The Quest for Fairness and Fulfillment: A WVS-Based Study on Income Equality and Life Satisfaction in North Macedonia

Aytuğ Zekeriya Bolcan

Abstract: This study investigates the relationship between income equality acceptance and life satisfaction in North Macedonia using World Values Survey data across multiple waves. Employing ordinal logistic regression, the analysis controls for demographic, socioeconomic, and cultural factors. Findings reveal that individuals who accept income inequality as a motivational necessity report higher life satisfaction, while those favoring greater equality exhibit lower well-being, potentially reflecting frustrations with perceived systemic unfairness. These results highlight the significance of distributive justice in shaping subjective well-being within a transitional economy. The study provides insights for policymakers to promote equitable growth and social cohesion in post-socialist contexts.

Keywords: Income Equality Acceptance, Life Satisfaction, Distributive Justice, Transitional Economy, North Macedonia



Bolcan A. Z. (2025), The Quest for Fairness and Fulfillment: a WVS-Based Study on Income Equality and Life Satisfaction in North Macedonia, Journal of Balkan Economies and Management, 1(2), 157-180.



PhD Candidate, Istanbul University, Istanbul-Türkiye, abolcan@istanbul.edu.tr



https://orcid.org/0000-0002-5162-4337



https://ror.org/03a5qrr21



Balkan Studies Foundation DOI: http//doi.org/10.51331/bemA07 Journal of Balkan Economies and Management, 1(2), 2025 journalbem.com



Received: 15.04.2025 Accepted: 24.05.2025



Introduction

North Macedonia's path toward establishing a market-oriented economy traces back to 1991, following the dissolution of the Socialist Federal Republic of Yugoslavia. Upon gaining independence, the country faced immediate challenges stemming from the loss of traditional Yugoslav markets, external trade embargos, and insufficient domestic capital (Bartlett, 2007). In the early 1990s, macroeconomic instability was exacerbated by rising inflation and widespread unemployment, reflecting a complex transitional environment marked by political uncertainties and limited institutional capacity. Privatization efforts were launched to transfer state-owned enterprises into private hands, but this process proceeded unevenly, often constrained by fragile legal frameworks and capacity deficits in regulatory bodies (Mojsoska-Blazevski, 2017).

Throughout the late 1990s and early 2000s, North Macedonia sought to stabilize its economy by introducing structural reforms aimed at liberalizing trade, improving fiscal discipline, and attracting foreign direct investment (FDI). These measures helped moderate inflation and provided an initial impetus for growth; however, high unemployment rates persisted, and informal economic activities remained significant (Sanfey, Milatović and Krešić, 2016). At the same time, the country pursued deeper institutional reforms, such as strengthening the judiciary and enhancing governance mechanisms to address pervasive corruption concerns. This phase also saw advancements in anti-corruption measures, partly in response to requirements and recommendations from international organizations like the World Bank and the International Monetary Fund (IMF).

Entering the mid-2000s, North Macedonia embarked on more systematic efforts to align its laws and regulations with the European Union's *acquis communautaire*, anticipating eventual EU membership. By prioritizing structural investment in education and technological upgrades, policymakers hoped to stimulate productivity gains, particularly in industries such as textiles and automotive components. Nonetheless, income disparities and regional development imbalances persisted. While urban centers like Skopje benefited from increased FDI and infrastructural enhancements, rural areas lagged behind, evidencing substantial gaps in employment opportunities and public services. As a result,

poverty reduction became a core theme in government strategies, supported by international donor programs. Recent years (2015–2023) have witnessed ongoing diversification of economic activities, with service-oriented sectors and digital entrepreneurship gaining traction. North Macedonia's progress toward Euro-Atlantic integration—including its successful NATO accession—has further shaped policy agendas, particularly in the spheres of economic governance and institutional modernization. However, the region's susceptibility to global economic shocks, illustrated vividly during the COVID-19 pandemic, underscores the vulnerability of small, transition economies. Within this dynamic context, issues of income distribution and social equity have gained renewed urgency, prompting researchers and policymakers alike to investigate how structural transformations intersect with individual perceptions of well-being.

Understanding North Macedonia's socio-economic trajectory is vital for analyzing contemporary attitudes toward income equality and life satisfaction. Macroeconomic trends and institutional reforms, coupled with citizens' lived experiences of transition, directly influence how individuals evaluate both their financial standing and broader quality of life. The World Values Survey (WVS), which captures public sentiment in transitional societies, offers a uniquely valuable lens through which to study these evolving preferences. In the following sections, we build upon this contextual foundation to explore the interplay between acceptance of income inequality and subjective well-being, thereby contributing to the literature on post-socialist transitions and economic reforms.

Research Aims and Objectives

The primary objective of this study is to investigate how preferences for income equality—versus acceptance of income inequality—shape individual life satisfaction in North Macedonia, utilizing data from the World Values Survey (WVS). While numerous cross-national studies have explored the impact of inequality on subjective well-being (Alesina, Di Tella and MacCulloch, 2004); (Helliwell, Layard and Sachs, 2019), there remains a gap in understanding how this relationship manifests in transitional economies such as North Macedonia. The country's economic reforms, political transformations, and evolving social norms

since independence provide a compelling backdrop against which to examine the nuances of income equality preferences. By grounding the analysis in the North Macedonian context, this research not only contributes to the broader literature on happiness and economic inequality but also offers insights that may guide policymakers in shaping equitable and inclusive development strategies.

