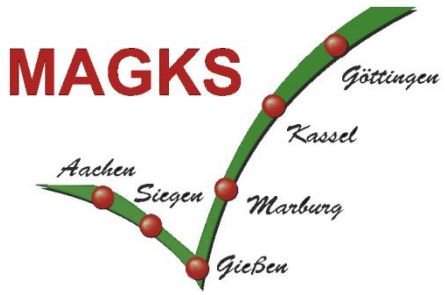

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Income and Happiness in Afghanistan: Do Insecurity and Violence Matter?

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Abstract

We examine the relationship between household income and happiness in Afghanistan and the moderating roles of fear of insecurity and experiencing violence. Our study is based on surveys conducted by the Asia Foundation from 2014 to 2021 across 34 provinces in Afghanistan. Employing fixed effects ordered logit regressions, our results reveal a positive association between income and happiness. Additionally, we find a negative association between fear of insecurity, experiencing violence, and happiness. Among individuals with higher incomes and a fear of insecurity, the probability of having a high level of happiness declines by about 2.4% points when compared to those without such fear. Furthermore, for individuals with higher incomes who have experienced violence, the probability of having a high level of happiness declines by about 3.8% points when compared to those who have not experienced violence. However, for individuals with low incomes, insecurity and violence do not significantly impact their predicated level of happiness. This result can be attributed to two main issues. First, in conflict-affected areas, high-income individuals not only encounter the inherent dangers of their environment and the constant threat of terrorism, but also face increased risk of asset loss and institutional mistrust due to rampant corruption. Second, fear of insecurity and experiencing violence are influenced by psychological factors and diminish the positive impact of higher income on happiness. The results are robust to the inclusion of other socio-economic and demographic characteristics of the respondents.

Keywords: Happiness; Life Satisfaction; Conflict; Violence; Afghanistan; Ordered logit; Survey

JEL Codes: D74; H56; I31; N35; O15

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1. Introduction

Afghanistan has experienced four decades of domestic and international conflicts, resulting in profound and long-lasting effects on the happiness of its citizens. The series of events, including the Soviet invasion from 1979 to 1989, the civil war from 1990 to 2000, and the US-led intervention from 2001 to 2021, have left long-lasting effects on the well-being of individuals in Afghanistan. The protracted conflict and violence have not only caused physical harm but have also led to significant psychological distress, characterized by fear, worry, anxiety, and uncertainty. This series of conflicting events have collectively contributed to making Afghanistan one of the unhappiest countries in the world. From 2020 to 2022, an average life evaluation score of 1.85 (out of 10) placed Afghanistan among the ten unhappiest countries in the world (Helliwell et al., 2023). Additionally, a Gallup survey conducted during the Taliban's takeover and U.S. troop withdrawal in 2021 revealed unprecedented levels of worry, stress, and sadness among Afghans. With 80 percent expressing worry, 74 percent reporting stress, and 61 percent feeling sad, Afghanistan witnessed some of the highest levels of negative emotions globally (Ray, 2022)

This study aims to explore the impact of income on individuals' happiness, placing a specific emphasis on the influence of fear of insecurity[1] and being a victim of violence[2] on individual well-being. On the one hand, higher income may buy people higher protection in conflict zones (e.g., better security, insurance, etc.), increasing life satisfaction. On the other hand, higher income in a violent environment may cause additional mental burden, increasing psychological disorders, stress, depression, and other forms of behavioral distortions. We use an original and representative survey data collected by the Asia Foundation[3] in Afghanistan from 2014 to 2021 for our empirical investigation. We show a significant negative association between fear of insecurity, being a victim of violence, and happiness among Afghans. Those with higher incomes are less able to enjoy higher happiness at the higher level of violence and insecurity.

Evidence from various studies by Easterlin (1974), Clark (2017), Jebb et al. (2018), and Klillingsworth (2021) suggests a positive association between income and happiness. Notably, in the case of Afghanistan, Bove & Gavrilova (2014) found a positive effect of income on individual well-being, despite the challenges posed by ongoing conflict and reduced economic growth. The uniqueness of Afghanistan's situation lies in the substantial increase in humanitarian aid from foreign countries, especially from the U.S., following NATO's presence since 2002. This influx of foreign aid has significantly contributed to Afghanistan's GDP per capita. However, the presence of international forces, particularly NATO, has also been a major trigger for conflict and violence by insurgents over the past

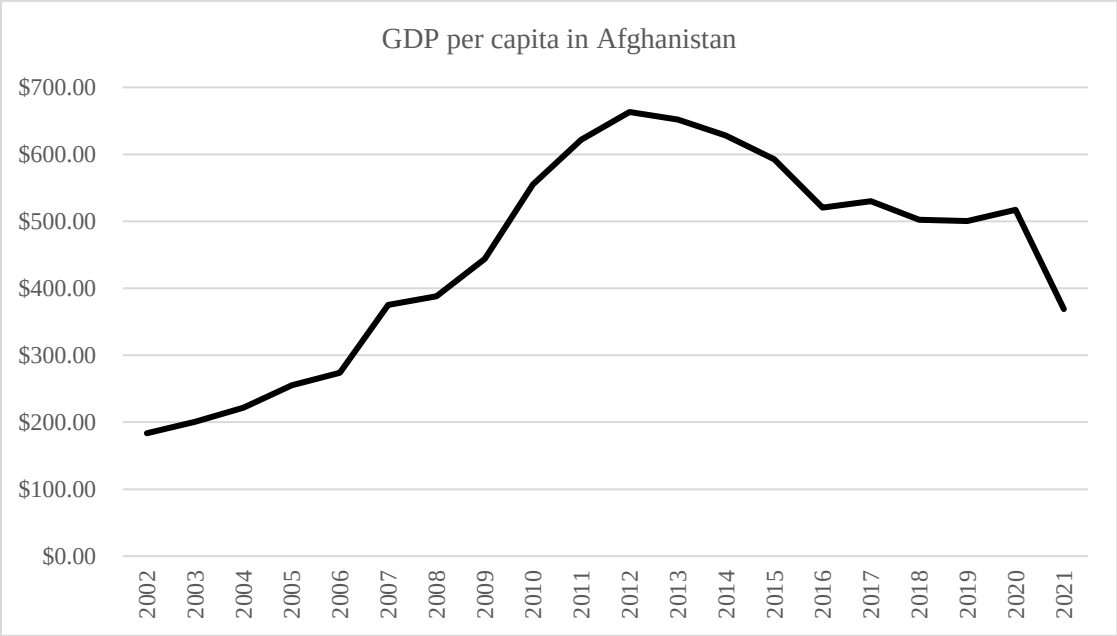
[1] Fear of insecurity means that an individual rates the security situation in his or her area or that he or she is afraid of his or her own personal safety or security or that of his or her family.

[2] Being a victim of violence or a crime implies that an individual reports his or her experience of violence at home or in the community.

[3] https://dataverse.ada.edu.au/dataset.xhtml?persistentId=doi:10.26193/VDDO0X

two decades, creating challenging situations. Figure 1 illustrates how the decision by international forces[4] to withdraw from Afghanistan in 2014 led to a gradual decline in the country's GDP per capita, primarily due to the reduction of foreign military expenditure and foreign aid. This withdrawal had a direct impact on the income of Afghans, as foreign aid played a pivotal role in supporting their livelihoods.

Fig 1: GDP per capita in Afghanistan (2002-2021)



Source: World Bank (2022)

Existing evidence suggests a negative association between fear of insecurity and happiness in various contexts, including in studies by Alfaro-Beracoechea et al. (2018) and Franc et al. (2012). Furthermore, research conducted in conflict-affected areas, such as Colombia by Wills-Herrera et al. (2011) and Bosnia-Herzegovina by Shemyakina & Plagnol (2013), have shown a negative relationship between perceived insecurity and subjective well-being. The number of political violence events, including battles, explosions, and violence against civilians has been substantial over recent years, declining since the return of the Taliban to power in August 2021 (see Figure 2).

