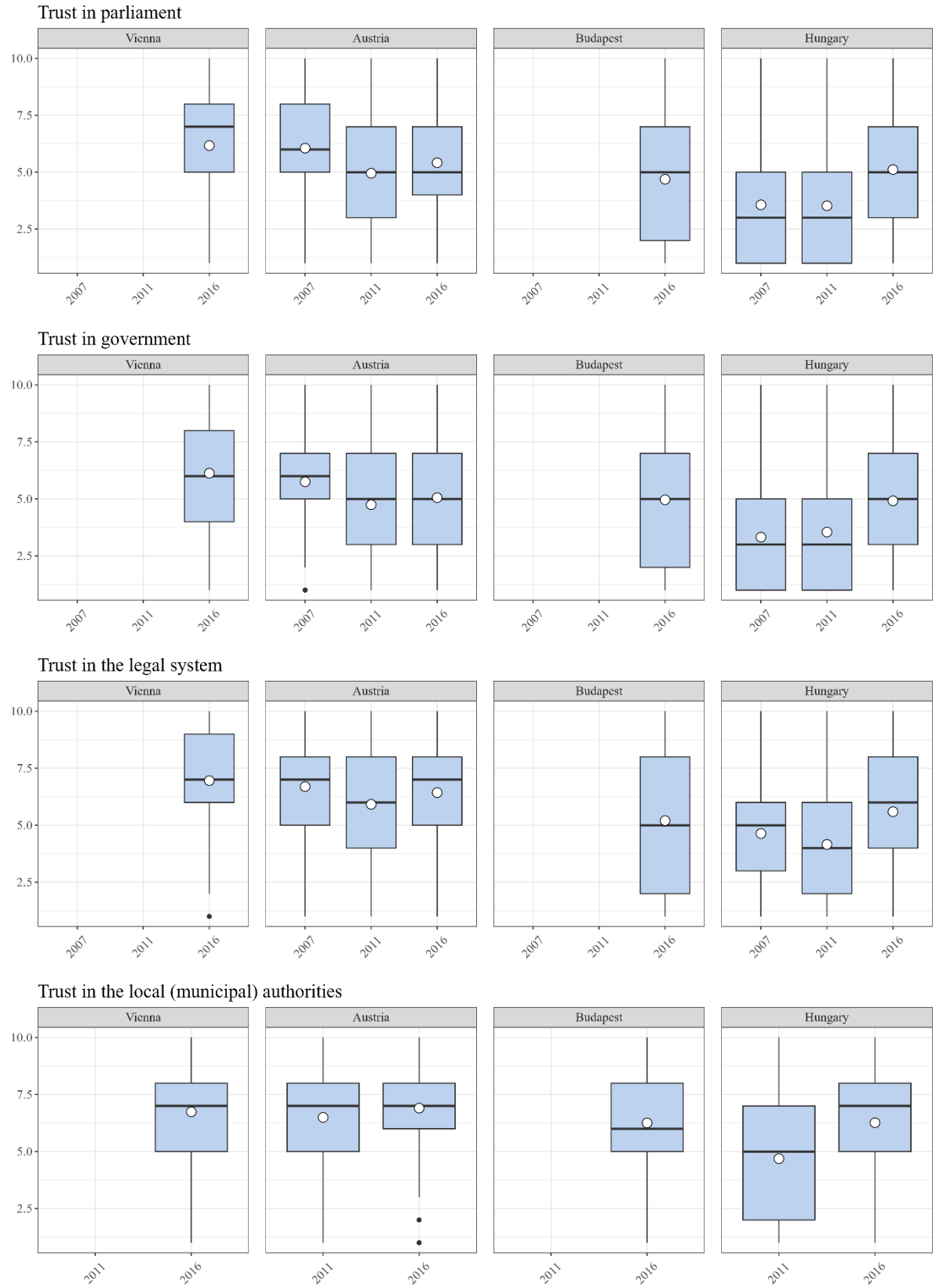


Source of data: EU-SILC, Hungarian microcensus. Own figure. (Non-respondents are not displayed)

Institutional trust covered the following questions in the EQLS (Q35, earlier Q28):