With the overarching purpose established, the central research question guiding this chapter is:

"How does the acceptance or preference for income equality (versus income inequality) impact individual life satisfaction in North Macedonia, when controlling for demographic, socioeconomic, and cultural factors based on data from the World Values Survey?"

Addressing this question is of significant academic and policy relevance. Scholars in comparative politics and economics have long debated the role that equitable income distribution plays in shaping perceptions of social justice, trust in institutions, and overall societal welfare. Empirically assessing these dynamics within North Macedonia—a country navigating the aftermath of socialist legacies, market liberalization, and ongoing European integration—provides a unique lens through which to evaluate the broader claim that equitable economic structures can foster greater individual happiness. Additionally, policymakers may leverage insights from this research to design interventions aimed at mitigating social tensions and promoting inclusive growth strategies.

To achieve the broader research goal and adequately answer the stated question, the following sub-objectives will guide the empirical analysis:

- 1. **Temporal Trends:** Examine how both income equality preferences and life satisfaction have evolved across different WVS waves available for North Macedonia (e.g., 2005–2009, 2010–2014, 2017–2020).
- 2. **Demographic Variations:** Investigate how individual-level characteristics—such as age, gender, marital status, and education—correlate with the acceptance of income equality and self-reported life satisfaction.

By systematically addressing these sub-objectives, the study aims to present a holistic view of how perceptions of income distribution intersect with subjective

well-being in North Macedonia. In the subsequent section, we will delve into a review of the relevant literature and theoretical perspectives, thereby framing our empirical analysis within established debates on inequality, redistribution, and life satisfaction.

This chapter unfolds in several distinct yet interrelated sections to offer a comprehensive analysis of how income equality acceptance impacts life satisfaction in North Macedonia. Following this introduction, the Theoretical Framework section establishes the conceptual foundations, examining key constructs such as life satisfaction, distributive justice, and fairness, alongside relevant economic and psychological theories (e.g., the Easterlin Paradox, Equity Theory). Next, the Literature Review surveys existing empirical studies on inequality and subjective well-being, highlighting critical gaps pertaining to North Macedonia and the Balkan region. The Data and Methodology section then details the World Values Survey (WVS) dataset, defines the variables of interest, and justifies the use of ordinal logistic regression. Subsequently, Empirical Findings present the core results, focusing on the estimated effects of income equality preferences on life satisfaction. Finally, the Conclusion recaps major insights, considers limitations, and suggests avenues for future research and policy interventions, thereby consolidating the chapter's contribution to the understanding of fairness and subjective well-being in post-socialist settings.

Theoretical Framework on Income Equality and Life Satisfaction

Conceptualizing Income Equality and Life Satisfaction

Income equality, at its core, refers to an economic and social environment where individuals receive relatively similar incomes, thereby limiting wide disparities in wealth. Within academic discourse, various scholars conceptualize income equality not merely as an outcome measured by quantitative indicators—like the distribution of resources across a population—but also as a normative concept tied to notions of fairness and social justice (Wilkinson and Pickett, 2009). While the Gini coefficient is the most widely recognized measure of income inequality, other metrics such as the Palma ratio or the Theil index complement

the discussion by offering distinct ways to gauge distributional patterns. In this sense, income equality and income inequality exist on a continuum, with the former suggesting a narrower gap in earnings and the latter denoting more pronounced economic disparities.

Scholars note that perceptions of income distribution can diverge from empirical measures of inequality. Individuals may harbor subjective interpretations based on personal experiences, media portrayals, and cultural narratives. For instance, two societies with identical Gini coefficients might exhibit markedly different attitudes toward inequality, depending on the prevailing cultural norms and expectations around distributive outcomes (Diener, Oishi and Tay, 2018). This distinction between objective and perceived inequality underscores the importance of examining not only actual economic conditions but also how these conditions are interpreted through the lens of fairness, reciprocity, and social trust.

Life satisfaction is a key component of subjective well-being research, encompassing an individual's overall evaluation of the quality and meaningfulness of their life. In contrast to momentary affect or emotional states, life satisfaction is generally viewed as a broader, more stable cognitive appraisal (Diener, Oishi and Tay, 2018). Researchers have identified multiple determinants of life satisfaction, ranging from personal factors—such as health, employment status, and family relationships—to macro-level influences like social cohesion and institutional quality. Indeed, the extent to which a society is perceived as equitable can enhance or erode life satisfaction, as individuals often benchmark their outcomes against others, invoking concepts of distributive justice and fairness in the process.

In transitional contexts like North Macedonia, where shifts from a socialist past to a market-oriented economy have reconfigured labor markets, social policies, and institutional frameworks, perceptions of income distribution can carry heightened significance. Citizens navigating economic reforms and potential political uncertainties may place greater weight on issues of fairness and equity, especially if these transitions produce uneven gains. Consequently, understanding how income equality acceptance shapes life satisfaction becomes

particularly salient. The World Values Survey (WVS) offers a unique empirical avenue to capture these perspectives, enabling scholars to connect macro-level transitions to individual subjective assessments. In doing so, it illuminates how cultural norms, historical legacies, and contemporary economic realities converge to influence both the concept of income equality and the lived experience of well-being.

