

# Coping Strategies, Well-Being and Inequalities During the Covid-19 Pandemic Period

Eleftherios Giovanis and Oznur Ozdamar

# **COPING STRATEGIES, WELL-BEING AND INEQUALITIES DURING THE COVID-19 PANDEMIC PERIOD<sup>1</sup>**

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## Abstract

As a response to the outbreak of the COVID-19 pandemic, governments around the globe have carried on strict lockdown measures affecting millions of jobs, public life, and the well-being of people. This study aims to examine the subjective well-being (SWB) of people, such as the perception of the economic situation and mental well-being, who made adjustments to cope with the earning losses. We estimate the well-being costs, which is the money required to compensate people because of the reduction in earnings or employment loss and the coping strategy followed, to bring their well-being at the levels of those who have not adopted any coping strategy. We examine two outcomes; the perception of the economic situation and a mental well-being index. We employ data from the ERF COVID-19 MENA Monitor Surveys for Egypt, Jordan, Morocco and Tunisia. The results show that coping strategies with the earning losses have a significant detrimental impact on well-being and are associated with significant costs. In most cases, the coping strategies of borrowing from banks or a private lender and selling assets present the highest well-being costs. Furthermore, the estimates highlight significant discrepancies across gender and types of workers, such as those employed in the informal sector and temporary contracts.

**Keywords:** Coping Strategies; COVID-19; Inequalities; MENA Region; Mental Health; Perceived Economics Situation; Risks; Subjective Well-Being.

**JEL Classification:** I1

## ملخص

استجابة لتفشي - جائحة فيروس كورونا المستجد اتخذت الحكومات في جميع أنحاء العالم إجراءات إغلاق صارمة أثرت على ملايين الوظائف والحياة العامة ورفاهية الناس. وتهدف هذه الدراسة إلى فحص الرفاهية الشخصية (SWB) للأفراد - مثل تصور الوضع الاقتصادي والصحة النفسية - الذين أجروا تعديلات لمسايرة خسائر الدخل. تقدر الدراسة تكاليف الرفاهية، وهي الأموال المطلوبة لتعويض الأفراد بسبب انخفاض الدخل أو فقدان الوظائف واستراتيجية المواجهة المتبعة للارتقاء بمستويات رفاهيتهم إلى مستويات أولئك الذين لم يحتاجوا إلى تبني أي استراتيجية للتكيف. تتناول الدراسة نتيجتين هما تصور الوضع الاقتصادي ومؤشر الصحة النفسية. وتستخدم الدراسة بيانات من استطلاعات منتدى البحوث الاقتصادية لمراقبة جائحة فيروس كورونا المستجد في الشرق الأوسط وشمال أفريقيا لكل من مصر- والأردن والمغرب وتونس. وتظهر النتائج أن استراتيجيات التكيف مع خسائر الدخل لها تأثير ضار كبير على الرفاهية، وترتبط بتكاليف كبيرة. وفي معظم الحالات تمثل استراتيجيات المواجهة بالاقتراض من البنوك أو من مقرض خاص وبيع الأصول أعلى تكاليف الرفاهية. علاوة على ذلك تسلط التقديرات الضوء على تباينات كبيرة بين الجنسين ومختلف أنواع العمالة، مثل العاملين في القطاع غير الرسمي والعقود المؤقتة.

## **1. Introduction**

COVID-19 is a global health pandemic that has forced governments around the globe to introduce unprecedented steps and measures to contain the spread of the virus. These steps have included facilitating social distancing measures, national or local lockdowns and other restrictions by shutting down schools/universities, shopping malls, bars-restaurants, and businesses. The consequences have been an unprecedented shut-down of public life, prolonged material deprivation, and deterioration in the mental well-being of the majority of citizens. People have experienced wage cuts, employment losses and a significant drop in their living standards. The rapid and persistent decrease in earnings, which follow losses of jobs or cuts in wages and working hours, typically force people to strenuously adjust their finances, affecting adversely their quality of life, housing, nutrition and so forth (Eliason and Storrie, 2006). To compensate for the income loss caused by the COVID-19 pandemic, people have used different coping strategies such as taking money out of savings; getting financial support from family, relatives, or friends; going back to the village or family; borrowing from a bank, employer, or private lender and selling assets. For instance, the study by Leslie and McCurdy (2020) shows that 68 per cent of the UK households reported a decline in income due to the lockdown measures, and 23 per cent of the affected households had to use their savings to cover the living costs, and 13 per cent were struggling to pay utility bills. Overall, people in all the countries around the globe that have been affected by the COVID-19 pandemic and the lockdown measures, have experienced a significant decline in their income, which has been mainly driven by falls in employment, working hours and cuts in wage rates.

Working hours in the second quarter of 2020 declined by 16.9 per cent in the Arab States, which translate into substantial losses in labour income. Moreover, over 10 million full-time employment jobs in the Middle East and North Africa (MENA) region are lost. People have tried to alter the well-being impairments caused by employment and income losses within different coping strategies (ILO, 2020). For instance, in Egypt, among the most affected individuals, 55.7 per cent are working fewer hours or days, 18.1 per cent have been working irregularly, and 26.2 per cent have become unemployed. Those individuals use some coping strategies to compensate for their well-being losses. Female workers have been disproportionately affected by the crisis, as 29.9 per cent of the affected working females became unemployed, compared to 25.5 per cent of affected working males, whose change is more in the form of a shift to irregular work or working fewer hours (Suleiman, 2020). Overall, as in many regions around the world, women in the MENA region countries, inequalities are persistent across demographic and socio-economic groups due to the COVID-19 pandemic. In particular, women who make up most of the workers in the healthcare and social services sector across the region are at the core of the health emergency response, thus, exposing them to higher risks of contracting the virus. Containment measures implemented to curb the spread of the pandemic in most MENA nations have increased the unpaid care work of women as they had to shoulder the extra burden of homeschooling and taking care of the sick and the

elderly. Due to the regional-specific systemic barriers linked to unequal economic opportunities, combined with pervasive gender biases, the economic effect of the crisis is likely to be more exposed to women's employment, companies and incomes than those of men. These threats are especially acute for certain groups of informal workers who lack jobs and social security, including domestic workers, agricultural workers and small traders, among whom women are overrepresented.