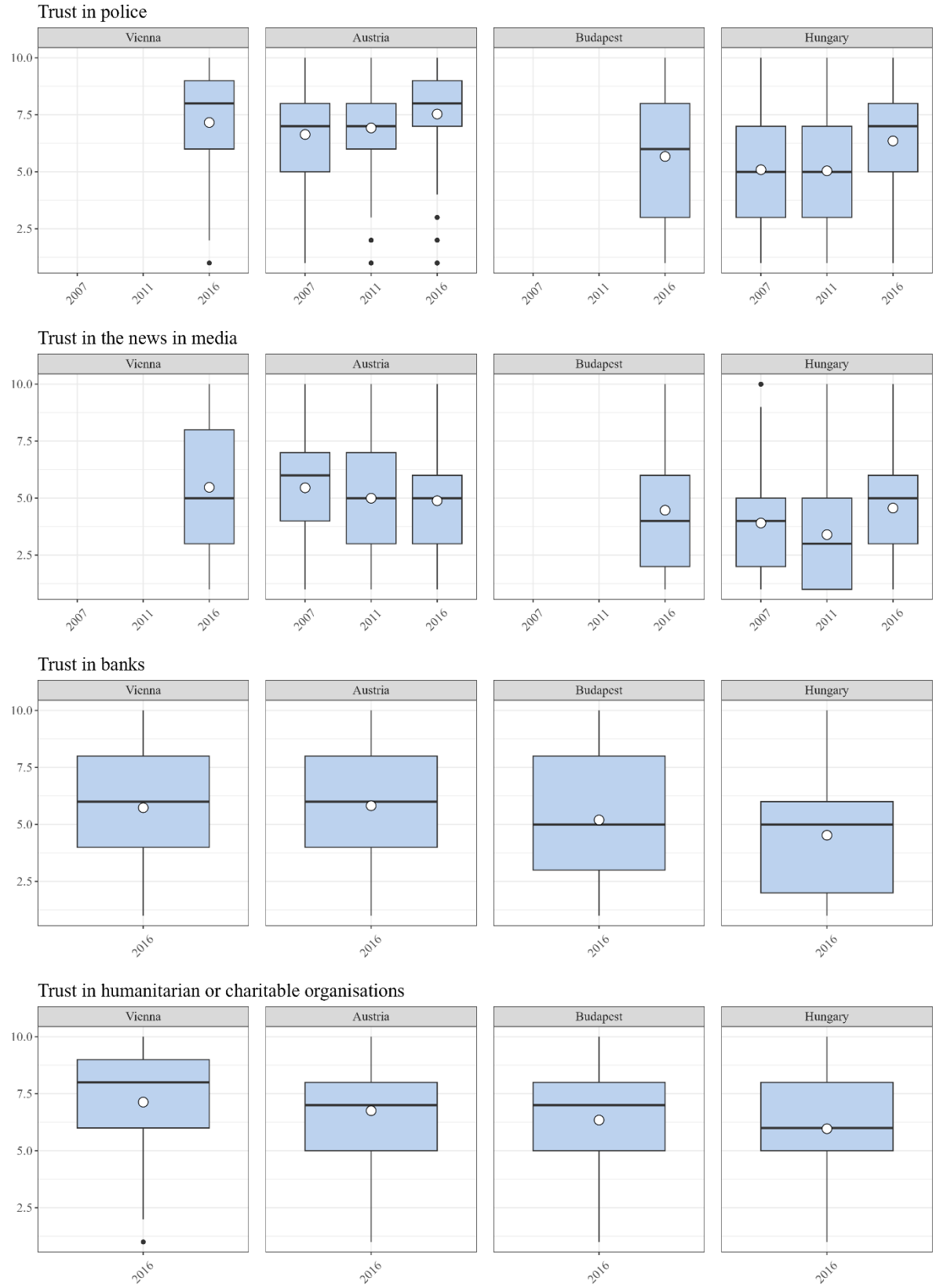
In EU-SILC only the trust in the legal system, trust in police (PW140 and PW150 by 2013) and the trust in the political system (by 2013 and 2022) were measured. In the 2013 Austrian SILC round we have additional information about the respondents' trust in media (M010040) and their trust in the people living in local area (M010050). All of these questions were included in the 2016 Hungarian microcensus as well, with the addition of the trust in military.