[4] The GDP per capita in Afghanistan, as depicted in Figure 1, initially increased from 2002 to 2012, while international military forces also increased. Later, there is a subsequent decline in the GDP per capita in conjunction with the reduction of international military forces and foreign aid. This trend of military costs in Afghanistan is illustrated on page 28 of the Sigar report, accessible at: https://www.sigar.mil/pdf/quarterlyreports/2021-07-30qr.pdf.

Fig 2: Number of Political Violence Events in Afghanistan

Source: ACLED (2023)

Despite some studies investigating the effects of conflict, corruption, education, and health on the well-being of individuals in Afghanistan (e.g., Graham & Chattopadhyay 2009; Trani et al. 2011; and Harsha et al. 2013)[5], there remains a lack of empirical research specifically exploring the relationship between income and happiness in Afghanistan and how insecurity and violence affect this association.

This study seeks to address a significant gap in the existing literature by examining the relationship between income and happiness in the specific context of a low income and conflict-affected Afghanistan. Furthermore, this investigation will consider the moderating effects of insecurity and violence, given the intricate interplay of social norms and socio-economic factors. By exploring these factors, the study aims to contribute valuable insights into the complex dynamics that shape the well-being of individuals in such challenging environments. This paper is structured as follows: the second section provides an overview of the literature, the third section describes the data and methodology utilized in our study, and the fourth section reports the results. The fifth section presents our discussion and the sixth section presents the conclusion.

2. Literature Review

2.1. Income and Happiness

According to Easterlin (1974), happiness has a positive correlation with income over the life cycle. However, he argues that income growth does not always increase happiness and only up to a certain point. Ferrer-i-Carbonell (2005) found that individuals are happier when their income increases more than the income of the reference group, respectively. The income of the reference group is as essential for individual happiness as their own income. Further, Moore (2006) found that higher levels of fear of

[5] Appendix A provides a summary of these studies on Afghanistan.

crime are associated with lower levels of happiness, while higher levels of income are associated with higher levels of happiness. The author computed the shadow price of fear of crime, as well as income, on happiness. Furthermore, Clark (2017) has investigated the effects of relative and absolute income on happiness. He found that relative income has a more significant impact on happiness than absolute income. Later, Jebb et al. (2018) examined the effect of income on happiness using a representative sample of over 1.7 million individuals worldwide. The authors used spline regression models and found that income satiation occurs at $95,000 for life evaluation and $60,000 to $75,000 for emotional well-being, though that amount varies in wealthier regions. In contrast, Killingsworth (2021) found that experienced well-being continues to rise linearly with log income, indicating higher income can improve day-to-day happiness and overall life satisfaction for individuals in wealthier countries. The author challenges the previous notion that experienced well-being levels exceeded $75,000 per year in income by analyzing over one million real-time reports.

2.2. Insecurity, Violence, and Happiness

To examine the relationship between insecurity, violence, and happiness or life satisfaction, different approaches have been employed. Analogous terminologies have been used to investigate the impact of insecurity or violence on happiness or life satisfaction in conflict-affected areas. These cover concepts such as armed conflict, fear of terrorism[6], perceptions of insecurity, violence, and fear of violence. In the present study, we adopt the utilization of "fear of insecurity" for insecurity and "being a victim of violence" for violence as proxies. This enables us to explore the correlation and magnitude of the influence of insecurity and violence on happiness in conflict-affected areas.

Many empirical studies show that insecurity and violence are negatively associated with happiness. For instance, Franc et al. (2012) discovered that there is a negative association between fear of insecurity and subjective well-being, showing that people with a greater sense of safety had higher levels of life satisfaction. Additionally, the fear of terrorism has a negative association with life satisfaction. Frey et al. (2009) demonstrated that terrorism has a negative effect on life satisfaction using panel data from 1973–2002. The authors argue that terrorism causes psychological harm and triggers fear, consequently diminishing life satisfaction. To illustrate, consider the aftershock of a terrorist attack on buses: individuals might develop a heightened fear about using buses, even if the likelihood of another attack remains relatively low. Later, Farzanegan et al. (2017) found that the association between terrorism and life satisfaction is negative using data from 81 countries from 1994 to 2009. Alfaro-Beracoechea et al.

[6] Terrorism remains one of the most alarming occurrences in Afghanistan, particularly in urban areas. Bomb explosions and unannounced suicide attacks have contributed to a prevailing atmosphere of tension and fear. Over the past two decades, Afghans have been exposed to a substantial number of terror-related incidents, either firsthand or indirectly through media and social platforms. Even after these events, people continue to share photos and videos, perpetuating a cycle of violence that inflicts negative psychological consequences.

(2018) revealed that there is a significant negative correlation between fear of insecurity and subjective well-being, indicating that higher levels of fear of insecurity are associated with lower levels of subjective well-being. They analyzed 12 studies from North America, South America, Europe, and New Zealand. In Colombia, perceptions of insecurity correlate negatively and significantly with levels of subjective well-being (Wills-Herrera et al., 2011). Evidence in Bosnia-Herzegovina shows that individuals who were directly exposed to conflict and experienced violence in war had low levels of subjective well-being compared to those who were not directly exposed to the war (Shemyakina & Plagnol, 2013).

2.3. Income, Insecurity and Violence, and Happiness

In the literature, the impact of income on happiness has been extensively studied, but very few studies have explored the relationship between income, fear of insecurity, being a victim of violence, and happiness. Both fear of insecurity and being a victim of violence have a correlation with psychological factors, especially personality traits[7] (Mohamedamin & Fatahi, 2022; Reynaud et al., 2012). Notably, among the personality traits components, neuroticism[8] appears to play a significant role in how individuals perceive changes in their income as affecting life satisfaction. For example, Boyce & Wood (2011) conducted a study examining the interaction effect between income and personality traits on life satisfaction. They found that the interaction effect between income and neuroticism was negative and significant. Furthermore, evidence shows that individuals with higher levels of neuroticism tend to report lower satisfaction from income increases compared to those with lower levels of neuroticism (Hussain, 2017; Syrén et al., 2020). Moreover, neuroticism may also act as a mediator between income and life satisfaction. Proto & Rustichini (2015) explored the mediating role of neuroticism between income and life satisfaction. They found that neuroticism negatively mediated the interaction effect between income and life satisfaction. This suggests that individuals with higher neuroticism may experience more significant changes in happiness with fluctuations in income, whereas emotionally stable individuals may be less affected.

Additionally, there are also findings that show that the interaction effect between neuroticism and income on life satisfaction is positive. For instance, Soto & Luhmann (2013) discovered that the interaction effect between income and neuroticism on life satisfaction is positive and significant. In their study, neurotic individuals with higher income reported higher life satisfaction. Conversely, when neurotic individuals had lower income, their life satisfaction was more negatively impacted compared to emotionally stable individuals with lower income.

[7] These are openness, conscientiousness, extraversion, agreeableness, and neuroticism (the Big Five).

[8] Neuroticism is one of the fundamental domains of personality traits (Big Five). It means that an individual feels tense and jittery (Syrén et al., 2020).

3. Data and Methodology

3.1. Data

We test following hypotheses in our study:

H1: The higher the level of income, the higher the level of happiness.

H2: The higher the level of fear of insecurity and experience of violence, the lower the level of happiness.

H3: The positive association between income and happiness is weaker in the presence of higher fear of insecurity and experience of violence.