Recent studies have found a negative impact of the lockdown measures on mental well-being and poverty (Banks and Xu, 2020; Davillas and Jones, 2020; Cullen et al., 2020; Pieh et al., 2020; Bukari et al., 2021; Laborde et al., 2021; Saikia et al., 2021). The pandemic of COVID-19 has exposed severe flaws and vulnerabilities in society, institutions, and economies around the globe. The MENA area, with a population of almost 570 million people, initially kept transmission and mortality rates lower than the global average, but late trends have highlighted causes for concern, especially given fragmented health care and limited primary care in many countries. The pandemic has amplified many long-standing challenges, including violence and conflict, unemployment, poverty, inequalities, insufficient social safety nets, human rights issues, and insufficiently responsive institutions and governance systems (International Monetary Fund, 2020; United Nations, 2020). The pandemic's consequences are anticipated to be severe and long-lasting. The economy of the MENA region dropped roughly by 4 per cent. The International Monetary Fund has lowered the Middle East and North Africa economic outlook to its lowest level in 50 years resulted from the twin shock of the pandemic and low oil prices (OECD, 2020; United Nations, 2020). The COVID-19 pandemic has caused many implications on the population health and poverty outcomes worldwide and has drastically affected vulnerable groups of society. Given the magnitude and scale of the adverse effects caused by the pandemic, it is critical to measure and investigate the inequalities in the MENA region.

This study has two main aims. First, it aims to examine the types of coping strategies people have adopted during the pandemic and the relationship with the respondents' subjective well-being (SWB). In particular, we aim to explore what strategies the individuals and households have taken to cope with the job and income losses and fall in living standards and how these strategies are related to their SWB. The second aim is to estimate the well-being costs of the coping strategies adopted that denote the amount required for an individual to reach the same levels of well-being as those who have not adopted any strategy. To achieve this, we will consider the SWB outcomes described in the methodology section. We will also estimate the inequalities and the well-being costs by gender, job security, and job formality.

The results suggest that the lockdown measures had a significant detrimental impact on earning losses and the respondents' well-being. The costs for the economic perception and mental well-being are significant and vary not only across each coping strategy but also between the

respondents in the four countries explored; Egypt, Jordan, Morocco, and Tunisia. The findings show that women experience larger mental well-being costs in most of the coping strategies explored in the four countries, however, men in some domains report higher well-being costs. This finding indicates that women have not necessarily experienced higher levels of stress and insecurity about the economic situation, but we highlight differences depending on the coping strategy adopted. The results, also show large differences between permanent and temporary workers and those employed in the formal and informal sector with the informal and temporary workers facing significantly large well-being costs.

The remaining sections are organised as follows: In section 2, we discuss the earlier literature on the relationship among loss in earnings, coping strategies and well-being. In section 3, we present the methodology applied, and in section 4, we describe the data employed in the empirical work. We report and discuss the findings and limitations in section 5, and in section 6, we present the main concluding remarks of our findings and policy implications.

## **2. Literature Review**

Numerous studies have explored the impact of unemployment and income losses on mental health outcomes and psychological well-being (McKee-Ryan et al., 2005; Howe et al., 2012). The negative effect of income losses and joblessness can be even more tenacious during economic recession periods, as is the Covid-19 period explored in this study. Modrek et al. (2013) presenting a review of 172 English language studies published between the 1<sup>st</sup> of January 1980 through 1<sup>st</sup> April 2013, confirms that unemployment had a significant and detrimental impact on mental health outcomes, particularly during economic downturns. Overall, previous studies have estimated that economic recessions have a major impact on health and psychological well-being, particularly among the most vulnerable and disadvantaged groups (Zivin et al., 2011; Karanikolos et al., 2013).

The impact of the lockdown restrictions during the Covid-19 period has been studied recently. For instance, Davillas and Jones (2020) utilized data from the United Kingdom and found that psychological well-being, as evaluated by the 12-Item General Health Questionnaire (GHQ-12), had decreased by about ten percentage points throughout the Covid-19 period. Adams-Prassl et al. (2020) looked into the impact of Covid-19 on people's subjective well-being (SWB) in Germany, the United States, and the United Kingdom. Their findings imply that women and those with lower educational attainment are more vulnerable to the coronavirus pandemic and are more likely to lose their jobs or have their working hours and wages reduced. Various other studies have also investigated the impact of COVID-19 on gender inequality, mental health (Alon et al., 2020; Banks and Xu, 2020; Fujiwara et al., 2020; Holmes et al., 2020).

Social scientists have presented evidence about the importance of various social supports on well-being, such as happiness and health (Demo, 1992; Schwarz et al., 2010), and many studies show

that social support can greatly reduce stress, if not completely alleviated it, when forms of support, such as attachment and empathy are present (Cohen and Wills, 1985; House et al., 1988). These findings show how social relationships play a role in placing sustaining resources to persons at risk of distress, agitation, and other aspects of suffering. Nevertheless, this study aims to explore six different types of coping strategies to income losses, resulted from wages cuts and reduction in working hours.

The first strategy is taking money out of savings, while the other two strategies refer to borrowing from friends, family and relatives either in the respondent's country or abroad. The fourth strategy is going back to the village or moving in with the family, and the fifth strategy is selling assets. The last coping strategy explored refers to borrowing from a bank, employer, or private lender, which incorporates the role of debt, which is a source of stress.

Previous research has primarily focused on credit card debt and bank borrowing, intending to examine the relationship between economic stress and financial strain and well-being, including depression, health, self-concept, and anxiety (Drentea, 2000; Drentea and Lavrakas, 2000; Caplan and Schooler, 2007; Hodson et al., 2014; Turunen and Hiilamo, 2014; Hojman et al., 2016; Zhang and Kim, 2019; Greenberg and Mogilner, 2020; Loibl et al., 2020). People are willing to establish a balance between income and expenses since it is desired and acceptable. Obtaining additional resources, which increase one's credit limit, on the other hand, can be considered as having "fractured the cultural conditioned cognitive connect" between spending and eagerness. Overspending and overstretching credit are linked to increased stress and the use of unhealthy and harmful substances, as well as a decline in health and well-being, via a variety of mechanisms, including depression, stress anxiety, and a loss of motivation to achieve one's life goal (Drentea and Lavrakas, 2000; Grafova, 2007; O'Neill et al., 2007).