Figure 59. Trust in parliament, government, legal system and local authorities by years



Source of data: EQLS. Own figure. (Non-respondents are not displayed)

Figure 60. Trust in police, media, banks and charity organisations by years



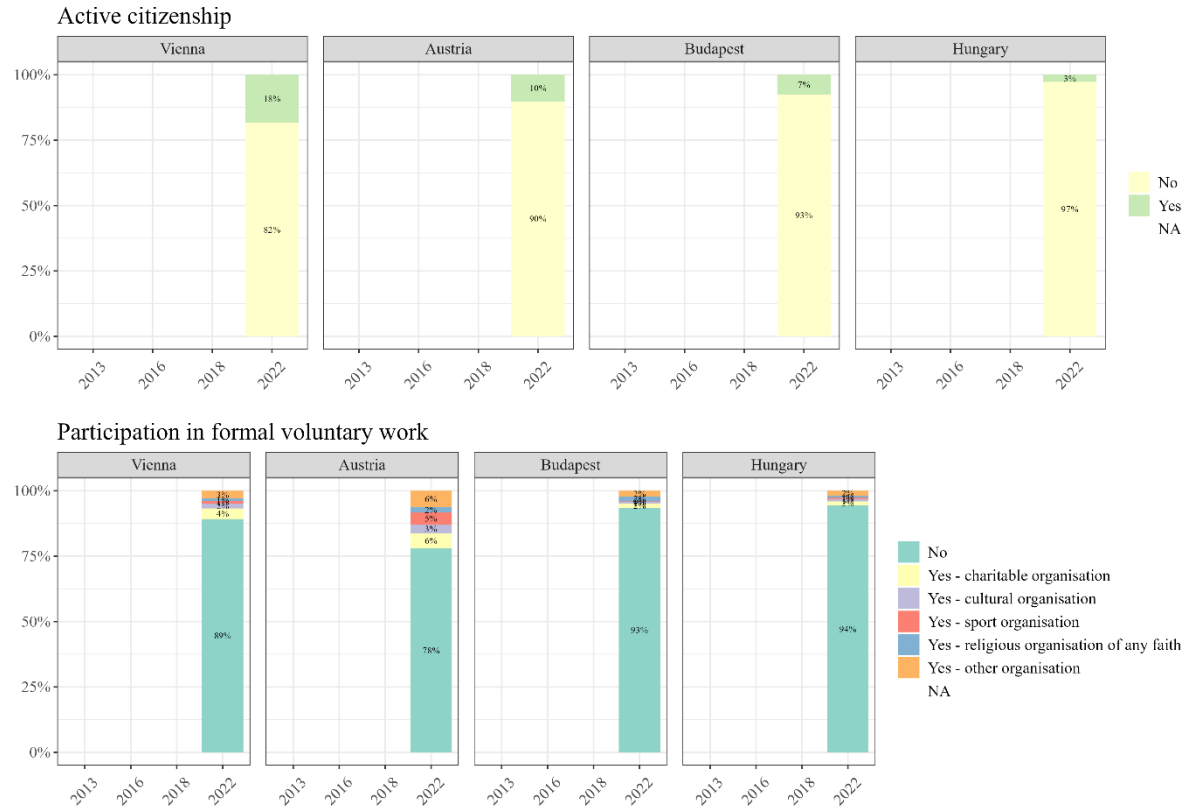
Source of data: EQLS. Own figure. (Non-respondents are not displayed)

7.4 Participation in society

In EU-SILC this dimension of social cohesion is relatively weak. Questions on people's participation in activities of political parties or trade unions, professional associations, recreational groups, charitable organisations, churches or other religious organisations were included in the 2006 SILC round. Our analysis does not cover this round because no SWB variables are available from that year, moreover the EQLS database contains similar and more recent variables.

In 2022 three relevant questions remained in SILC: active citizenship, participation in activities of political parties or trade unions, and participation in informal voluntary activities.

Figure 61. Share of people by civic engagement by years



Source of data: EU-SILC, Own figure. (Non-respondents are not displayed)

"Active citizenship" is a composite variable that reflects participation in political party activities, professional associations, and demonstrations or peaceful protests, such as signing a petition. The data clearly show that Hungarian society is highly passive in this regard: only 7% of people in Budapest and 3% in other parts of Hungary exhibit

characteristics of active citizenship. In comparison, the figures are somewhat higher in Austria (10%) and remarkably higher in Vienna (18%).