The analysis of this study is based on a national survey conducted by the Asia Foundation, a nonprofit international development organization. The survey aims to explore the thoughts and opinions of Afghans regarding security, political participation, the economy, government, and other socio-economic factors. From 2014 to 2021, the survey collected 54,446 observations. The data collection involved face-to-face interviews with respondents using a stratified-random sampling technique in all 34 provinces, 400 districts, cities, and villages across Afghanistan. The sample used in the survey is designed to represent the Afghan population in terms of political, socio-economic, and demographic characteristics. According to the Asia Foundation (2021), this survey is the longest-running barometer of public opinion in Afghanistan since 2001. To analyze the data, we used a fixed-effect ordered logit model (Baetschmann et al., 2020).

Dependent Variable

The dependent variable is "happiness," which is determined by the participants' responses to the question, "In general, in your life, would you say you are very happy, somewhat happy, not very happy, or not at all happy?" The original scoring of this variable ranges from 1 (very happy) to 4 (not at all happy).

We re-scaled the scores so that 1 represents "not at all happy" and 4 represents "very happy." We collected self-reported happiness data through surveys conducted between 2014 and 2021. Hence, our dataset includes data from 2014–2019 and 2021. We were unable to obtain the 2020 survey report from the Asia Foundation.

Explanatory Variables

The explanatory variables of interest in this study are "income," "fear of insecurity," and "being a victim of violence."

The income data was collected by asking participants to provide their average total family monthly income, which originally had nine categories[9] ranging from less than 2,000 AFN to 40,000 AFN or more. To simplify the analysis, these nine categories were grouped into three broader categories, represented as dummies: Category 1 signifies low income (equal to 1) and 0 otherwise. Category 2 indicates medium income (equal to 1) and 0 otherwise. Category 3 represents high income (equal to 1) and 0 otherwise.

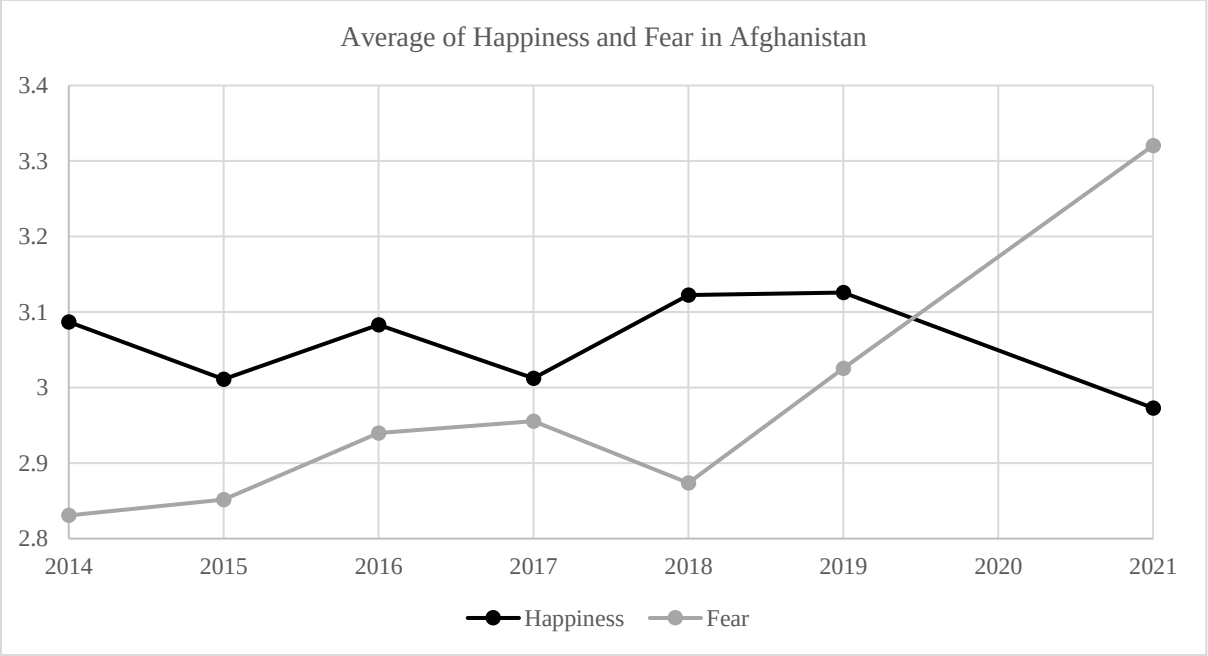
Fear: Participants were asked about how often they fear for their personal safety or security, as well as that of their family. The original scoring of this variable ranged from 1 (often) to 4 (never). For analysis purposes, the scores were re-scaled, where 0 represents never fear and 1 represents fear.

Being a victim of violence: Participants were asked whether they or any member of their family had been a victim of violence or some criminal act in their home or community within the past year. The original scoring of this variable is binary, with a value of 0 representing "No" and 1 representing "Yes."

Figure 3 illustrates the average levels of happiness and fear of insecurity among Afghans from 2014 to 2021, indicating a negative correlation between the two variables. During this period, several remarkable events impacted the experience of conflict and the happiness of Afghans. On May 17, 2014, U.S. President Barack Obama officially announced the withdrawal of U.S. troops from Afghanistan, coinciding with the end of Hamid Karzai's presidency. Afghans expressed concerns about the future, particularly regarding the escalation of internal conflicts. In September 2014, a unity government was established in Afghanistan; however, due to the high level of corruption within the administration, Afghans were pessimistic about the outcome of the presidential election. Later, on April 13, 2017, U.S. President Donald Trump signaled the possibility of a prolonged conflict in Afghanistan. Finally, after 2018, the security situation deteriorated throughout Afghanistan, resulting in a peace agreement between the Taliban and the U.S. that took place in 2019. Overall, these political events could have had a profound impact on the well-being of people in Afghanistan, especially due to the corresponding rise in fear of insecurity and uncertainty about the future.

[9] This income categorization is based on the researchers' own estimations. For instance, individuals with incomes between 0 and 10,000 AFN fall into the low-income category; those with incomes between 10,001 and 200,000 AFN are classified as having medium income; and those with incomes exceeding 200,000 AFN are considered high-income individuals. Medium-income people have been considered a reference group.

Fig. 3: Average of Happiness and Fear of Insecurity in Afghanistan (2014 – 2021)



Source: The Asia Foundation (2021)

Table 1: Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max	Operationalization
Happiness	92416	3.061	.827	1	4	1=Not all happy, 2 = Not very happy, 3 = Somewhat happy, 4 = Very happy.
Low income	91599	.303	.46	0	1	0 = No, 1 = Yes.
Medium income	91599	.63	.483	0	1	0 = No, 1 = Yes.
Low income	91599	.067	.249	0	1	0 = No, 1 = Yes.
Financial situation of the household	123124	1.98	.724	1	3	Financial situation of the household. 1 = worse, 2 = the same, 3 = better. (Compared to two years ago)
Physical situation of the household	122117	1.93	.668	1	3	Physical condition of the household. 1 = worse, 2 = the same, 3 = better. (Compared to two years ago)
Fear of insecurity	147625	.645	.479	0	1	0 = No, 1 = Yes.
Being a victim of violence	147109	.187	.39	0	1	0 = No, 1 = Yes.
Corruption in daily life	146982	.877	.329	0	1	Corruption is a problem in daily life. 0 = No problem, 1 = Major problem.
Country direction	129942	.436	.496	0	1	Afghanistan is going on the right direction or wrong direction. 0 = Wrong, 1 = Right.
Satisfaction with democracy	130491	2.715	.885	1	4	1 = very dissatisfied, 2 = somewhat dissatisfied, 3 = somewhat satisfied, 4 = very satisfied.
Trust in government	145749	2.519	.911	1	4	1 = No trust, 2 = a little trust, 3 = Some trust, 4 = a lot of trust.
No education	72452	.493	.5	0	1	0 = No, 1 = Yes.
Primary education	72452	.161	.367	0	1	0 = No, 1 = Yes.
Secondary education	72452	.124	.33	0	1	0 = No, 1 = Yes.
Higher education	72452	.085	.279	0	1	0 = No, 1 = Yes.
Access to school	122519	2.05	.715	1	3	Household members have access to school with better quality. 1 = worse, 2 = the same, 3 = better.
Health well-being	122625	2.003	.705	1	3	Health well-being of the household. 1 = worse, 2 = the same, 3 = better. (Compared to two years ago)
Food quality	122508	1.911	.7	1	3	Quality of food and diet of the household. 1 = worse, 2 = the same, 3 = better. (Compared to two years ago)