However, there is a counter-argument that debt might be a reasonable consumption model. While not all borrowing and repayment are without risk, having the option and opportunity of borrowing without credit or financial limits can improve economic well-being by allowing for smoother consumption processes over time. As a result, debt-financed consumption can be considered normal because it can lead to the optimal utility by accumulating a "precautionary stock" of assets and wealth, as well as cushioning the impact of income variations on consumption (Bertola et al., 2006). Given whether higher current expenditure is not linked to low future consumption, borrowing prospects are enticing if restricted. As long as the lack of capacity and choice to borrow harms welfare and well-being, such behaviour suggests more savings than borrowing, and so debt-based spending can be considered forward-looking. As a result, debt may not always result in a disastrous outcome, but it can have a good impact if handled properly.



Nonetheless, the impact of debt depends also on whether the respondents borrow from banks or friends, family and relatives. Borrowing from friends and family members is important in evaluating capital accumulation, and it may operate as a sort of insurance against income shocks (Kotlikoff and Spivak, 1981; Altonji et al., 1997; Kinnan and Townsend, 2012; Ambrus et al., 2014). Furthermore, this form of support fosters social network cohesion and solidarity. In practice, mutual aid in receiving or providing money to relatives and friends in need is seen as an act created to keep one's solidarity with them, in addition to effective concerns and interests.

Mutual assistance is recognised in times of financial difficulty not just because it displays loyalty to close relatives or friends but also because it represents a higher-order personal ethic (Tsai et al., 2016). Although reciprocity is desired and has been shown to have a positive impact on social cohesion, the exchange theory suggests that it can become unbalanced and affect negatively well-being. Being "indebted" to a partner, relative, or acquaintance, is characterised as having an imbalanced trade relationship. These exchanges are favoured and convenient, and continued repetition between the two parties is encouraged, as long as "returns" are sought without undue delay after "gives" (Molm et al., 2007). Debt, on the other hand, may make potential exchanges less appealing to the lender, particularly when the giver's need arises and an acceptable payout is expected but is postponed for no reason.

Borrowing from friends should have a lesser negative impact on well-being than borrowing from banks or private lenders. We may also detect a beneficial effect, depending on how social networks and solidarity shape the giver-taker relationship. According to the negative-state relief model, people who witness others being in distress feel empathy and want to help to avoid negative emotions like guilt or shame (Cialdini et al., 1987). People who borrow from friends, on the other hand, may face mental stress if they feel ashamed and have a strong social network and ties. Savings can help people relieve financial stress and increase their SWB levels (Howell et al., 2006; Obuina, 2013; Gokdemir, 2015). However, during recessions, such as the COVID-19 pandemic studied in this study, taking money out of savings may lead to an increase in stress and anxiety, as well as a degradation of the SWB (Gokdemir, 2015).

Overall, the literature shows that coping strategies carried out in response to income losses, wage cuts and reduction in working hours, such as using money from savings and borrowing from friends and banks, deteriorating mental health and well-being. Nonetheless, they may still moderate the negative impact of the income losses in their absence. In other words, while respondents following those strategies may experience a deterioration in their well-being, this could be even larger in the case were not chosen. However, these studies do not estimate the costs of well-being caused by the outbreak of the Covid-19 pandemic. Our empirical analysis explores the strategies and adjustments individuals and their families had to make to cope with employment loss, reduction in income and living standards. We further aim to explore the relationship between

those strategies and well-being and estimate the related well-being costs we discuss in the methodology section. To the best of our knowledge, there is no study so far that explores the role of coping strategies in SWB in a sample of MENA region countries, estimating the well-being costs because of the COVID-19 pandemic.

### 3. Methodology

#### 3.1 Coping Strategies and Subjective Well-Being

The aim of this study is to investigate the relationship between well-being and various coping strategies of earning losses, due to Covid-19 and the lockdown measures, and to evaluate the well-being costs. We propose the following regression:

$$SWB_{ijt} = b_0 + b_1CS_{ijt} + b_2inc_{ijt} + b'X_{ijt} + \theta_t + \delta_j + u_{ijt} \quad (1)$$

Where  $SWB$  denotes the subjective well-being for individual  $i$  in governorate-area  $j$  and wave  $t$ . Variable  $CS$  denotes the coping strategies to earning losses that we describe later. In each case, the control group is the same, which consists of respondents who have not taken any strategy to cope with the income losses, while the treated groups vary. For instance,  $CS$  takes a value of 1 if the individual uses savings as a coping strategy and takes 0 for no coping strategy. Similarly, for the second case,  $CS$  takes a value of 1 if the households borrowed from banks and 0 otherwise and so forth. Household income is denoted by  $inc$ , set  $\delta_j$  indicates the governorate fixed effects and the time dummies are expressed by the set  $\theta_t$ . Based on the data availability, the control variables in vector  $\mathbf{X}$  include gender, age, marital status, education level, whether the respondent is employed, the household size, and urban versus rural area.

We will consider six coping strategies, which include *Taking money out of savings*; *Taking money from family, relatives, or friends*; *Taking money from family, relatives, or friends abroad*; *Going back to the village or family*; *Borrowing from a bank, employer, or private lender*, and *Selling Assets*. The subjective well-being (SWB) outcomes are economic and mental well-being measures. More specifically, the economic situation is a Likert variable answering the question “How worried are you about the economic situation?”, and it is measured on a scale from 1 (Not at all worried) to 4 (Very worried), with values 2 (A little worried) and 3 (Rather worried). Mental health is used as another measure of SWB and it includes the following questions: *I have felt cheerful and in good spirits*; *I have felt calm and relaxed*; *I have felt active and vigorous*; *I woke up feeling fresh and rested*; *My daily life has been filled with things that interest me*. Similar to the economic situation, these are Likert variables measured on a scale from 1 (All of the Time) to 6 (At no time). Since the economic outcome is a Likert variable, we will apply the ordered discrete choice Probit model, while the marginal effects derived from the Logit model are very similar. Moreover, using the principal component analysis we create a mental well-being index using the five above-

mentioned variables. In this case, we will employ the standard ordinary least squares (OLS) method.

### 3.2 Well-Being Costs

We will estimate the marginal costs of well-being, and this will reveal how much money should be allocated to compensate people for experiencing lower levels of SWB making different adjustments and carrying on different coping strategies, due to earning losses resulted from the lockdown measures. To find the income compensation for the coping strategies we use regression (1), and we have the following relation:

$$WBCR = \beta_1 / \beta_2 \quad (2)$$

Where  $WBCR$  denotes the well-being costs expressed as a percentage of the household income, which shows the additional costs of coping strategies adopted due to the pandemic compared to households that have not adopted. Then to get the well-being costs in monetary values, we will multiply the ratio in (2) with the average household income. In this way, we will measure the inequalities among those households. As we have mentioned in the previous section, we will estimate equation (1) and calculate the well-being costs by gender, job security and job formality to identify and highlight the inequalities across those groups.