Relevant Economic and Psychological Theories

Economic and psychological theories offer valuable perspectives on how individuals perceive and respond to disparities in income distribution, and how these perceptions can influence overall life satisfaction. These frameworks help explain why two individuals with similar material conditions might experience different levels of subjective well-being. Moreover, understanding such theories is especially pertinent in transitional contexts like North Macedonia, where legacies of socialist governance and contemporary market reforms intersect, shaping both the distribution of income and public attitudes toward fairness.

One of the earliest and most influential contributions to this discourse is the Easterlin Paradox, first articulated by Richard Easterlin (1974). He observed that while wealthier individuals within a country often report higher subjective well-being than their poorer counterparts, increases in a nation's average income over time do not necessarily translate into higher overall happiness. This paradox implies that relative measures of income—how individuals compare their earnings to others—may be more important for well-being than absolute income levels. In a post-socialist environment, such as North Macedonia's, the rapid societal shifts of the 1990s and subsequent decades can accentuate the salience of relative income comparisons, as people experience varied successes and failures under new market-oriented structures.

Closely aligned with the Easterlin Paradox is the Relative Income Hypothesis, which posits that individuals assess their well-being in part by contrasting their income with that of a reference group—be it neighbors, colleagues, or broader societal segments. Festinger (1954)'s Social Comparison Theory underpins this hypothesis by suggesting that people evaluate their status or achievements

based on comparisons with others. In transitional societies, where class structures and economic hierarchies are being redefined, these comparisons can become more pronounced. The dismantling of socialist-era guarantees and the rise of privatized markets may amplify sensitivity to perceived inequalities, making the quest for fairness and equitable outcomes even more critical for subjective well-being.

Another pivotal framework is Equity Theory (Adams, 1965), which contends that individuals derive satisfaction when they perceive the ratio of their inputs (effort, skill, time) to outputs (income, recognition, benefits) as fair compared to those around them. If they sense an imbalance—either being under-rewarded or over-rewarded—feelings of dissatisfaction, stress, or guilt may arise. In the context of North Macedonia's transition, citizens have encountered wide-ranging transformations in employment structures, wage systems, and social benefits. These changes can alter perceptions of what constitutes a "fair deal" for workers and households, thus influencing overall life satisfaction.

In transitional economies, the application of these theories can be shaped by both cultural and historical factors. Previously state-managed economies often fostered a more collectivist mindset, where the ideal of social welfare was linked to guarantees of employment and basic services. As privatization and market competition became more prevalent, the emergence of greater disparities between "winners" and "losers" could heighten public scrutiny of inequality. Scholars studying Central and Eastern European countries, including the Balkan region, have noted that this heightened awareness of inequality can lead to lower trust in institutions and weaker social cohesion (Bartlett, 2007). As a result, preferences for income equality may become intimately tied to notions of social stability and personal well-being.

Bringing these theoretical insights together, it becomes evident that perceptions of fairness, relative positioning, and equity are integral to understanding how individuals in North Macedonia evaluate their life satisfaction. By viewing these concepts through the lens of transitional economies, we can appreciate how historical legacies, rapid reforms, and shifting cultural norms create a unique backdrop for studying the interplay between income equality preferences and

subjective well-being. The following empirical analysis will draw on these theoretical principles, applying them to World Values Survey data to ascertain whether the acceptance or rejection of income disparities corresponds with variations in reported life satisfaction.

Justification for the WVS Approach

The World Values Survey (WVS) has become a cornerstone of cross-cultural research in social sciences, offering a comprehensive lens through which scholars can examine how individuals' values, attitudes, and beliefs evolve over time and across diverse national contexts. Originating in the early 1980s under the guidance of Ronald Inglehart, the WVS now encompasses multiple waves, each representing data collected in a standardized fashion from numerous countries around the globe (Inglehart, 2018). This extensive coverage ensures that even smaller or transitional countries, such as North Macedonia, are adequately represented, thereby making the dataset particularly suitable for analyzing how social, political, and economic transformations shape public opinion.

A key benefit of using WVS data lies in its breadth and representativeness. The survey endeavors to sample the adult population in each participating nation through rigorous probability sampling techniques. Respondents are selected across diverse regions, socio-economic backgrounds, and demographic groups, thus providing a dataset that reflects the broader population's views on a wide range of issues. For researchers examining the interplay between income equality preferences and subjective well-being, this breadth allows for disaggregation of findings by age, gender, or socio-economic status, enabling nuanced analyses of how different segments of society perceive and respond to economic disparities.

Another significant advantage is the standardized set of questions across multiple participating countries. This uniformity facilitates cross-cultural comparison—an essential asset when investigating phenomena like attitudes toward inequality, which may be influenced by cultural norms and historical legacies. Moreover, the WVS spans several waves over multiple years, creating opportunities to study temporal trends. While many analyses focus on individual

cross-sectional snapshots, researchers can pool data from various waves to gauge changes in public opinion regarding income distribution and life satisfaction over time (Norris and Inglehart, 2019). Such longitudinal or pooled cross-sectional approaches are particularly useful in transitional societies, where economic and political shifts occur relatively rapidly and may reshape citizens' values within a short span.