Age 18-25	148196	.288	.453	0	1	Age level 18-25. 0 = No, 1 = Yes.
Age 26-35	148196	.287	.452	0	1	Age level 26-35. 0 = No, 1 = Yes.
Age 36-45	148196	.229	.42	0	1	Age level 36-45. 0 = No, 1 = Yes.
Age 46-55	148196	.122	.328	0	1	Age level 46-55. 0 = No, 1 = Yes.
Age55over	148196	.074	0.261	0	1	Age level over 55. 0 = No, 1 = Yes.
Household size 1-4	141970	.054	.226	0	1	Household Size 1-4. 0 = No, 1 = Yes.
Household size 5-8	141970	.111	.314	0	1	Household Size 5-8. 0 = No, 1 = Yes.
Household size 9-12	141970	.537	.499	0	1	Household Size 9-12. 0 = No, 1 = Yes.
Household size over	141970	.804	.397	0	1	Household Size over. 0 = No, 1 = Yes.
Single	148150	.177	.382	0	1	1 = Single, 0 = otherwise.
Married	148150	.8	.4	0	1	1 = Married, 0 = otherwise.
Widow	148150	.023	.15	0	1	1 = Widow, 0 = otherwise.
Gender	148196	.527	.499	0	1	0 = Female, 1 = Male.
Pashtun	147944	.409	.492	0	1	Ethnic group. Not belong to Pashtun, 1 = belong to Pashtun.
Tajik	147944	.333	.471	0	1	Ethnic group. Not belong to Tajik, 1 = belong to Tajik.
Uzbek	147944	.074	.261	0	1	Ethnic group. Not belong to Uzbek, 1 = belong to Uzbek.
Hazara	147944	.108	.31	0	1	Ethnic group. Not belong to Hazara, 1 = belong to Hazara.
Turkmen	147944	.018	.132	0	1	Ethnic group. Not belong to Turkmen, 1 = belong to Turkmen.
South	148196	.235	.424	0	1	South = 1, 0 = otherwise
Kabul	148196	.208	.406	0	1	Kabul = 1, 0 = otherwise
West	148196	.112	.315	0	1	West = 1, 0 = otherwise
East	148196	.108	.31	0	1	East = 1, 0 = otherwise
North	148196	.289	.453	0	1	North = 1, 0 = otherwise
Central Highlands	148196	.048	.214	0	1	Central Highlands = 1, 0 = otherwise
Access to electricity	121316	1.762	.719	1	3	Access to electricity. 1 = worse, 2 = the same, 3 = better. (Compared to two years ago)
Access to TV	101683	.596	.491	0	1	Access to TV: 0 = No, 1 = Yes.
Access to the internet	101349	.116	.32	0	1	Access to the internet: 0 = No, 1 = Yes.

3.2. Methodology and Model Specification

In equation (1), we use the fixed effects ordered logit model (Baetschmann et al., 2020). A fixed effects model helps to control for unobservable factors that are constant over time but may impact the outcome. The outcome variable is happiness, which is an ordinal scale in nature (1- 4). In addition, based on general assumptions for happiness (Ferrer-i-Carbonell & Frijters, 2004), ordered logit is a latent variable model that can be used in subjective well-being studies.

$$Happiness_{it} = \alpha + \beta_1.income_{it} + \beta_2.fear\_insec_{it} + \beta_3.victim\_v_{it} + \beta_4.Z_{it} + \varepsilon_{it} \quad (1)$$

In the above equation, happiness denotes the happiness of an individual i over a period t. $\beta_1$denotes the coefficient for the level of income, expected to be positive, implying that higher income is associated with higher happiness. β_2 denotes the coefficient for fear of insecurity, expected to be negative, indicating that higher fear of insecurity is associated with lower happiness. β_3 indicates the coefficient for being a victim of violence, which is expected to be negative, suggesting that being a victim of violence is associated with lower happiness. β_4 denotes the coefficient for Z_{it} of control variables and ε_{it} is the error term.

4. Results

We first aim to determine the correlation coefficients between the dependent variable and the explanatory variables, including control variables. Since our dependent variable is ordinal and we have a panel data set, we use a fixed effects ordered logit model, following the methodology outlined in (Baetschmann et al., 2020).

Table 2 presents the results, which show the correlation coefficients of fixed effects in the ordered logit models that analyze the impact of explanatory variables on happiness. These factors are categorized into eight models based on their connections and thematic areas.

Model 1 demonstrates the association between income levels and happiness. As expected, a high income level has a positive effect on happiness. However, the relationship between a low income level and happiness is negative and significant, considering medium income as a reference group. This finding aligns with previous research (Clark, 2017; Easterlin, 1974; Jebb et al., 2018). In Model 2, we include control variables related to income, such as household financial situation and physical conditions of the households, both of which have positive and significant coefficients. These variables contribute to happiness by providing a sense of security and alleviating stress stemming from financial concerns. We add control variables to mitigate the influence of confounding factors that could potentially distort the estimated effects of insecurity, fear, experience of violence, and income on happiness. The selection of these control variables is based on the literature and the availability of the data.

In Model 3, fear of insecurity emerges as a significant negative predictor of happiness at the 1% level. Security is a major concern for Afghans, as terrorist attacks are the most prevalent security incidents in Afghanistan. These incidents have a profound negative impact on the happiness of individuals. Fear of terrorist attacks and incidents both have direct and indirect impacts on economic growth, as highlighted by Frey et al. (2009). These incidents create negative externalities within the economy. In Afghanistan, the economic impact of terrorism is estimated to be as high as 22% of the GDP, encompassing losses in livelihoods, disabilities, injuries, and damages to the private and public sectors (Bardwell & Iqbal, 2021).

Furthermore, Model 3 reveals that happiness is negatively associated with being a victim of violence, and is statistically significant. The victims have experienced various forms of violence within their households or in society, including physical attacks, extortion, suicide attacks, murder, and livestock theft. This finding aligns with prior studies (Di Tella & MacCulloch, 2008; Staubli et al., 2014).

Model 4 focuses on the institutional determinants of happiness. The results reveal that happiness is negatively and significantly associated with the perception of corruption in daily life. Additionally, variables such as the country's direction (favorable or otherwise), satisfaction with democracy, and trust in the government are positively and significantly associated with happiness.

In Model 5, we examine the relationship between education and happiness. The analysis demonstrates that primary education, secondary education, and higher education, as well as access to and quality of schools, have positive and significant associations with happiness, with no education serving as the reference group. In Model 6, we investigate the effect of household well-being and food quality on happiness. The findings present a positive and significant association between these factors and happiness.