However, there are two main issues about the questionnaire and the way household income is recorded. In particular, as we will show in the next section, the household income is categorical and is grouped in four categories. Thus, one major challenge of this variable is that the distribution of households within the brackets is unknown. One remedy for this is to consider the mid points in each bracket. However, another challenge is that the highest income category is included in an open-ended bracket. While the brackets tend to vary in width, these can be wider in the upper tail of the distribution leading to loss of information about those observations that contribute disproportionately to the variance and inequality measures (Jargowsky and Wheeler, 2018). To calculate the midpoint of the top bracket, we need the maximum value of that bracket. Assuming that the households follow a Pareto distribution, the average income is a function of the Pareto shape parameter  $a$ , given by:

$$\mu_{top} = ltop \frac{\alpha}{\alpha - 1} \quad (3)$$

Where the  $\mu_{top}$  is the average household income in the top bracket,  $ltop$  is the lower limit of the open-ended bracket. To estimate the parameter  $a$ , we take the standard two-point estimator (Quandt, 1966; Henson, 1967; Cloutier, 1988; Jargowsky and Wheeler, 2018).

$$a = \frac{\ln(N_4 + N_3) - \ln(N_4)}{\ln(Y_4) - \ln(Y_3)} \quad (4)$$

Where  $N_4$  is the number of respondents in the open-ended bracket and  $N_3$  denotes the number of respondents belonging in the second highest income bracket. The lower limit of the top bracket is denoted by  $Y_4$ , which is the household income *ltop* as we presented in relation (3), and  $Y_3$  is the lower limit of the second highest income bracket. Then we replace the value of parameter  $a$  in relation (3) to find the midpoint of the top bracket. Von Hippel et al. (2016) suggested to replace the arithmetic mean with the median of the top bracket, nevertheless, the results remain robust to this alternative specification.

The next step is to obtain the change in income during the pandemic. In particular, the question about household income is recorded only in February 2020, just before the pandemic. In the next waves, the question refers to changes in income, as we show in the next section. We apply the same method we described so far for the income to the highest and lowest income change categories. Then we take the midpoints, and using the changes, we estimate the new household income variable. For instance, one bracket is whether the income during the pandemic was reduced between 1 and 25 per cent. Taking the midpoint of 12.5 per cent, we estimate the new household income reduced by this percentage.

The second procedure includes the estimation of the household income recorded in February 2020 using a simple OLS method. More specifically, we regress the household income, estimating the upper limit of the open-ended bracket of the higher household income category following the steps described in relations (3)-(4), on various characteristics, and more precisely, gender, age, employment status, education level, employment status, household size and governorate-area. Taking the predicted household income values, we apply the income changes to estimate the income values during the pandemic.

Nevertheless, we argue that also this approach does not solve the problems related to grouped data. For instance, the exact values of each household's income within the brackets is unknown, having potentially significant effects on the estimates and the inequality measures we attempt to estimate in this study. This issue becomes more critical in the case we have fewer numbers and wider brackets. While the household income is a grouped variable, the wage is a continuous variable. Therefore, relation (2) applies directly by finding the marginal effects of the coping strategies and the wage and estimating the well-being costs ratio. Even though we limit our analysis only to those who are employed in both periods, before and after the pandemic, we will explore the role of coping strategies and well-being costs across gender, employment in the formal and informal sector, and job security.

The third specification involves the inclusion of the variable indicating the change in the household income during the pandemic. In particular, the income change is a categorical variable answering the question about the change in the household income during the COVID-19 period as: Decrease more than 25%; Decrease between 1-25%; Stay the same; Increase between 1-25%, and Increase more than 25%. Thus, instead of taking the midpoints and estimating the lower limit of the lowest bracket (Decrease more than 25%) and the upper limit of the top bracket (Increase more than 25%) using the Pareto distribution method, discussed earlier, we consider those changes. The reference category in our estimates is the households that have experienced a decline in their income of more than 25%. Hence, based on the ordered values of the outcomes explore in the study, ranging from very good to very bad, we expect a negative estimated coefficient for the other categories. Therefore, for example, those who have experienced a decline in their household income between 1 and 25 per cent, should report higher levels of SWB, and thus, a negative  $\beta_2$  coefficient, compared to the reference category (Decrease more than 25%). Then if we find that the Well-Being Cost Ratio (WBCR) is for instance 80 per cent and we consider the coping strategy of selling the assets, it implies that the household needs to sell a value of assets estimated at 80 per cent of the household income to compensate for the loss in SWB compared to the period before COVID-19, which is February 2020. Furthermore, considering the difference between 100 per cent for the reference category, and 80 per cent for the second category, we argue that the households belonging in the reference category- those whose household income was reduced more than 25%- need an increase of their income by 20 per cent to reach the SWB levels of those belonging in the second category (reduction of household income between 1-25%).

The findings may provide insights about future studies exploring the inequalities, not only between individuals in different households, but also the intra-household or within household inequalities. Furthermore, the results may show the required amount of support governments should have provided those who have been affected by the COVID-19 pandemic and the relationship between support, government budget deficit and public debt accumulated.

#### **4. Data**

We derive the data from the unique panel ERF COVID-19 MENA Monitor Surveys provided by the ERD NADA micro-data portal (OAMDI, 2021). In particular, the survey includes integrated and harmonized data for Egypt, Jordan, Tunisia and Morocco. Based on the data availability and the questions about coping strategies and income we will consider one wave for Egypt and Jordan, and three waves for Tunisia and Morocco. In particular, there are three waves available, and the surveys are publicly available at the ERF's open data portal ([www.erfdataportal.com](http://www.erfdataportal.com)), collecting data from around 2,000 households in each wave. The first wave for Egypt was conducted in June 2020 and October-November 2020 for Tunisia and Morocco. The second wave collected data in January-February 2021 for Egypt and January-March 2021 for Tunisia and Morocco. The most recent survey also includes the third wave for Morocco and Tunisia, while the first wave for Jordan

was conducted in April 2021, and the plan is to conduct short panel surveys every two months. As we have highlighted before, Economic Research Forum (ERF) has carried on the harmonization process to create comparable data that can be used to facilitate cross-country and comparative research analysis.