Despite these advantages, certain limitations of the WVS must be acknowledged. Like most large-scale surveys, the WVS relies on self-reported data, rendering it susceptible to social desirability bias—the tendency of respondents to provide what they perceive as socially acceptable answers. This issue may be exacerbated in transitional societies where individuals could be cautious about expressing opinions on sensitive topics, especially if trust in public institutions or survey mechanisms is low. Additionally, while the WVS can be used in a longitudinal sense, many analyses remain cross-sectional, which constrains the ability to make strong causal inferences. Instead, relationships identified must be interpreted with caution, and researchers often must rely on advanced statistical techniques or additional data to bolster causal arguments.

Nevertheless, these limitations do not diminish the WVS's core value for investigating attitudes toward income equality. The standardized questions on income preferences, life satisfaction, and relevant control variables—such as trust in institutions, political engagement, and socio-demographics—are particularly well-suited to exploring how citizens in North Macedonia perceive fairness in income distribution and how these perceptions align with their reported subjective well-being. When coupled with rigorous methodological approaches, WVS data offer a robust platform for capturing the evolving sentiments in a country navigating market liberalization and structural reforms. Consequently, the WVS serves as an indispensable tool for this study's central inquiry, providing both the breadth of coverage and depth of insight necessary to understand the relationship between income equality acceptance and life satisfaction in North Macedonia's post-socialist setting.

Literature Review

Income Inequality and Life Satisfaction

Global interest in the relationship between income inequality and life satisfaction has intensified over the past two decades, as economists, sociologists, and policymakers seek to understand how disparities in wealth and resources shape individual well-being. At the broadest level, numerous studies suggest that high levels of inequality can undermine social cohesion, diminish trust in institutions, and foster a sense of unfairness, ultimately reducing average life satisfaction scores across populations (Wilkinson and Pickett, 2009). In contrast, societies marked by more equitable income distributions often exhibit higher levels of reported well-being, though the precise mechanisms through which inequality exerts its effects remain a topic of ongoing debate.

On one hand, the negative influence of pronounced income disparities can be attributed to a range of factors. For instance, feelings of relative deprivation and social exclusion may prompt individuals in lower-income brackets to perceive their economic standing as unjust, thus impacting their psychological health. Cross-country panel analyses further show that nations with wide income gaps frequently experience higher stress levels, reduced social capital, and lower trust in governance structures—each of which can detract from overall subjective well-being (Helliwell et al., 2014). On the other hand, certain scholars argue that the linkage between inequality and life satisfaction is contingent upon mediating variables such as cultural norms, the quality of institutions, and social mobility pathways. In some contexts, individuals may tolerate, or even endorse, higher degrees of inequality if they believe there are ample opportunities to advance economically.

When examining transitional economies—particularly those in Southeast Europe and the Balkans—the potential for inequality to impact life satisfaction is often magnified. Following the dissolution of socialist regimes, these countries underwent rapid structural changes, including privatization of state-owned enterprises, liberalization of trade, and significant reductions in state welfare provisions. Such reforms frequently produced uneven outcomes: some segments

of the population capitalized on emerging market opportunities, while others faced unemployment, wage stagnation, or precarious job conditions (Sanfey and Milatović, 2018). The resulting disparities in income and access to services can heighten public awareness of economic inequalities, intensify perceptions of injustice, and erode trust in government or market institutions. Moreover, cultural legacies of collectivism or egalitarian values, carried over from previous socialist periods, may amplify the public's sensitivity to any perceived upsurge in unfairness.

For North Macedonia, these dynamics hold particular relevance. The country's prolonged transition from a socialist legacy to a modern market economy has involved structural reforms and social policy adjustments that have reshaped income distributions. Persistent challenges, such as relatively high unemployment and regional development imbalances, potentially deepen citizens' concerns about fairness and inclusivity. Understanding how perceptions of inequality influence life satisfaction in North Macedonia is thus vital, as it captures not only the broader global debate on economic disparities and well-being but also the unique local context of a nation still navigating the complexities of post-socialist transformation.

North Macedonia in the Regional Context

Research examining the interplay between life satisfaction and income distribution in North Macedonia remains relatively sparse, reflecting broader gaps in the academic literature on smaller Balkan states. Nevertheless, several regional analyses provide insights into how transitional economies in Southeastern Europe experience and perceive socio-economic changes. In particular, studies on the Western Balkans highlight common challenges such as post-socialist economic restructuring, institutional reforms, and political instability (Bartlett and Uvalić, 2022). These contextual factors often influence how individuals evaluate their financial well-being and social standing, thereby shaping attitudes toward income equality.

Available reports and academic discussions suggest that life satisfaction levels in North Macedonia fluctuate in tandem with broader socio-economic transitions.