Table 2: Happiness with Fixed Effects Ordered Logit Model: Correlation Coefficients

	Dependent Variable: Happiness							
Variables	(Model 1)	(Model 2)	(Model 3)	(Model 4)	(Model 5)	(Model 6)	(Model 7)	(Model 8)
	Income Variables	Economic Variables	Insecurity Variables	Institutional Variables	Edu. Variables	Health Variables	Demo. Variables	Utilities Variables
Low income	-0.202***	-0.172***	-0.200***	-0.229***	-0.196***	-0.194***	-0.214***	-0.191***
	(-9.743)	(-8.200)	(-9.468)	(-10.714)	(-9.102)	(-8.971)	(-9.406)	(-8.368)
High income	0.509***	0.414***	0.424***	0.396***	0.350***	0.346***	0.370***	0.338***
	(13.730)	(10.980)	(11.209)	(10.231)	(8.993)	(8.865)	(9.290)	(8.423)
Household financial situation		0.414***	0.413***	0.263***	0.243***	0.193***	0.202***	0.206***
		(29.898)	(29.800)	(18.078)	(16.579)	(12.713)	(13.079)	(13.328)
Household physical condition		0.326***	0.307***	0.241***	0.207***	0.127***	0.125***	0.118***
		(21.691)	(20.373)	(15.685)	(13.230)	(7.596)	(7.394)	(6.988)
Fear of insecurity			-0.343***	-0.293***	-0.285***	-0.273***	-0.228***	-0.237***
			(-15.744)	(-13.054)	(-12.657)	(-12.079)	(-9.961)	(-10.317)
Being a victim of violence			-0.247***	-0.222***	-0.217***	-0.216***	-0.183***	-0.186***
			(-10.339)	(-9.123)	(-8.879)	(-8.833)	(-7.363)	(-7.488)
Corruption in daily life				-0.102***	-0.106***	-0.101***	-0.098***	-0.106***
				(-2.927)	(-3.042)	(-2.907)	(-2.789)	(-3.009)
Country direction				0.361***	0.345***	0.325***	0.341***	0.341***
				(16.973)	(16.140)	(15.138)	(15.608)	(15.588)
Satisfaction with democracy				0.309***	0.305***	0.300***	0.299***	0.294***
				(26.649)	(26.177)	(25.737)	(25.210)	(24.785)
Trust in government				0.227***	0.223***	0.219***	0.218***	0.217***
				(19.113)	(18.706)	(18.290)	(17.912)	(17.789)
Ref. group (No education)				.	.	.	.	.
Primary education					0.079***	0.081***	0.078***	0.082***
					(3.094)	(3.159)	(3.002)	(3.141)
Secondary education					0.086***	0.082***	0.032	0.021
					(2.946)	(2.815)	(1.089)	(0.689)
Higher education					0.445***	0.439***	0.356***	0.278***
					(12.526)	(12.316)	(9.782)	(7.442)
Access and quality of school					0.163***	0.119***	0.113***	0.101***
					(11.324)	(8.053)	(7.555)	(6.581)
Health well-being						0.153***	0.146***	0.141***
						(9.990)	(9.450)	(9.077)
Food quality						0.129***	0.131***	0.132***
						(7.934)	(7.991)	(8.030)
Reference: Age18-25							.	.
Age 26-35							-0.118***	-0.115***
							(-3.975)	(-3.874)
Age 36-45							-0.132***	-0.119***
							(-4.172)	(-3.742)
Age 46-55							-0.155***	-0.138***
							(-4.116)	(-3.648)
Age 55 and over							-0.089**	-0.060
							(-1.991)	(-1.345)
Household size 1-4							-0.092	-0.094
							(-1.574)	(-1.601)
Household size 5-8							0.159***	0.155***
							(3.619)	(3.538)
Household size 9-12							-0.028	-0.032
							(-1.323)	(-1.483)
Ref. group: HH size over 12							.	.

Single = 1							0.506***	0.490***
							(6.756)	(6.535)
Married = 1							0.542***	0.552***
							(7.999)	(8.140)
Widow = 1							.	.
Gender (male = 1, female = 0)							0.109***	0.084***
							(5.457)	(4.165)
Ref. group Pashtun							.	.
Tajik							-0.058**	-0.061**
							(-2.062)	(-2.140)
Uzbek							-0.549***	-0.551***
							(-12.275)	(-12.285)
Hazara							-0.479***	-0.484***
							(-11.577)	(-11.722)
Turkmen							-0.176**	-0.167**
							(-2.250)	(-2.134)
Region (Ref. South)							.	.
Kabul central							0.460***	0.406***
							(11.383)	(9.923)
West							-0.125***	-0.149***
							(-3.076)	(-3.625)
East							0.481***	0.496***
							(12.533)	(12.813)
North							0.447***	0.397***
							(11.800)	(10.243)
Central highlands							0.658***	0.643***
							(10.124)	(9.864)
Access to electricity								0.021
								(1.448)
Access to TV								0.079***
								(3.624)
Access to internet								0.079***
								(3.624)
N. of observations	54446	54446	54446	54446	54446	54446	54446	54446
N. of panel units	14879	14879	14879	14879	14879	14879	14879	14879
Wald chi2	338	2183	2532	4195	4408	4533	5153	5235
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.0078	0.0524	0.0612	0.1096	0.1161	0.1200	0.1379	0.1404
Std. errs. adjusted clusters in person id	14,879	14,879	14,879	14,879	14,879	14,879	14,879	14,879

Significant levels: ** $p < 0.05$, *** $p < 0.01$. Z-statistics based on robust standard errors are reported in parentheses.

Considering age levels, Model 6 reveals that the association between age and happiness is negative and significant for individuals aged 26 to 55. However, the coefficient becomes insignificant for individuals over the age of 55, with the reference group being individuals aged 18 to 25. This result aligns with (Toshkov, 2022). Furthermore, Model 7 indicates a positive and significant relationship between household size and happiness for households consisting of 5 to 8 members. This finding is not surprising, considering the cultural and religious values in Afghanistan, where the average household size is tends to be around 8.

Model 7 shows that there is a positive and significant association between marital status and happiness. In other words, the size of the difference between being single and married is small, with married respondents being slightly happier than those who are single. However, the association between being a widow and happiness is negative, which serves as a reference group. In addition, in terms of gender, males are happier than females. In Model 7, it also reveals the association between ethnicity and happiness, which is negative and significant for Tajik, Uzbek, Hazara, and Turkmen, considering

Pashtun as a reference group. Furthermore, we consider the regions as control variables which shows people who live in Kabul central, the central highlands, the east and the north are happier than other regions. Due to the concentration of international military forces in the South and West, the media usually reported that most security incidents occurred in these regions (BBC, 2018).

Finally, Model 8 also presents a positive and significant association between access to television and internet and happiness. However, the relationship between access to electricity and happiness is found to be statistically insignificant.

4.1. Marginal Effects

By considering the model (8) in Table 2, we compute the marginal effect of happiness at average in Table 3 by employing the fixed effects ordered logit following (Baetschmann et al., 2020). The results denote that the probability of being very happy increases by 7.6% points when the individual is in the high income level group, whereas the probability of being very happy decreases by 4.3% points when the individual is in the low income level group. In other words, people are more likely to be very happy when their income level shifts from low to high, and this is statistically significant at the 1% level. The results confirm our first hypothesis (H1) and are consistent with (Di Tella & MacCulloch, 2008; Easterlin, 1974; Farzanegan et al., 2017).