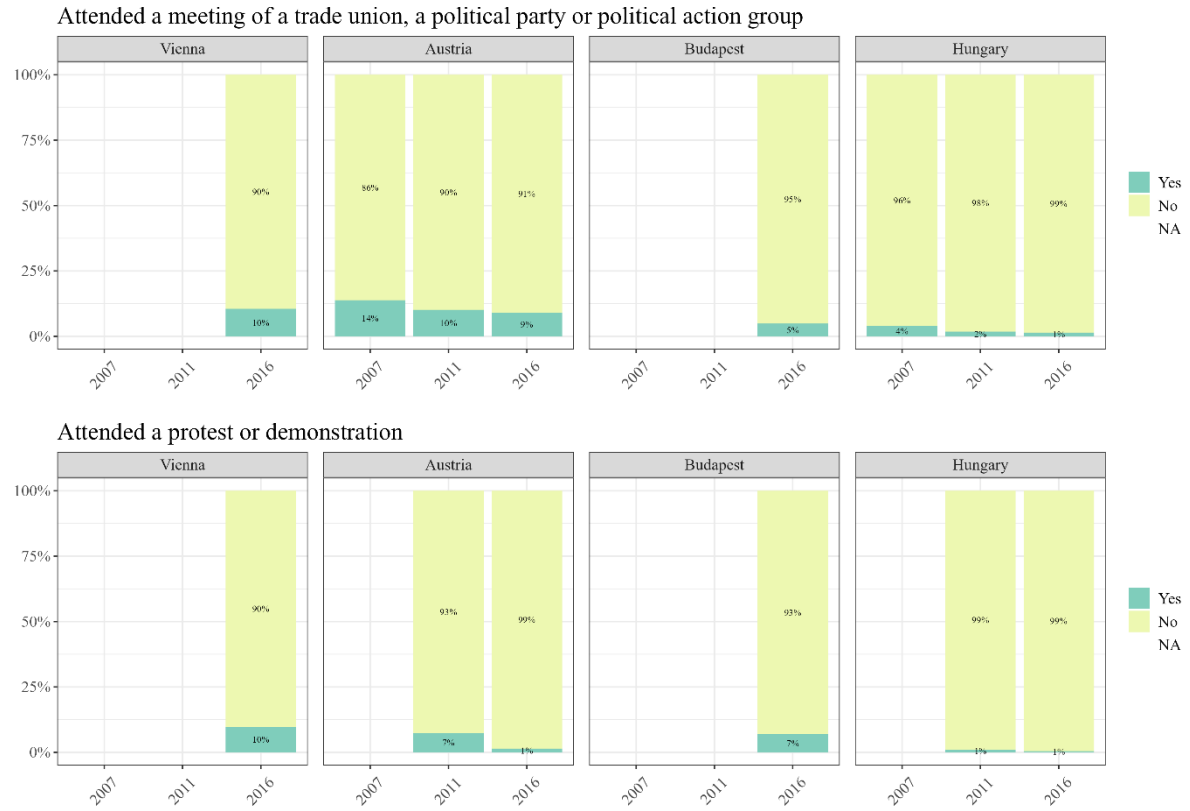
Volunteer activity is similarly low in Hungary, with only 6–7% of people in both Budapest and the rest of the country engaged in voluntary work. In Vienna, this rate is 11%, while in other parts of Austria it reaches 22%. There is no dominant type of voluntary organisation – charitable, cultural, and sports organisations are represented in roughly equal proportions.

A more comprehensive picture of civil engagement emerges from the 2011 and 2016 waves of the European Quality of Life Survey. In most cases, the intensity of civic activity follows a clear gradient: Hungary – Budapest – Austria – Vienna, in increasing order.

The contrast is especially stark in forms of civic engagement that can be carried out individually and anonymously – for example, 30% of Viennese respondents reported having boycotted certain products, compared to just 8% in Budapest. Activities that can be done "from home", such as signing a petition or commenting on social or political issues online, also show marked differences (22% and 28% in Vienna vs. 12% and 8% in Budapest, respectively).