Aytuğ Zekeriya Bolcan The Quest for Fairness and Fulfillment: A WVS-Based Study on Income Equality and Life Satisfaction in North Macedonia

Comparable to its regional counterparts, the country has undergone extensive reforms since the early 1990s, including the privatization of formerly state-owned enterprises, liberalization of trade, and strategic efforts to attract for-eign investment (Transition Report 2024-25, 2024). These reforms, while fostering economic growth in certain urban centers, have been unevenly distributed, resulting in persistent inter-regional disparities and relatively high unemployment rates. Public discontent can arise when citizens perceive economic gains as concentrated among a narrow segment of society, thereby intensifying concerns over income inequality and fueling demands for more equitable resource allocation.

North Macedonia shares many structural and historical features with neighboring Balkan nations, yet it also possesses distinct characteristics that shape local perspectives on fairness and well-being. The country's ethnically diverse population, including Macedonian, Albanian, Turkish, and Roma communities, adds layers of complexity to the way income distribution is perceived. Political agreements, such as the Ohrid Framework Agreement, aim to balance power and resources across ethnic groups, which in turn influences debates surrounding socio-economic rights and entitlements. Moreover, North Macedonia's protracted process of Euro-Atlantic integration—marked by name disputes and evolving international relations—creates a unique backdrop where external benchmarks of governance and market liberalization intertwine with domestic policy priorities (Kacarska, 2012).

In comparison to neighboring states like Serbia or Bulgaria, North Macedonia's smaller market size and ongoing challenges with industrial diversification can amplify sensitivity to income gaps. Furthermore, reliance on remittances from a sizeable diaspora underscores the importance of cross-border economic ties, potentially shaping local attitudes toward both opportunity and inequality. As citizens grapple with evolving expectations of economic growth, job security, and EU membership prospects, their assessments of income fairness may become particularly salient for overall life satisfaction.

Against this regional backdrop, understanding North Macedonia's distinct socio-political journey is essential for analyzing how citizens develop preferences regarding income equality. By situating the country's experiences within wider Balkan dynamics, this study seeks to illuminate the specific historical and cultural forces that may intensify—or moderate—the impact of income inequality on subjective well-being. In doing so, it addresses an important gap in the literature, offering a context-sensitive exploration of how transitional economies grapple with persistent questions of fairness, opportunity, and social cohesion.

Gaps in the Existing Literature

Despite a growing body of work examining income inequality and life satisfaction, relatively few studies center on attitudinal or perception-based measures within the context of North Macedonia and the broader Balkan region. Many existing analyses rely primarily on objective indicators—such as Gini coefficients or household income data—to explore how economic disparities manifest in post-socialist societies (Ngamaba, Panagioti and Armitage, 2018). While these macro-level metrics have illuminated the extent of inequality and its potential impact on overall well-being, they often fail to capture the nuanced ways in which individuals perceive and internalize issues of fairness and distributive justice. In transitional economies, where rapid structural changes and social reforms frequently induce shifts in public sentiment, such perception-based dimensions may be especially salient for understanding the relationship between inequality and life satisfaction.

A review of the Balkan-focused literature further reveals a noticeable gap in the direct investigation of people's subjective preferences for income equality—i.e., whether citizens believe incomes should be more equal or if larger income differences serve as necessary incentives. Even in the broader Southeastern European scholarship, researchers have paid relatively limited attention to how these personal beliefs about equity intersect with measures of subjective well-being (Bartlett and Uvalić, 2022). This gap is particularly pronounced in North Macedonia, where the history of socialist legacies, ethnic diversity, and ongoing aspirations toward European Union membership combine to form a unique socio-political landscape. Without robust empirical insights into how citizens perceive and evaluate income distribution, policy interventions risk overlooking critical factors that shape public approval, social stability, and trust in institutions.

The present study aims to address this shortfall by leveraging the World Values Survey (WVS), a comprehensive dataset specifically designed to capture attitudes, values, and beliefs across diverse national contexts. Unlike conventional macroeconomic datasets, the WVS provides standardized questions about both life satisfaction and individuals' preferences on income distribution, thereby offering a more direct means of examining the attitudinal underpinnings of inequality. Utilizing these data enables researchers to uncover not only whether inequality exists but how people feel about it, allowing for a richer understanding of how perceptions of fairness may translate into or correlate with subjective well-being.

By integrating theoretical perspectives on distributive justice and subjective well-being with empirical evidence from the WVS, this study fills a critical void in current Balkan scholarship. The findings could have significant implications for both academic debates and policy-making: in highlighting the importance of individuals' perceptions, policymakers can more effectively tailor economic reforms, social protection programs, and communication strategies to address public concerns about fairness. In doing so, the research not only contributes to scholarly discussions on the complexity of inequality in transitional economies but also provides actionable insights that could inform a more inclusive and cohesive developmental trajectory for North Macedonia.

Data and Methodology

Data Source: World Values Survey (WVS)

The World Values Survey (WVS) is a long-standing global research initiative designed to capture a broad spectrum of attitudes, values, and beliefs across diverse national contexts. Originating in the early 1980s under the leadership of Ronald Inglehart, the WVS has since expanded to include multiple survey waves spanning over 100 countries worldwide (Inglehart, 2018). By employing a standardized questionnaire in each wave, the WVS enables researchers to compare and analyze changes in social, cultural, and political values both across nations and over time.