Table 3: Happiness with Fixed Effects Ordered Logit Model: Marginal Effect at Mean (MEM)

	Dependent Variable: Happiness			
	(1)	**(2)**	**(3)**	**(4)**
	Not at all happy	**Not very happy**	**Somewhat happy**	**Very happy**
Low income	0.009***	0.026***	0.008***	-0.043***
	(0.001)	(0.003)	(0.001)	(0.005)
High income	-0.016***	-0.046***	-0.014***	0.076***
	(0.002)	(0.005)	(0.002)	(0.009)
Household financial situation	-0.010***	-0.028***	-0.008***	0.046***
	(0.001)	(0.002)	(0.001)	(0.003)
Household physical condition	-0.006***	-0.016***	-0.005***	0.026***
	(0.001)	(0.002)	(0.001)	(0.004)
Fear of insecurity	0.011***	0.032***	0.010***	-0.053***
	(0.001)	(0.003)	(0.001)	(0.005)
Being a victim of violence	0.009***	0.025***	0.007***	-0.042***
	(0.001)	(0.003)	(0.001)	(0.006)
Corruption in daily life	0.005***	0.014***	0.004***	-0.024***
	(0.002)	(0.005)	(0.001)	(0.008)
Country direction	-0.016***	-0.047***	-0.014***	0.066***
	(0.001)	(0.003)	(0.001)	(0.005)
Satisfaction with democracy	-0.014***	-0.040***	-0.012***	0.066***
	(0.001)	(0.002)	(0.000)	(0.003)
Trust in government	-0.010***	-0.030***	-0.009***	0.048***
	(0.001)	(0.002)	(0.000)	(0.003)
Ref. group (No education)	.	.	.	.
Primary education	-0.004***	-0.011***	-0.003***	0.018***
	(0.001)	(0.004)	(0.001)	(0.006)
Secondary education	-0.001	-0.003	-0.001	0.005
	(0.001)	(0.004)	(0.001)	(0.007)
Higher education	-0.013***	-0.038***	-0.011***	0.062***
	(0.001)	(0.004)	(0.001)	(0.007)
Access and quality of school	-0.005***	-0.014***	-0.004***	0.023***
	(0.001)	(0.002)	(0.001)	(0.003)
Household well-being	-0.007***	-0.019***	-0.006***	0.032***

	(0.001)	(0.002)	(0.001)	(0.003)
Food quality	-0.006***	-0.018***	-0.005***	0.030***
	(0.001)	(0.004)	(0.001)	(0.007)
Ref: Age 18-25	.	.	.	.
Age 26-35	0.005***	0.016***	0.005***	-0.026***
	(0.001)	(0.004)	(0.001)	(0.007)
Age 36-45	0.006***	0.016***	0.005***	-0.027***
	(0.001)	(0.005)	(0.001)	(0.008)
Age 46-55	0.006***	0.019***	0.006***	-0.031***
	(0.002)	(0.006)	(0.002)	(0.009)
Age 55 and over	0.003	0.008	0.002	-0.013
	(0.002)	(0.006)	(0.002)	(0.010)
Household size 1-4	0.004	0.013	0.004	-0.021
	(0.003)	(0.008)	(0.002)	(0.013)
Household size 5-8	-0.007***	-0.021***	-0.006***	0.035***
	(0.002)	(0.006)	(0.002)	(0.010)
Household size 9-12	0.001	0.004	0.001	-0.007
	(0.001)	(0.003)	(0.001)	(0.005)
Ref. group: HH size over 12	.	.	.	.
Single = 1	-0.023***	-0.067***	-0.020***	0.110***
	(0.003)	(0.010)	(0.003)	(0.017)
Married = 1	-0.026***	-0.075***	-0.022***	0.123***
	(0.003)	(0.009)	(0.003)	(0.015)
Ref. group: Widow =1	.	.	.	.
Gender (male = 1, female =0)	-0.004***	-0.0012***	-0.003***	0.019***
	(0.001)	(0.003)	(0.001)	(0.005)
Ref. group Pashtun	.	.	.	.
Tajik	0.003**	0.008**	0.002**	-0.014**
	(0.001)	(0.004)	(0.001)	(0.006)
Uzbek	0.026***	0.075***	0.022***	-0.123***
	(0.002)	(0.006)	(0.002)	(0.010)
Hazara	0.023***	0.066***	0.020***	-0.108***
	(0.002)	(0.006)	(0.002)	(0.009)
Turkmen	0.008**	0.023**	0.007**	-0.037**
	(0.004)	(0.011)	(0.003)	(0.017)
Region (Ref: South)	.	.	.	.
Kabul Central	-0.019***	-0.056***	-0.016***	0.091***
	(0.002)	(0.006)	(0.002)	(0.009)
West	0.007***	0.020***	0.006***	-0.033***
	(0.002)	(0.007)	(0.002)	(0.011)
East	-0.023***	-0.068***	-0.020***	0.111***
	(0.002)	(0.005)	(0.002)	(0.009)
North	-0.018***	-0.054***	-0.016***	0.089***
	(0.002)	(0.005)	(0.002)	(0.009)
Central Highlands	-0.030***	-0.088***	-0.026***	0.144***
	(0.003)	(0.009)	(0.003)	(0.015)
Access to electricity	-0.001	-0.003	-0.001	0.005
	(0.001)	(0.002)	(0.001)	(0.003)
Access to TV	-0.004***	-0.011***	-0.003***	0.018***
	(0.001)	(0.003)	(0.001)	(0.005)
Access to the internet	-0.013***	-0.038***	-0.011***	0.063***
	(0.001)	(0.004)	(0.001)	(0.007)
Number of Observations	54446	54446	54446	54446
N. of panel units	14879	14879	14879	14879
Prob > chi	0.000	0.000	0.000	0.000
$PseudoR^2$	0.1404	0.1404	0.1404	0.1404

Significant levels: ** $p < 0.05$, *** $p < 0.01$. Z-statistics based on robust standard errors are reported in parentheses.

Moreover, in our analysis, we not only consider income but also include control variables such as household financial situation and household physical condition. As is seen in Table 3, the probability of being very happy increases by 4.6% points for better financial situations and 2.6% points for better household physical conditions when an individual feels that their household assets are better off. This implies that, besides income, wealth and assets in the household affect happiness. Graham &

Chattopadhyay (2009) also examine the impact of wealth and household assets on happiness in Afghanistan. In some cases, the financial situation of the household has a greater impact on mental well-being than income (Syrén et al., 2020).

Importantly, Table 3 indicates that the probability of being very happy decreases by 5.3% points when an individual experiences fear of insecurity. This means that fear of insecurity is negatively associated with being very happy. The result supports our second hypothesis (H2) and aligns with (Franc et al., 2012). Moreover, the probability of being very happy decreases by 4.2% points for individuals who experience violence and crime.

4.2. Interaction Effect

The basic model of equation (2) is described in equation (1) above. Eq. (2) presents the interaction effects between income and fear of insecurity (β_3) as well as income and experience of violence (β_5). The interaction term provides a more comprehensive understanding of how these factors jointly influence happiness. The coefficient β_6 represents the effects of the control variables.

$$happiness_{it} = \alpha + \beta_1.income_{it} + \beta_2.fear\_insec_{it} + \beta_3.(income_{it} \times fear\_insec_{it}) + \beta_4.victim\_v_{it} + \beta_5.(income_{it} \times victim\_v_{it}) + \beta_6.Z_{it} + \varepsilon_{it} \quad (2)$$

In this part, we are interested in finding out how fear of insecurity and being a victim of violence moderate the association between income and happiness in conflict-affected areas like Afghanistan. Therefore, Table 4 presents the results of the interaction term between income levels and fear of insecurity on happiness. Further, we also examine the interaction between income levels and being a victim of violence and happiness. The aim is to investigate whether individuals who experience insecurity and violence and have higher income levels are less likely to be happy. We assume that, on the one hand, higher income brings more protection for individuals, but on the other hand, higher income creates more anxiety, depression, and worries about safety and how to protect his or her assets from threats.

After controlling for other personal characteristics, the results in Table 4 provide evidence that for individuals with higher income levels who also experience insecurity, the probability of being very happy is 2.4% points lower than high-income individuals who do not experience insecurity (6.7% points compared to 9.1% points).