In contrast, in the case of forms of civil engagement that require physical participation and have a partly political nature, participation rates are lower and the differences between the two cities are smaller. For instance, in 2016, 10% of Viennese respondents attended a meeting of a trade union, political party, or political action group, and another 10% participated in a demonstration. In Budapest, the respective figures were 5% and 7%. Outside the Hungarian capital, civic engagement is virtually absent: only 1–2% of the population participated in any form of civil activity. By contrast, levels of engagement beyond Vienna remain above 10% in most cases – except for participation in demonstrations, where figures are lower.

Figure 62. Share of people by forms of civic engagement by years

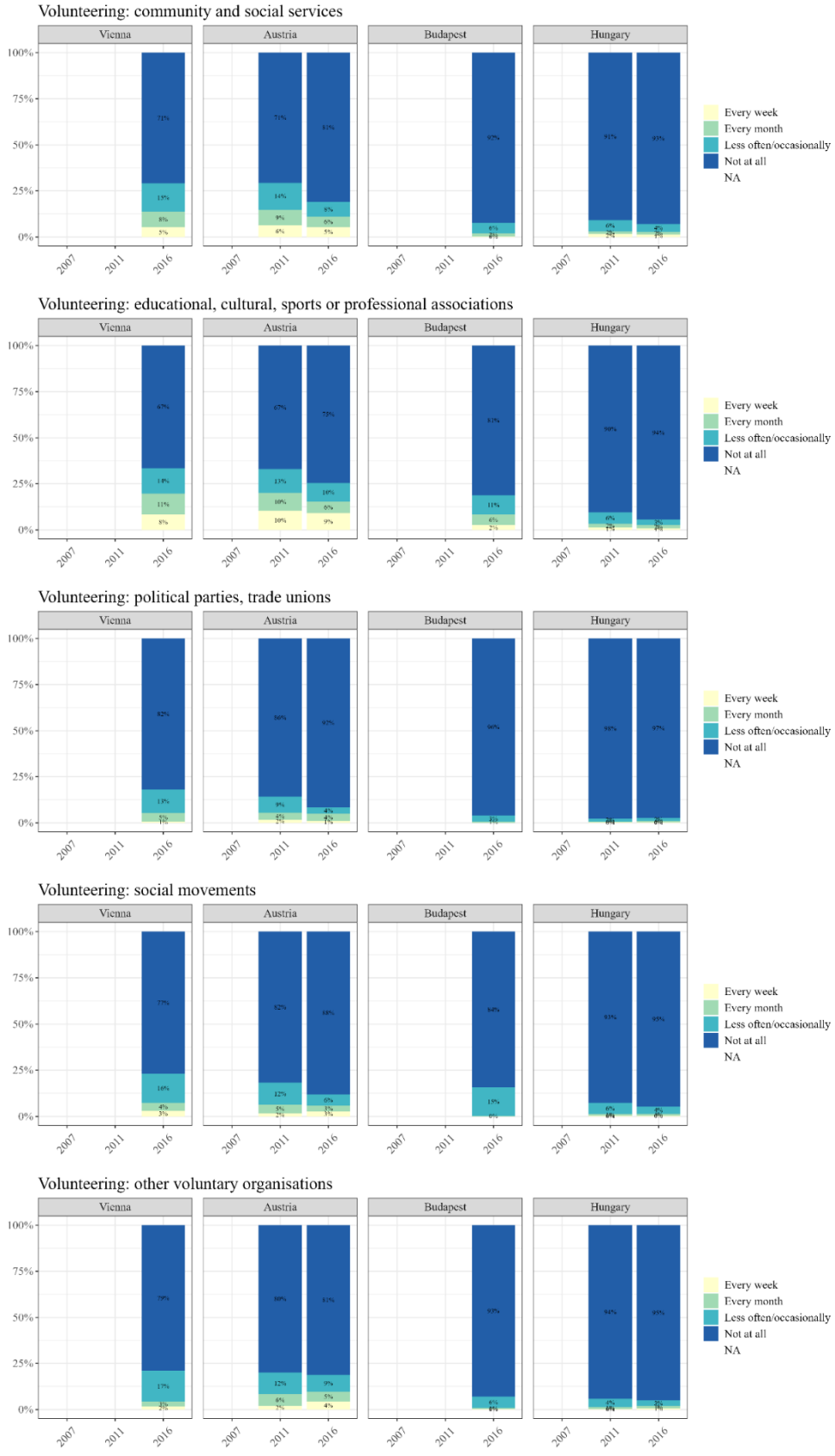


Source of data: EQLS. Own figure. (Non-respondents are not displayed)