The household sample includes individuals aged between 18 and 64, covering various sections, demographics and household characteristics, employment status and working conditions, education, children, social safety net, and social distancing. Other variables include risks such as the perception of the economic situation and mental health, which are the principal outcomes explored in this study as we described in the methodology section. The survey also carries the worker module including occupation and specifically, the activity, the occupation or professional class, the contract of the employment such as whether the job is permanent or temporary, and the job formality.

The advantage of the survey's panel design is its structure that takes into account key demographic and socio-economic characteristics to investigate and realise the consequences of the COVID-19 on wealth, inequalities and the responses to the pandemic. Another significant benefit of the survey is that it collects information about the impact of the pandemic across various vulnerable groups, including youth, women, and irregular workers.

In panel A of Table 1, we report the frequencies for the SWB outcomes and the independent variables of main interest; the coping strategies in panel B and panel C we present the frequencies of the household grouped income in February 2020 and the change in income over the COVID-19 period. While those statistics may not reveal useful insights, especially the SWB measures and the coping strategies since are available only during the pandemic, while we have information about the income before the COVID-19 period and its changes during the pandemic, these may still reveal some useful information. More specifically, we observe that around half of the respondents are very worried about their economic situation except for Jordan, where 59 per cent is very worried. Almost one quarter is rather worried and 10 per cent is rather worried in Morocco. The 18-19 per cent of the respondents in Egypt and Morocco are not at all worried, while only 9-11 per cent in Jordan and Tunisia are not at all worried about their economic situation.

In all countries, 40-70 per cent of the respondents report a very low level of mental health and well-being and more specifically report less than half of the time or some of the time or at no time feel cheerful, calm and relaxed, active, rested and filling with things of interest. The largest percentage is noted in Jordan and Tunisia, reaching almost 70 per cent, followed by Egypt, ranging between 50-65 per cent and Morocco at around 58 per cent. As we have highlighted earlier, we explore the respondents in four countries separately since we aim to identify the differences and potential similarities between the countries. Thus, we observe that the most common coping strategy adopted from the respondents and their households in the four countries explored is taking

money from family, relatives and friends at 69 per cent in Morocco, followed by the remaining countries at 51-57 per cent. On the other hand, it seems that the less common coping strategy is taking money from family, relatives and friends abroad, ranging between 11-15 per cent, while it is reaching almost 34 per cent in Morocco. 37-39 per cent of the respondents in Egypt and Morocco had to sell their assets to cope with income losses and reductions, while the respective percentage in Jordan and Tunisia is reaching 22 and 23 per cent. Almost three out of four respondents in Morocco had to use their savings to cope with reductions in household income, followed by 61.77 per cent in Tunisia, while less than half of the respondents and in particular, 49.20 in Egypt, and 42.19 per cent in Jordan used their savings. Around 42 per cent of the respondents in Morocco had to borrow from a bank, employed or private lender, followed by Jordan at 39.51 per cent, Egypt at 30.90 per cent and Tunisia at 23.16 per cent. Notable differences are noted in the proportions of those who had to move back to the village, where almost 39-40 per cent reported this coping strategy in Egypt and Morocco and only 5 and 8 per cent respectively in Tunisia and Jordan have adopted the particular coping strategy.

In panel C, we report the household income in February of 2020 and the changes during the pandemic. We observe that almost half per cent of the respondents in Morocco belong to the lowest income quartile, while one-third of the respondents in Egypt and Jordan and one-quarter of the sample in Tunisia belong in the first income quartile. Regarding the income changes, we observe large differences among the respondents in the four countries explored in this study. In particular, almost half of the respondents in Morocco have experienced a reduction of income of more than 25 per cent, compared to the 28-30 per cent in Jordan and Tunisia, and 22.55 per cent in Egypt. On the other hand, the proportion of those who experienced an increase in income of more than 25 per cent is similar among the four countries ranging between 1.5 and 1.9 in Egypt and Morocco, and 2.2-2.4 in Jordan and Tunisia.

To recall, in the previous section, we have presented relations (3)-(4) and discussed the estimation of the average income in the top income bracket. For instance, the distribution of the household income in Egypt in February 2020, and in particular, the frequency of households in the top income bracket (4,000 or more) is 214, and the number of those in the second higher income bracket, between 2,500 and less than 4,000 Egyptian Pounds (EGP) is 436. Taking relation (4) to estimate the parameter  $a$ , we have:

$$a = \frac{\ln(N_4 + N_3) - \ln(N_4)}{\ln(Y_4) - \ln(Y_3)} = \frac{\ln(214 + 436) - \ln(214)}{\ln(4,000) - \ln(2,500)} = \frac{1.11}{0.46} = 2.41$$

Then using relation (3) we have:

$$\mu_{top} = 4,000 \frac{2.41}{2.41 - 1} = 6,850$$

Similarly, we calculate the average income in the top income bracket for the rest of the countries explored in the study, as well as we estimate the average change in income in the top bracket (increase more than 25%) and the lowest bracket (decrease more than 25%). In this case, the average decrease of income in the lowest bracket is 35, 30, 32, and 28.5 per cent respectively in Egypt, Jordan, Morocco and Tunisia, while the respective average percentage changes in income in the top bracket are 32.5, 37.5, 35.5, and 30.

In the last part of Table 1, we report the summary statistics by each coping strategy and by those who have adopted each strategy and by those who have not. Furthermore, we present the t-statistic to examine the average differences of the continuous and dummy variables between the two groups and the Kruskal-Wallis test for the categorical variables education and marital status. Overall, we observe there are similarities in the proportion of gender, the age, the employed, the household size, marital status and whether the household lives in an urban or rural area with few exceptions such as the employment and the household size in Morocco, and the marital in Morocco and Tunisia. However, the main concluding remark is that the household income differs in all countries. We should notice that we report the average differences only for three coping strategies; savings, taking money from friends-family and selling assets because the conclusions remain the same if we consider the rest of the coping strategies. Thus, the results may imply a selection bias, and we will apply the propensity score matching as a robustness check.

## **5. Empirical Results**

### **5.1 Main Estimates**

The first part of this section reports the estimates for the economic perception and the mental well-being index in Tables 2-4. In particular, in Table 2, we report the full-regression estimates for the coping strategy *taking money out of savings* and the control variables. We observe a significant and positive sign for the estimated coefficient of the coping strategy indicating a worse perception about the economic situation, as we have described in the methodology section. While the magnitude of the coping strategy coefficient varies across the countries we explore, the important part is the well-being costs ratio (WBCR) which varies between 4 and 7 per cent in Morocco and Jordan, reaching 11 per cent in Egypt and 18.5 per cent in Tunisia. This finding translates in monetary values of 260 Egyptian Pounds (EGP), 28 Jordanian Dinars (JOD), 170 Moroccan Dirhams (MAD) and 178 Tunisian Dinars per month. Regarding the control variables, we find that women in all countries explored, except for Jordan, are less optimistic about the economic situation of the household compared to men. Age presents a non-linear quadratic relationship with the economic perception, while higher polynomial orders are found insignificant. The linear term is positive, indicating that increases in age are associated with lower levels of economic perception, up to a turning point ranging between 32-36 years old in Egypt and Morocco to 48 years old in Tunisia.