Table 4: Happiness with Fixed Effects Ordered Logit: Average Marginal Effect (AME) with Interactions

	Dependent Variable: Happiness			
	(1)	**(2)**	**(3)**	**(4)**
	Not at all happy	**Not very happy**	**Somewhat happy**	**Very happy**
Low income × fear of insecurity = 0	0.006***	0.020***	0.009	-0.036***
	(0.001)	(0.005)	(0.002)	(0.008)
Low income × fear of insecurity = 1	0.008***	0.021***	0.004	-0.034***
	(0.001)	(0.003)	(0.002)	(0.005)
High income× fear of insecurity =0	-0.012***	-0.043***	-0.034***	0.091***
High income× fear of insecurity =1	-0.012***	-0.038***	-0.016***	0.067***
	(0.001)	(0.005)	(0.005)	(0.010)
Low income × being a victim of violence = 0	0.007***	0.020***	0.006***	-0.033***
	(0.001)	(0.003)	(0.002)	(0.005)
Low income × being a victim of violence = 1	0.010***	0.025	0.002	-0.038***
	(0.001)	(0.006)	(0.003)	(0.009)
High income × being a victim of violence = 0	-0.013***	-0.042***	-0.024***	0.081***
	(0.001)	(0.005)	(0.006)	(0.010)
High income × being a victim of violence =1	-0.009***	-0.026**	-0.007	0.043***
Control Variables	Yes	Yes	Yes	Yes
Number of Observations	58580	58580	58580	58580
N. of panel units	16417	16417	16417	16417
Prob > chi	0.000	0.000	0.000	0.000
$PseudoR^2$	0.1404	0.1404	0.1404	0.1404

Significant levels: ** $p < 0.05$, *** $p < 0.01$. Z-statistics based on robust standard errors are reported in parentheses.

Furthermore, as indicated in Table 4, the results indicate that for individuals with lower incomes who experience fear of insecurity, the probability of being very happy is only 0.2% points higher than for low-income individuals who do not experience insecurity (3.4% points compared to 3.6% points). The size of this difference is extremely small, suggesting that in conflict-affected areas, fear of insecurity may not significantly impact the happiness of lower-income individuals.

Furthermore, we examine the interaction between income and being a victim of violence on happiness. The results show that for individuals with higher income who experience violence, the probability of being very happy is 3.8% points lower (4.3% points compared to 8.1% points) than for those who are very happy and have higher income but do not experience violence. This result also supports our third hypothesis, (H3). However, on average, the size of the marginal effect of the interaction term between the low-income group and being a victim of violence and the low-income group and not being a victim of violence is also small at 0.5% points (3.3% points compared to 3.8% points).

These findings suggest that while higher income can provide some level of protection and well-being in conflict-affected areas, it can also lead to increased anxiety and decreased happiness when combined with fear of insecurity or being a victim of violence. On the other hand, lower-income individuals may not be significantly affected by fear of insecurity or being a victim of violence in terms of their happiness. This can be interpreted to mean that their unhappiness may result from having lower incomes compared to others. Consequently, they are not as concerned about their financial resources and assets compared to individuals with higher incomes.

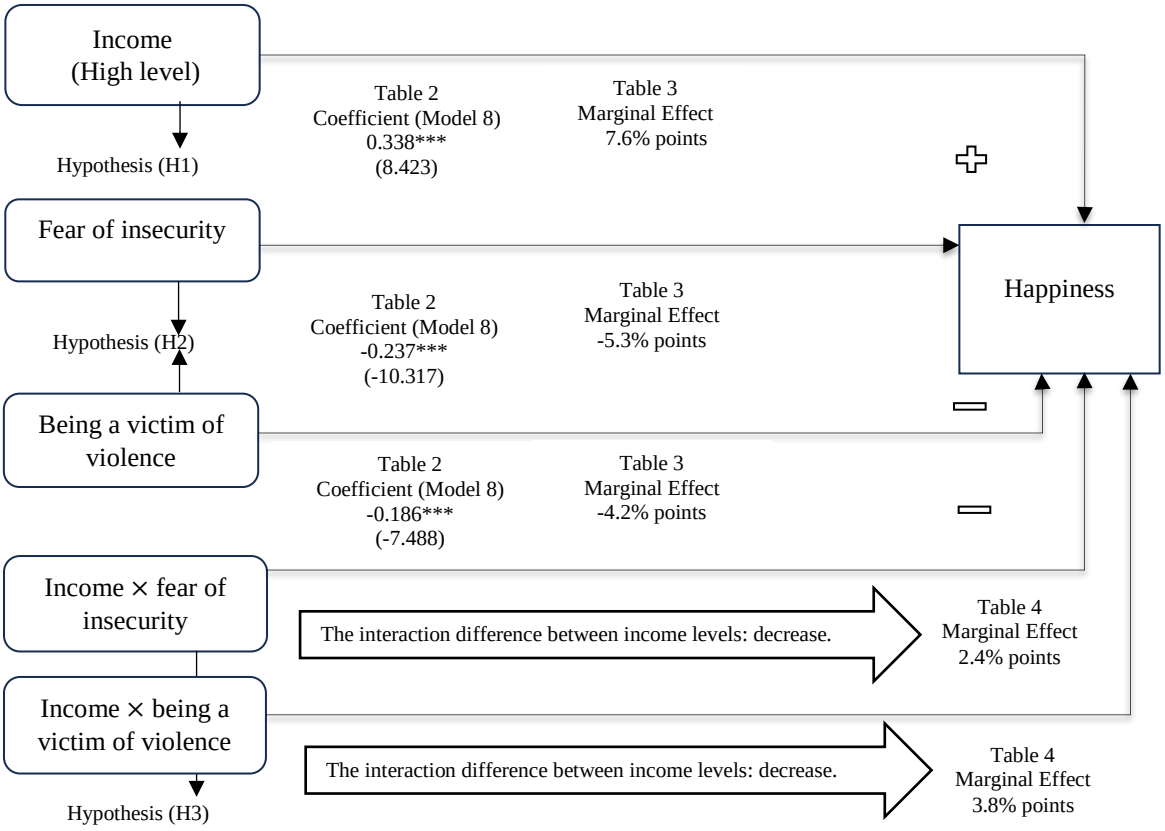
This result aligns with Di Tella & MacCulloch (2008). The authors found that the interaction effects between income and sulphur oxides (SOx) emissions are negative for happiness; that is, that the rich suffer from the negative effects of environmental degradation more than the poor. In this study, as we observed, even though individuals with high income levels might have more resources, their higher socio-economic status does not necessarily protect them from the detrimental impacts of negative externalities such as suicide attacks, bomb blasting, and armed conflicts or crime such as physical attacks, extortion, kidnapping, murder, and livestock theft.

According to psychology literature, experiences of conflict and violence can have long-lasting psychological effects such as fear, trauma, stress, or anxiety (Bucciol & Zarri, 2020). These psychological burdens may persist even if individuals achieve higher income levels, and these negative emotions could contribute to lower levels of happiness despite having more financial resources. One reason for this could be the influence of psychological factors, such as personality traits like openness, conscientiousness, extraversion, agreeableness, and neuroticism, where fear of insecurity could be a part of the neuroticism personality trait of an individual. This finding is consistent with the literature (Boyce & Wood, 2011; Hussain, 2017; Proto & Rustichini, 2015; Syrén et al., 2020).

4.3. Happiness Model in Conflict-Affected Areas

Figure 4 presents a comprehensive happiness model in conflict-affected areas. This model combines the key findings extracted from Tables 2, 3, and 4, thus offering a holistic overview of the outcomes derived from the conducted study. Hypothesis 1 (H1) describes the outcome pertaining to the correlation between income and happiness, revealing a positive relationship between these variables. Hypothesis 2 (H2) demonstrates the findings concerning the relationship between the fear of insecurity and being a victim of violence with happiness, indicating the size of marginal effect of happiness influenced by income, fear of insecurity, and being a victim of violence. Lastly, Hypothesis 3 (H3) sheds light on the results emerging from the analysis of the interaction effect. This effect encompasses the interplay between income and happiness, which is moderated by both fear of insecurity and being a victim of violence. Notably, the interaction effects reduce the positive effect of income on happiness in conflict-affected areas.