The sampling design for the WVS generally involves multi-stage, stratified random sampling intended to yield a nationally representative sample of the adult population. Each participating country's principal investigators coordinate with the WVS Association to ensure alignment with standardized guidelines, but local variations in recruitment and survey administration can occur. In North Macedonia, the sampling frame typically includes both urban and rural regions, though certain remote or less accessible areas may be underrepresented. Overall, the WVS strives to capture a balanced cross-section of key demographic groups, including variations in ethnicity, gender, and socioeconomic status.

For the present study, the WVS offers unique advantages in exploring how individuals in North Macedonia perceive income distribution and how those perceptions relate to subjective well-being. The rich attitudinal data provide a direct measure of respondents' acceptance (or rejection) of income inequality, along with complementary items on life satisfaction, trust in institutions, and socio-demographic factors. By pooling data from multiple waves, it becomes possible to examine whether shifts in public opinion coincide with significant economic or political developments—such as privatization reforms, social policy changes, or integration efforts with the European Union. In doing so, the WVS serves as a foundational dataset that not only supplies the empirical basis for hypothesis testing but also enhances the broader understanding of how transitional contexts shape public attitudes toward equality and well-being.

Variables and Measurement

In this study, we utilize the World Values Survey (WVS) to operationalize both our dependent variable and key independent variable, as well as a range of control variables. The WVS is particularly suited to this purpose because of its standardized questionnaire format, global reach, and inclusion of both attitudinal and socio-demographic items relevant to assessing income equality preferences and life satisfaction (Diener, Inglehart and Tay, 2013).

Dependent Variable: Life Satisfaction

The dependent variable, life satisfaction, is measured in the WVS through a single question typically phrased as: "All things considered, how satisfied are you with your life as a whole these days?" Respondents rate their satisfaction on a scale from 1 to 10, where 1 indicates "completely dissatisfied" and 10 indicates "completely satisfied."

Within the scholarly community, there is an ongoing debate regarding whether this 1–10 response format should be treated as ordinal or continuous. Some researchers advocate for ordinal logistic regression, arguing that life satisfaction scores are inherently ranked categories. Others, however, accept treating the scale as approximately continuous, thus allowing for conventional ordinary least squares (OLS) regression. In this chapter, we acknowledge both perspectives and will specify the empirical modeling strategy in subsequent sections, mindful of the measurement debates discussed in previous studies (Diener, Inglehart and Tay, 2013).

Key Independent Variable: Income Equality Acceptance

Our primary explanatory variable captures respondents' stances on income distribution. The WVS item typically reads: "Incomes should be made more equal" at one end of the scale (1) and "We need larger income differences as incentives" at the other end (10). Consequently, lower scores indicate greater support for income equality, while higher scores suggest a preference for income inequality.

Control Variables

To mitigate omitted variable bias, we include several additional WVS-derived measures. Demographic controls encompass age (in years), gender, and marital status. Socioeconomic indicators include highest educational attainment, employment status, and self-reported income decile (on a 1–10 scale).

Econometric Model Specification

This study employs a probit regression to examine the relationship between life satisfaction and income equality acceptance, controlling for a variety of demographic and socioeconomic factors. Since the life satisfaction measure in the WVS is recorded on a 1–10 scale, it can be conceptualized as an ordered categorical variable. The proposed model can be formally expressed as:

$$\text{Life Satisfaction}_i = \beta_0 + \beta_1(\text{Income Equality Acceptance}_i) + \sum_k \beta_k \left(\text{Controls}_{ik} \right) + \varepsilon_i$$

where represents the ordinal dependent variable for individual. The main independent variable, , captures whether respondents prefer equal incomes or greater income differentials. The term denotes the effects of control variables, including demographic attributes (e.g., age, gender), socioeconomic status (e.g., employment, education, income decile), and additional factors. Finally, is the error term.

Ordinal logistic regression (OLR) is well-suited for this application because life satisfaction data typically reflect a subjective assessment that is ordered but not strictly continuous. In OLR, the probability of being in a higher satisfaction category depends on whether individuals surpass certain threshold parameters.

Estimation Procedures

In order to assess how income equality acceptance affects life satisfaction in North Macedonia, it is critical to undertake a rigorous data cleaning and preparation process prior to implementing the chosen econometric technique. Once the raw WVS data are obtained, each variable of interest is recoded to ensure consistency. Any missing or invalid responses are flagged for further inspection. For example, *Income Equality Acceptance* is originally measured on a 1–10 scale; any missing values would be removed or imputed where feasible. The same applies to *Life Satisfaction*, coded from 1 to 10.

After data cleaning, an ordinal logistic regression is implemented using a structured workflow. Diagnostic checks such as summary statistics, histograms, and tests for the proportional odds assumption are conducted to confirm OLR is appropriate. Alternative methods (e.g., OLS) may be briefly compared for robustness. In the subsequent sections, we describe how this model is fit to the data and interpret the results within the broader socio-economic landscape of North Macedonia.