The conclusions drawn from data on the frequency of voluntary activities are similar: Hungarian society is highly passive in this regard – particularly in areas outside of Budapest, where at least 95% of the population does not engage in any such activity. The figures are slightly better in Budapest. In the Hungarian capital, voluntary activity is mainly associated with educational, cultural, sports, and professional organisations, as well as occasional involvement in social services (15% and 11%, respectively).

In Austria, voluntary engagement is more widespread than in Hungary, although a slight decline has been observed since 2011. In 2016, for example, one in four respondents reported participating in voluntary activities linked to educational, cultural, sports, or professional organisations, and one in five were involved in community and social services. In Vienna, these proportions were even higher – reaching 29% and 33%, respectively.

Figure 63. Frequency of volunteering activities by years



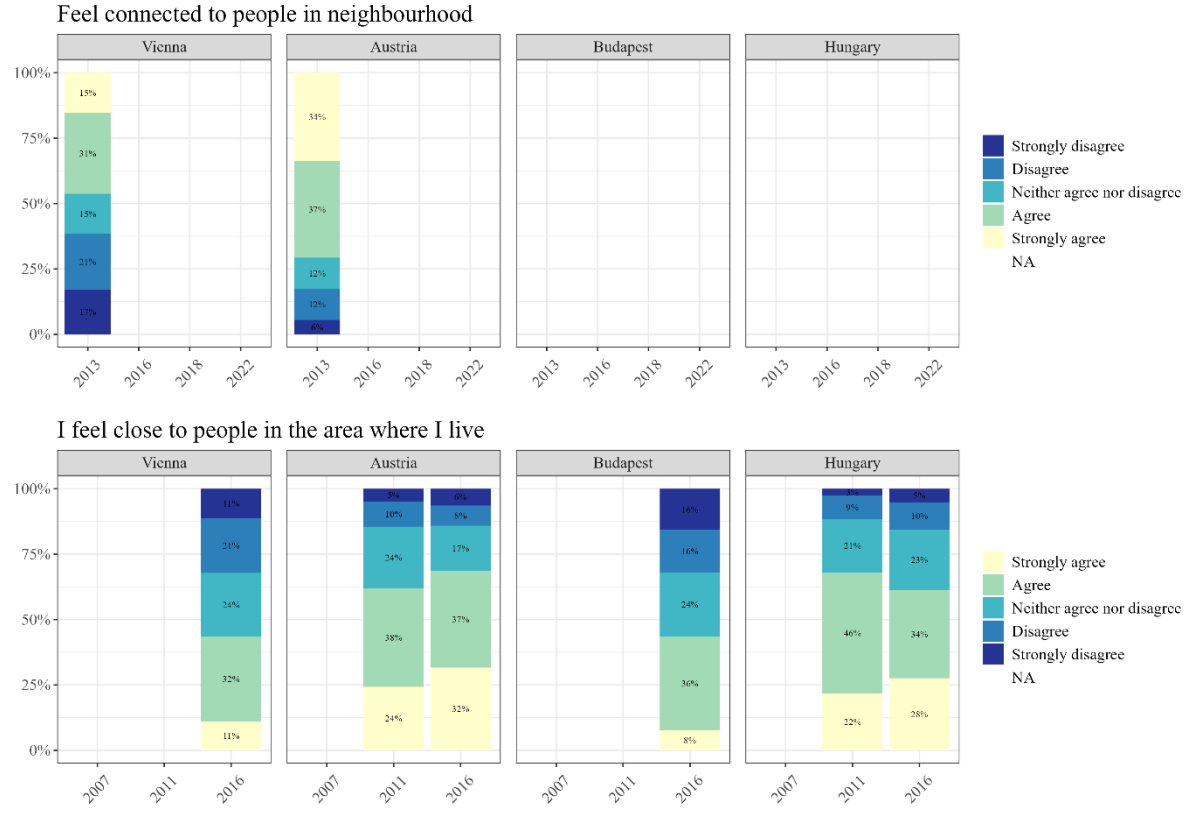
Source of data: EQLS. Own figure. (Non-respondents are not displayed)