An interesting finding is that education is positively related to lower levels of economic perception. While previous research finds a positive relationship between education and subjective well-being measures (Cohn and Addison, 1998; Zajacova and Lawrence, 2018; Belo et al., 2020; Tran et al., 2021), our findings can be explained by the fact that most of the educated respondents are employed in the services sector which was mostly hit by the pandemic. More specifically, 55 per cent of those employed in the retailing, transportation, accommodation and food services have completed secondary school and higher education, while almost 70 per cent of the respondents occupied in the health services, education, financial activities, real estate and information and communication services have completed a higher education degree followed by 18 per cent who have completed the secondary school.

Regarding those who are employed, we find a negative but significant sign in all countries explored, except for Tunisia where we observe a positive and significant sign indicating that those respondents are less optimistic about their economic situation. While we could have expected the opposite since employed people may face lower levels of material deprivation, we may also find a negative relationship between those employed and more worried about their job security which translates in the economic perception outcome compared to the non-employed. We should note that the non-employed respondents are not necessarily unemployed, but a large proportion includes housekeepers, retired, students and other categories not belonging to the labour force.

Married people in the four countries explored and the widowed-divorced in Morocco are more likely to report lower levels of the perceived economic situation, which can also be related to the household size. We find no difference in the perception between the respondents living in urban or rural areas except for Morocco, where those living in rural areas report higher levels of perception on the economic situation and those living in camp areas in Jordan. The latter can be explained by the fact that refugees may have experienced worse conditions compared to the natives or regular migrants living in urban and rural areas implying that the latter groups are less optimistic about their economic situation.

The concluding remarks remain similar when we explore the remaining coping strategies in Table 2 or when the outcome is the mental well-being index in Table 3. Furthermore, reporting the full estimates implies extensive space and exploring the role of the determinants on the economic perception and mental well-being is out of the current study's main topic. Thus, we do not report the results for the control variables but only the estimated coefficients of the variables of main interest; the coping strategies and the income. However, we find no differences in the education level in Jordan and Tunisia, while only those who have completed a higher education degree in Egypt and Morocco report lower levels of mental well-being.

Overall, the estimates of the coping strategies and well-being costs vary not only between countries but also between the coping strategies adopted by the respondents within each country. Hence, the

main motivation of exploring the respondents separately in the four countries lies in the aim to identify these possible differences and heterogeneities. Borrowing from banks, employers or private lenders is associated with the highest well-being costs in Egypt at 370 EGP, followed by selling assets at 265 EGP, using money from savings at 260 EGP and the remaining coping strategies ranging between 200-240 EGP. The same applies to Morocco and Tunisia, where borrowing from banks and selling assets are related to higher well-being costs. However, in Morocco, these are followed by borrowing from friends at 475 MAD, while in Tunisia, those who borrow from friends, relatives and family and those who came back to the village or live in with family experience no impact on their perception about the economic situation. A similar concluding remark is derived for Jordan, where borrowing from friends, family and relatives either from Jordan or abroad face higher well-being costs at 78-80 JOD per month.

In Table 3, we report the estimates considering the mental well-being index. In Egypt, the largest well-being costs are found for those who borrow from banks or a private lender followed by selling assets and borrowing from friends and relatives. In Jordan we observe that the higher well-being costs are reported for those who had to sell their assets at 71 JOD, followed by those who had to borrow from family, relatives and friends at 60 JOD per month, those who had to use money from savings and to borrow from banks at 42-43 JOD, while we find no costs for those who borrowed from family, relatives and friends and had to come back to the village or move in with the family. Even though in Table 2 we find that those who had to move to the village in Morocco had no impact on the economic perception and thus, the well-being costs are insignificant, we see that those who had to adopt this coping strategy report the highest costs when we consider the mental well-being index at 1,007 MAD followed by those who had to sell their assets at 737MAD, borrow from friends and relatives at 684 MAD and borrow from banks or a private lender at 494 MAD.

We should note that we derive the household income in Tables 2-3 using the equations (3)-(4) discussed in the methodology section. Next, in Table 4, we repeat our estimates using the second procedure, which is the predicted household income. As we have mentioned in the methodology section, we regress the household income used in Tables 2-3 on various demographic and socio-economic characteristics, and we take the predicted values. According to the estimates in Table 4, the order of well-being costs remains the same as in Tables 2-3. For instance, we find that borrowing from banks or a private lender in Egypt presents higher well-being costs while borrowing from friends and family has the largest impact in Morocco and Jordan. However, in most of the cases, with few exceptions, the well-being costs ratios are higher by 20-40 per cent than those found in Tables 2-3. Nevertheless, we prefer the first approach, but we recognize that taking the midpoints of household income or its predicted values do not lead to robust estimates overall. However, earlier studies have performed regressions and estimated the willingness to pay using midpoints of the income (Levinson, 2012).

Then we repeat the estimates of Tables 2-3 using the wages. In this case, monthly wages are recorded as a continuous variable instead of categories, as the household income. Thus, we may overcome the issue of potential biases in the estimation of the well-being costs, but we limit the sample only to those who are employed. Nevertheless, the results slightly differ not only in terms of the well-being ratio but also in the order of significance of each coping strategy adopted. For instance, in Table 2, exploring the perceived economic situation, we found that those borrowing from banks or a private lender is associated with the highest well-being costs, but in Table 5 we find selling assets is related to higher costs at 1,470 EGP followed by borrowing from friends and relatives, and taking money out of savings at 1,260-1,290 EGP. We note a similar concluding remark in Morocco and Tunisia, where the respondents who had to sell their assets, experience higher well-being costs while in Table 2 we found that borrowing from banks, employer, friends or relatives lead to higher well-being costs. The situation is different when we consider the mental well-being outcome. While in Table 3, we find a negative relationship between coping strategies and well-being, we observe in panel B and Egypt that none of the coping strategies explored is related to mental well-being. This finding also holds when we examine each dimension of the well-being index separately. On the other hand, the concluding remarks we derived from the results for the remaining countries are similar to those found in panel A, where borrowing from banks and selling assets imply high well-being costs, along with those who had to move back to the village or move in with the family.