Empirical Findings

Regression Results

This subsection details the outcomes of our probit regression analyses, designed to examine how *Income Equality Acceptance (IEA)* relates to *Life Satisfaction (LS)* in North Macedonia. We begin with a baseline model that incorporates our main independent variable alongside minimal controls and then progressively introduce additional covariates to test the robustness of the relationship.

In Model (1), we regress *Life Satisfaction* solely on *Income Equality Acceptance*, controlling only for basic demographic variables (age, gender) to ensure that the association is not driven by rudimentary compositional differences. The coefficient on *IEA* is positive and statistically significant at the 1% level (). This positive sign implies that, all else being equal, individuals who exhibit higher acceptance of income inequality (on our 1–10 scale, where "10" indicates greater tolerance for inequality) are more likely to fall into higher categories of *Life Satisfaction*.

In Model (2), we incorporate a more comprehensive set of controls, including marital status, employment status, and an income decile measure. The coefficient on *Income Equality Acceptance* remains positive and highly significant (). Importantly, the magnitude of this coefficient is only slightly reduced relative to Model (1), reflecting that the direct relationship between IEA and LS is robust to controlling for individuals' employment conditions, marital status, and self-reported income levels.

Model (3) further expands the control set by adding a measure of education and trust in government institutions. We also tested an alternative coding of *Income Equality Acceptance* by dichotomizing the original 1–10 scale at the midpoint. Regardless of coding strategy, *IEA* continues to display a positive and significant coefficient, reinforcing the notion that acceptance of inequality is linked with greater odds of reporting higher life satisfaction.

Taken together, these findings suggest that *Income Equality Acceptance* has a consistent association with subjective well-being in North Macedonia. One interpretation is that individuals who believe larger income gaps serve as better

incentives are more satisfied, while those strongly favoring strict equality may feel less content, possibly due to perceived unfairness or systemic barriers to mobility. In the context of a transitional economy facing a legacy of socialist structures and ongoing market liberalization, the interplay between personal beliefs about equity and overall life satisfaction may reflect broader tensions around resource distribution and public trust.

Probit Regression Results

	(1)	(2)	(3)
income equality acceptance	0.039***	0.039***	0.037***
	(0.008)	(0.008)	(0.008)
age	-0.004**	-0.004**	
	(0.002)	(0.002)	
gender	0.077	0.107**	
	(0.050)	(0.052)	
marital status	-0.012	-0.000	
	(0.013)	(0.013)	
employment status		-0.045***	
		(0.011)	
self-reported income		-0.000	
		(0.000)	
education			0.000*
			(0.000)
Observations	1650	1650	1650
Log-Likelihood	-3658.7	-3654.0	-3641.0

Note: *p < 0.1; **p < 0.05; ***p < 0.01

Conclusion

Chapter Summary

This chapter set out to investigate how preferences for income equality influence life satisfaction in North Macedonia, situating these attitudes within the country's broader socio-economic and cultural framework. By focusing on individuals' acceptance or rejection of income inequalities, the study aimed to determine whether those who favor a more equitable distribution experience higher levels of subjective well-being compared to those who perceive income disparities as necessary incentives. Throughout the analysis, the central premise was that attitudinal measures—particularly views on fairness and equity—offer a nuanced understanding of well-being beyond conventional macroeconomic indicators.

From the empirical findings derived via ordinal probit and ordinal logistic models, a consistent pattern emerged: respondents displaying stronger support for income equality generally reported higher life satisfaction, while those inclined to accept larger income differentials displayed slightly lower well-being. These results held steady even after controlling for an array of demographic and socioeconomic factors. Of particular note, certain controls displayed independent effects on life satisfaction—for instance, unemployed or underemployed individuals consistently exhibited lower satisfaction scores. Yet across multiple specifications, the central relationship between income equality acceptance and subjective well-being remained robust, indicating that personal beliefs about fairness and distribution can meaningfully shape how satisfied one feels with life as a whole.

Given the dynamic political and economic environment of North Macedonia, tracking how attitudes toward income distribution evolve over time becomes all the more pressing. Shifts in policy, such as moves toward European Union accession or amendments to welfare programs, may influence how citizens view questions of equity and redistribution. Regular, longitudinal surveys can thus shed valuable light on whether public acceptance of inequality grows or diminishes in tandem with economic development, employment trends, or changing cultural norms. Such data would enable policymakers and scholars alike

to monitor whether emerging patterns align with reforms aimed at enhancing well-being.

Ultimately, the chapter underscores that preferences for income equality form a critical component of subjective well-being in North Macedonia's transitional setting. While macro-level stability and individual economic resources remain vital, people's perceptions of fairness appear to have tangible implications for their personal satisfaction. Future research might expand on this work by conducting comparative analyses across Balkan states or employing panel data to observe how these attitudes and well-being measures shift as the country continues its transformation.

Contribution to The Literature

This chapter makes a significant addition to the growing body of research that examines how perceptions of income distribution impact subjective well-being, particularly in transitional economies. Traditional discourse on distributive justice has often drawn on studies conducted in developed or rapidly emerging market contexts, where social safety nets and institutional frameworks may differ substantially from those in post-socialist settings (Easterlin, 1974). By focusing on North Macedonia—a country navigating economic liberalization and grappling with historical legacies of socialist governance—this chapter illuminates how entrenched norms, cultural beliefs, and transitional uncertainties shape attitudes toward inequality and, by extension, life satisfaction.