7.5 Sense of community

"Sense of community" plays a fundamental role in fostering social cohesion. It is often within the small-scale, everyday networks – among neighbours, friends, and local communities – that people find emotional support and belonging. This type of proximity-based cohesion is essential because it may directly affect individuals' feelings of safety, identity, and mutual responsibility. When people feel embedded in their local community, they are more likely to participate in civic life, help others, and have a higher level of trust.

Although a sense of belonging is a key component in understanding social cohesion, the EU-SILC survey included this question only in the 2013 Austrian wave. However, comparable data are available from the European Quality of Life Survey. One of the most striking – and perhaps unsurprising – patterns observed in both Austria and Hungary is that residents of the capital cities feel considerably less connected to the people in their neighbourhoods. Respondents from Vienna and Budapest expressed almost identical views: 43% and 44%, respectively, strongly or somewhat agreed that they feel close to the people living in their area. By contrast, the average figures for other settlements across Austria and Hungary were substantially higher, at 69% and 62%, respectively.

Figure 64. Feel connected to people in neighbourhood by years



Source of data: EU-SILC (above), EQLS (below). Own figure. (Non-respondents are not displayed)

Questions relating to the frequency of personal contact are thematically relevant here, but they are also of particular importance from the perspective of the relation factors of well-being. For this reason, these indicators were presented in Chapter 5.3. It is important to underline that this is the point at which the concepts of well-being and social cohesion are logically connected, and this is what we will place greater emphasis on in the later stages of the WELLCOH project, both in the qualitative and quantitative phases of data collection and analysis.

7.6 Summary. Key patterns of social cohesion: Vienna vs. Budapest

Social cohesion in both Vienna and Budapest reflects urban challenges, but Vienna generally performs more favourably, especially in trust, participation in society, and perceived social tensions. However, both capitals diverge from their national contexts.

Perceived Social Exclusion. While Austria has improved steadily since 2007 in reducing feelings of exclusion, Vienna consistently shows higher levels of perceived exclusion than the national average – likely influenced by its higher share of immigrants. Conversely, Budapest residents feel more excluded than in the past, and far more so than in Vienna. In Hungary, this trend has worsened since 2007, possibly due to economic insecurity and growing political polarisation.

Perceived Social Tensions. Vienna and Austria report lower perceived tensions across most social groups than Budapest and Hungary, with one major exception: perceived tensions between religious groups are remarkably higher in Vienna. Budapest, however, shows greater perceived conflict along class and income lines, suggesting deeper socioeconomic divides. Ethnic tensions were high in both cities, though the 2015 "refugee crisis" appeared to have shaped Austrian perceptions more strongly than Hungarian ones.

Trust. Generalised trust is higher in Austria than in Hungary overall. Vienna shows slightly lower trust than the rest of Austria, while Budapest scores somewhat higher than the rest of Hungary – making it a relative bright spot in an otherwise low-trust society. However, trust in institutions (like the legal system and police) is markedly higher in Vienna than in Budapest, reflecting stronger institutional credibility in Austria.

Participation in Society. Civic activity shows the widest gap between the two cities. Viennese residents are far more engaged, whether through volunteering, petitions, or boycotts. Budapest lags considerably – especially in forms of engagement requiring initiative or offline participation. In Hungary, civic engagement outside Budapest is nearly absent. In Austria civic engagement remains far more widespread and consistent across the country.

Sense of Community. Despite their differences, Vienna and Budapest are nearly identical in how residents perceive local connectedness – both reports weaker ties to their neighbourhoods compared to respondents from other parts of the countries. This reflects a common urban phenomenon: social are usually weaker in large cities, regardless of national context.

In summary, Vienna consistently outperforms Budapest across most dimensions of social cohesion, particularly in institutional trust and civic participation. However, both cities struggle with weak local ties and urban-specific exclusions, marking them as distinct from their broader national societies.

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