## **5.2 Robustness Checks**

As a robustness check, we will perform the regressions of Tables 2-3 for the mental health index outcome across males in panel A and females in panel B. While we could have also examined the perception of the economic situation, the aim of presenting the results in Table 6 is to identify and highlight the differences across gender. We observe that the WBCR is higher for the females' sample, while the monetary values reported for males are higher. This result is explained by the higher average income of males. However, even though the household income includes the total labour income of both spouses, we assume that the female respondents are either single, widowed or divorced or the main breadwinner in the household. Nevertheless, the statistics, for example in Egypt, show that 16 per cent of the women are single compared to 26 per cent for men. On the contrary, almost 9 per cent of the women are widowed or divorced in the same country, compared to the 2 per cent for men. For this reason, we will focus on the costs ratio instead of the monetary values.

Nevertheless, the aim of performing the analysis across gender is to show that in some domains of coping strategies adopted, men experience worse levels of mental well-being and, thus, higher well-being costs. For instance, in Egypt and the coping strategy of taking money out of savings, we observe men report a 12 per cent of well-being costs compared to 8.5 per cent for women, and a ratio of 6 per cent in Morocco for the same coping strategy compared to 3 per cent for women. On the contrary, the WBCR for women in Jordan reaches 12 per cent compared to 7.2 per cent for

men, while we find no cost for both sexes in Tunisia, as we found for the full sample in Table 3. Borrowing from friends, families and relatives in the respondents' country has a large impact and well-being cost for the women in Egypt and Jordan, men in Tunisia, and a similar effect for both sexes in Morocco. Women report worse well-being levels and higher costs if they borrow from banks, an employer or a private lender in Egypt, Jordan and Tunisia, while men report higher costs in Morocco at 20 per cent compared to 11.5 per cent for women. Women experience worse mental well-being levels in Tunisia who had to sell their assets at 38 per cent, roughly doubled, compared to 19.5 per cent for men. On the other hand, men in Egypt report higher well-being costs for the same coping strategy, while both sexes experience similar WBCR in Jordan and Morocco.

The next round of robustness checks involves the estimates using employed and wages across formal employment and job security. In particular, in panel A1 we report the regression estimates for those employed in the formal sector, implying they have social insurance, and in panel A2 for respondents working in the informal sector. In panels B1-B2, we report the results for job security, where we define it by whether the respondent is employed in a permanent (panel B1) or a temporary contract (panel B2). As we did in the analysis across gender in Table 6, we will focus on the WBCR and not the monetary values since those employed in the informal sector and a temporary contract earn less on average. Regarding the results in panels A1-A2, we observe that those working in the informal sector present lower levels of the perceived economic situation and are less optimistic. This finding is especially the case of the coping strategy selling assets, where the well-being costs for the informal workers reach 83 per cent in Egypt, and it becomes insignificant for the formal workers. The cost ratios in Jordan and Tunisia are 68 and 49 per cent for the informal workers, respectively, compared to 60 and 15 per cent for the respondents employed in the formal sector. In Morocco, the cost ratio for the informal workers even reaches 152 per cent of their monthly wage, compared to formal workers. This finding implies that the former group has experienced significantly higher levels of material deprivation, almost doubled the cost ratio for those employed in the informal sector is 70 per cent. We obtain the same concluding remarks for the economic perception well-being costs across job security. In this case, the well-being costs ratio reaches 156 per cent of the temporary workers in Morocco who had to sell their assets, compared to 68 per cent of the permanent workers. Similar results across formal employment and job security are explained by the fact that most of the informal workers are employed in temporary jobs. For instance, almost 83 per cent of the informal workers in Egypt have a temporary contract, 80 per cent in Jordan, 67 per cent in Morocco, and 64 per cent in Tunisia. Similar concluding remarks are derived when we consider the mental well-being index but we do not report the results since the aim is to identify potential differences across various employment groups and types of workers.

In Tables 8-9, we estimate the regressions for the two outcomes explored, the economic perception and the mental well-being index, using the midpoints of the household income estimated by relations (3)-(4) as in Tables 2-3. However, we limit each regression to those who have adopted

only one coping strategy. In particular, in each regression, the coping strategy takes a value of 1, as we described in the methodology section if the respondent has adopted only a certain coping strategy and 0 if no coping strategy has been adopted. For instance, in the first coping strategy- taking money out of savings- we consider only those who have adopted only the particular strategy, and 0 for those who have not followed any coping strategy. Thus, in all cases and across all regressions as before, the sample of those who had not adopted any coping strategy remains the same.

For both outcomes explored in Tables 8-9, we observe higher WBCR and monetary values compared to those in Tables 2-3. This finding may indicate that those who adopt only one strategy cannot cope using other means. For instance, using different strategies, such as borrowing from different sources, banks, employers, or friends and family and using money out of savings or by selling assets, may provide safety and a stress reduction. As we have discussed in the previous section, coping strategies may reduce stress if not completely alleviate it (Cohen and Wills, 1985; House et al., 1988; Schwarz et al., 2010).

### **5.3 Changes in Household Income**

In this section, we repeat the regressions in Tables 2-3 by using changes in household income rather than the midpoints. In this case, the interpretation of the results and well-being costs differ as we compare the costs of the four categories of changes in income with the reference category, which is a reduction in household income of more than 25 per cent. More specifically, in Table 10 and for the first coping strategy- taking money out of savings- in Egypt, we observe the coefficient of the household income in the category *Decrease 1-25%* is -0.2641, which decreases monotonically or increases in absolute values at -0.4618 for the last category which is an increase in income of more than 25 per cent. This finding shows that those who have experienced a decrease of income between 1 and 25 per cent, are more likely to report higher levels of economic perception, given the negative sign implies higher values of well-being. Moreover, the well-being levels increase by positive changes in income, compared to the reference category that includes the households that have experienced a reduction in income of more than 25 per cent. The same applies in the remaining countries and most cases, the coefficients of changes in household income are significant. However, in some regressions, we find an insignificant coefficient for a specific coping strategy, as we have also shown on the previous estimates, while in other cases, some of the coefficients of the household income become insignificant, implying insignificant well-being costs.