Fig. 4: Happiness Model in Conflict-Affected Areas



5. Discussion

In this paper, we examine the effect of income on happiness and further investigate the interaction effects of income, fear of insecurity, and being a victim of violence on happiness, considering other socio-economic factors. We found a positive and significant relationship between income and happiness. This finding is consistent with a large body of economic literature that indicates a positive association between income and happiness (Di Tella & MacCulloch, 2008; Easterlin, 1974; Jebb et al., 2018; Killingsworth, 2021). Moreover, we found that the marginal effect of higher income on happiness is positive, albeit small. It is worth noting that income has a low effect on happiness, and it is subject to distinct interpretations in the fields of psychology and economics. Psychological studies reveal a moderate connection between income and happiness, suggesting the presence of heterogeneity in human behavior with respect to the relationship between income and happiness (Rojas, 2007). However, from an economic perspective, Lucas & Schimmack (2009) believe that despite the weak association between income and happiness, those with higher income tend to report higher levels of happiness compared to individuals with lower income.

Furthermore, our findings reveal a negative and significant association between fear of insecurity, experience of violence, and happiness. The results align with previous studies (Alfaro-Beracoechea et al., 2018; Farzanegan et al., 2017; Franc et al., 2012; Shemyakina & Plagnol, 2013). Notably, even after including control variables in our models, the negative association between fear of insecurity, being a

victim of violence, and happiness remain consistent and unchanged (see Figure 4 for the summary results collected from Tables 2, 3, and 4).

In the case of Afghanistan, Graham & Chattopadhyay (2009) demonstrate that insecurity and violence or crime do not lead to a decline in reported happiness, implying that individuals have come to perceive such events as the norm. The authors identified evidence of adaptation. However, our findings reveal a different outcome, suggesting that, like many other places, being afraid of insecurity or being a victim of violence results in a decrease in reported happiness.

Importantly, we found that the interaction term between income and fear of insecurity, as well as between income and being a victim of violence, significantly moderates the effect of income on happiness. These interaction effects are negative at low income levels and positive at high income levels; however, people with higher incomes report low levels of happiness in conflict-affected areas, despite having more financial resources to be protected from an insecure environment compared to those with low incomes. In conflict-affected areas like Afghanistan, individuals with higher income often find themselves experiencing less happiness compared to those with lower income. This difference can be attributed to a variety of factors. First and foremost, the constant threat of security incidents, such as armed conflicts, terrorist attacks, and explosions, and various criminal activities like kidnapping and extortion, overshadows daily life. This pervasive sense of danger can weigh heavily on the minds of those who are more affluent. Secondly, the looming risk of losing valuable assets and capital during internal conflicts between the government and opposing factions adds to the overall sense of unease. The instability brought about by such conflicts creates an environment where even the well-off feel vulnerable and uncertain about the future. Another significant factor contributing to this phenomenon is the widespread lack of trust in the government, largely stemming from the presence of political and social corruption. This erosion of trust further deepens feelings of insecurity. The prevalence of corruption raises doubts about the government's competence in ensuring security and upholding justice, leaving citizens to question their safety and well-being.

Similar findings in a different context have been found by Di Tella & MacCulloch (2008). The authors examined the interaction effect between sulphur oxides (SOx) and income on happiness at the macro level. Their findings show a negative interaction between income and SOx emissions and happiness. This indicates that individuals with higher income levels tend to experience a greater decline in well-being due to environmental degradation compared to those with lower income levels. In essence, despite having greater access to resources, individuals of higher socio-economic status do not enjoy immunity from the adverse consequences of environmental degradation. They also intended to make an interaction between personal income and crime rate, but do not use data at individual levels.

Another plausible explanation for these results lies in the role of psychological factors, which are so-called personality traits. The fear of insecurity and being a victim of violence can lead to long-lasting psychological burdens in conflict-affected areas, such as trauma, stress, and anxiety. These factors may

persist even if individuals attain higher income levels, contributing to lower levels of happiness. Personality traits, especially neuroticism (fear, stress, and anxiety), influence the well-being of individuals, such as happiness and life satisfaction. The interaction effect between income and personality traits has been examined in different empirical studies (Boyce & Wood, 2011; Hussain, 2017; Proto & Rustichini, 2015; Syrén et al., 2020).

6. Conclusion

The findings presented in this study highlight the relationship between income and happiness, moderated by fear of insecurity and being a victim of violence. We used representative sample data from 2014 - 2021 for Afghanistan and employed a fixed effects ordered logit model in our analysis. The results demonstrate that the fear of insecurity and being a victim of violence variables significantly moderate the effect of income on happiness, resulting in a reduced impact at higher income levels. This suggests that individuals with higher income who experience fear of insecurity or being a victim of violence are less happy than those with higher income who do not have experience of insecurity and violence in conflict-affected Afghanistan.

The findings shed light on several significant insights. First, the research confirmed the positive association between income and happiness at the individual level, which was a shortcoming of previous studies on Afghanistan. Second, we found a negative and significant relationship between the fear of insecurity, being a victim of violence, and happiness. These findings echo the conclusions of previous research, but with one difference: in this research, two new proxies (fear of insecurity and being a victim of violence) are used to resemble the effects of insecurity and violence on happiness in conflict-affected countries such as Afghanistan. Finally, and most importantly, we found an interaction effect between income and fear of insecurity, as well as between income and being a victim of violence, revealing a moderating influence on the income-happiness relationship. Remarkably, the results showed individuals with higher income levels in conflict-affected areas, like Afghanistan, reported lower levels of happiness, challenging the conventional belief that greater financial resources provide insulation from fear and distress. This phenomenon can be attributed to the pervasive sense of danger, the risk of asset or capital loss, and the lack of trust in institutions because of corruption, which collectively amplifies the feeling of vulnerability among the affluent.

Psychological factors emerged as potential explanatory elements for these complex relationships. The enduring psychological burdens arising from fear of insecurity and being a victim of violence, including trauma, stress, and anxiety, might eclipse the impact of higher income levels on happiness. The interplay between income and personality traits, particularly neuroticism, has been explored in previous research. The result of this study suggests that policymakers should consider the multifaceted nature of these relationships, aiming not only to bolster economic conditions but also to alleviate political instability, insecurity, and violence. Enhancing security measures has the potential to contribute to the well-being of Afghans by offering psychological solace.

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Appendix A: Previous studies about well-being and happiness in Afghanistan

Graham & Chattopadhyay (2009) examine the relationship between happiness and household physical assets. The authors found that regardless of the presence of conflict, violence, and corruption, the average happiness level in Afghanistan is higher than in Latin America. Their findings were based on survey data collected through face-to-face interviews with 2,000 individuals in eight provinces of Afghanistan, although they failed to provide evidence on the association between income and happiness over a long period of time, considering insecurity and violence. Trani et al. (2011) investigated the relationships between capabilities, well-being, social values, and cultural norms in Afghanistan. They found that despite challenges such as conflict and poverty, the well-being of Afghans is positively influenced by social values, cultural norms, and religious beliefs. Harsha et al. (2013) investigated the relationship between educational attainment, economic welfare, and subjective well-being in Afghanistan. The study revealed a positive correlation between women's education and happiness. Additionally, the authors emphasized that when controlling for all socio-economic factors, greater household income is linked to higher levels of happiness. However, the impact of violence and other adverse events tends to decrease happiness, particularly in rural areas.