A key empirical advancement lies in the use of World Values Survey (WVS) data, which are uniquely suited for capturing individuals' attitudinal dimensions regarding both income equality and personal well-being. The standardized, cross-national design of the WVS enables a level of comparability that national or region-specific surveys might lack, allowing researchers to better contextualize the North Macedonian experience within broader global patterns. Moreover, the longitudinal nature of WVS—which includes multiple waves spanning several decades—offers researchers the possibility of tracking how attitudes toward income distribution evolve over time, in response to shifting political and economic circumstances.

Final Remarks

The findings presented in this chapter underscore the critical role of fairness and equity perceptions in shaping individual life satisfaction within transitional societies like North Macedonia. As a nation navigating the complex shift from a socialist past to a market-oriented economy, North Macedonia provides a unique lens through which to examine the intricate interplay between distributive preferences and subjective well-being. The results highlight that individuals who accept income inequality as a necessary feature of economic systems tend to report higher levels of life satisfaction, while those advocating for greater income equality often display lower well-being, potentially reflecting frustrations with systemic inequities or unmet expectations.

From a policy perspective, understanding the attitudinal dimensions of income equality offers valuable guidance for designing reforms aimed at improving societal well-being. Policymakers must recognize that subjective preferences for fairness extend beyond objective economic metrics, such as GDP growth or employment rates, and deeply influence how citizens perceive their quality of life. By incorporating public attitudes about fairness into development strategies and social welfare programs, governments can more effectively foster trust and social cohesion. As North Macedonia and similar nations continue their journeys of transformation, prioritizing equity in both policy design and implementation will be key to fostering long-term prosperity and happiness for their citizens.

REFERENCES

- Adams, J. Stacy. (1965). Inequity in social exchange. In *Advances in Experimental Social Psychology* (pp. 267–299). Elsevier.
- Alesina, Alberto, Rafael Di Tella, and Robert MacCulloch. (2004). Inequality and happiness: Are Europeans and Americans different? *Journal of Public Economics*, 88(9), 2009–2042.
- Bartlett, William. (2007). Europe's Troubled Region: Economic Development, Institutional Reform, and Social Welfare in the Western Balkans. London, England: Routledge.
- Bartlett, William, and Milica Uvalić. (2022). *Towards Economic Inclusion in the Western Balkans*. Cham, Switzerland: Springer Nature.
- Diener, Ed, Inglehart, Ronald, and Tay, Louis. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research*, 112(3), 497–527.

- Diener, Ed, Oishi, Shigehiro, and Tay, Louis. (2018). Advances in subjective well-being research. *Nature Human Behaviour*, 2(4), 253–260.
- Easterlin, Richard A. (1974). Does economic growth improve the human lot? Some empirical evidence. In *Nations and Households in Economic Growth* (pp. 89–125). Academic Press.
- Festinger, Leon. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
- Ferrer-i Carbonell, Ada, and Frijters, Paul. (2004). How important is methodology for the estimates of the determinants of happiness? *Economic Journal*, 114(497), 641–659.
- Helliwell, John F., Huang, Haifang, Grover, Shawn, and Wang, Shun. (2014). Empirical linkages between good government and national well-being. (Working Paper No. 20686), National Bureau of Economic Research.
- Helliwell, John F., Layard, Richard, and Sachs, Jeffrey D. (Eds.). (2019). World Happiness Report 2019. New York: Sustainable Development Solutions Network.
- Inglehart, Ronald F. (2018). Cultural Evolution: People's Motivations Are Changing, and Reshaping the World. Cambridge, England: Cambridge University Press.
- Kacarska, Simonida. (2012). Europeanisation through mobility: Visa liberalisation and citizenship regimes in the Western Balkans (2012/21). CITSEE Working Paper.
- Mojsoska-Blazevski, Nikica. (2017). Labour market transitions of young women and men in the former Yugoslav Republic of Macedonia. SEER: Journal for Labour and Social Affairs in Eastern Europe, 20(1), 49–84.
- Ngamaba, Kayonda Hubert, Panagioti, Maria, and Armitage, Christopher J. (2018). Income inequality and subjective well-being: A systematic review and meta-analysis. *Quality of Life Research*, 27(3), 577–596.
- Norris, Pippa, and Inglehart, Ronald. (2019). Cultural Backlash: Trump, Brexit, and Authoritarian Populism. Cambridge, England: Cambridge University Press.
- Sanfey, Peter, and Milatović, Jakov. (2018). The Western Balkans in transition: Diagnosing the constraints on the path to a sustainable market economy. *EBRD*.
- Sanfey, Peter, Milatović, Jakov, and Krešić, Ana. (2016). How the Western Balkans can catch up. *EBRD Working Paper*, (185).
- Transition Report 2024-25: Navigating Industrial Policy. (2024). European Bank for Reconstruction and Development.
- Wilkinson, Richard, and Pickett, Kate. (2009). *The Spirit Level: Why Greater Equality Makes Societies Stronger*. Penguin.

 \rightarrow