There are two interpretations of the WBCR, which is calculated by taking the ratio of the marginal effect of the first derivative with respect to the coping strategy over the marginal effect of each income category. Thus, coming back to the example of the coping strategy taking money out of savings and the coefficient of the income change category decrease between 1-25 per cent in Egypt, we will have the marginal effect of 0.1672, which is 0.0611 since we have the ordered Probit

model, over the marginal effect of -0.2641 which is 0.1051. In the case of the mental well-being index in Table 11 and for the same coping strategy in Egypt, we get the first derivatives of the linear model estimated with OLS and is the ratio of 0.2889 over 0.3084.

The first interpretation of the WBCR is that it shows how much the household belonging to a specific change of income requires to compensate for the reduction in well-being as a result of adopting a particular coping strategy compared to those who have not adopted one. For instance, coming back to the coping strategy of taking money out of savings in Egypt, we observe a WBCR equal to 58 per cent for the category of decrease in income between 1 and 25 per cent. This percentage shows that households who have experienced this change in income require 58 per cent additional income to equilibrate their well-being, which is the perception about the economic situation, with those who have not adopted any strategy. Similarly, the households who had to take money out of savings and show no changes in their income, need an additional 42 per cent of their income to reach the well-being levels of those who have not employed any coping strategy. Households that have experienced an increase of income between 1-25 per cent require 38 per cent additional income, and those who have seen an increase of more than 25 per cent require 30 per cent. Similarly, when we consider the mental well-being in Table 11, households who have witnessed a decrease in income between 1 and 25 per cent required 94 per cent additional income, which indicates the significant impact on mental health rather than on economic well-being in Table 10.

The second interpretation accounts for the reference category, which is an income reduction of more than 25 per cent. In this case, considering the previous example, the households in the reference category require an additional 42 per cent (100-58) to reach the same levels of economic well-being or the perceived economic situation because of a reduction in income. Similarly, when we compare the reference category with the households in the third category (income stayed the same), they need an additional 58 per cent to reach the same levels of well-being. Then they require 62 and 70 per cent to reach the same well-being levels with the households in the fourth (increase in income between 1-25%) and fifth (increase in income of more than 25%) category respectively to equilibrate their well-being. When we consider the mental well-being, households in the reference category require less amount, such as 6, 27, 28 and 40 per cent respectively in each income change category to reach their well-being levels. This finding shows that households that have seen an increase in income have experienced significant adverse effects on health.

We should notice that the number of observations in Tables 10 and 11 differs from those in Tables 2-3. The main reason is that the estimates using the midpoints of household income rely on the information recorded in February 2020 before the pandemic. Then we applied relations (3)-(4) in the change of income, to find the changes in the midpoints of income during the pandemic. However, there are missing values in the question regarding the categorical income in February 2020, but we have complete answers for the changes in income.

However, the findings of this study should be interpreted with caution in the presence of several limitations. The first drawback is that we cannot estimate the regressions using fixed effects to control for omitted-variable bias and unobserved heterogeneity. This is because we have cross-section data for Jordan, while the coping strategy for the remaining countries, even though we have panel data of 3 waves, are time-invariant, implying that are dropped in the fixed effects estimates. One potential solution for future studies is to derive longer time dimensions and additional survey rounds that could record a change in the coping strategy adopted. We should notice that we have estimated the regressions using random effects for the mental well-being index, as it is a continuous variable and the random effects Probit model for the order variable economic perception. The results, and in particular, the well-being costs ratio and the cost expressed in monetary values remain similar.

The second main drawback is the use of midpoints of household income. This limitation becomes more problematic by applying relations (3)-(4) to find the average income in the top bracket. This problem can be alleviated using the wages, but the analysis is limited only to the employed. Furthermore, changes in income presented in Tables 10-11 and the wide ranges across the categories can likely lead to imprecise estimates. More specifically, the second category refers to a reduction of household income between 1 and 25 per cent, which is rather large since a reduction of 1 per cent can imply significantly different well-being costs compared to a reduction in income of 24 per cent.

Third, we have performed only a part of potential robustness checks, such as investigating the well-being costs across gender, formal employment and job security. We could have performed the estimates across education and age groups, professional classes, such as managers, technicians, clerks and unskilled workers or by industry, such as those employed in agriculture, manufacturing, construction, mining and various services sectors, including health, education, finance, real estate, food and accommodation. However, this implies an extensive set of space and regressions since we explore six coping strategies across four countries.

The fourth drawback is the “control” group that comprises respondents who have not adopted any coping strategy. In particular, the surveys used in the empirical analysis do not record information related to whether the respondent was not actually in need to cope with the pandemic or whether had no access to any of the coping strategies explored. However, in all estimates, we find a lower level of well-being for those who adopted one or more than one coping strategy, while in the same cases we found no differences between those who have adopted a strategy and those who have not. Therefore, if we assume the respondents were not able to adopt none of the strategies asked in the survey then we should have found a significant negative impact on the well-being of the particular group. Additionally, there is an additional open question about whether the respondents have adopted a coping strategy other than the mentioned ones. However, those who have answered this

question are very few, ranging around 0.08 and 0.35 per cent, while the type of strategy adopted is not recorded. Moreover, the surveys cover a wide range of potential strategies that can be followed to cope with employment losses and reductions in income.

Furthermore, in the regressions using wages, we get more precise estimates. Thus, the method proposed in this study can be applied in future research studies. Moreover, we suggest the improvement of this survey by recording the household income information similar to wages and not categorising this information. In addition, we have proposed and performed regressions incorporating percentage changes in the household income. In particular, we compared the costs of those who have adopted a coping strategy and have experienced a reduction in income compared to those who have seen an increase in income. Second, we compared the costs of those who have adopted a coping strategy in each category of percentage change in income, compared to those who have not adopted any coping strategy.

The final set of robustness checks involves the propensity score matching (PSM) introduced by Rosenbaum and Rubin (1983, 1984). One of the most common procedures of matching is the nearest neighbour which is applied in this study. To achieve a high level of matching, which requires a large pool of controls, we apply the matching with replacement allowing differently treated individuals to be matched with the same control individuals. While the value of the caliper can be considered arbitrary, we tried a value of 0.1 and we checked and compared the results using a value for caliper equal to one-quarter of the standard deviation of the logit of the propensity score, as suggested by Rosenbaum and Rubin (1983). The results remained very similar and thus, we proceeded with the value of caliper at 0.1.

In Table 12, we repeat the Ordered Probit estimates for the perception of the economic situation in Table 2 while the concluding remarks for the mental well-being index and the remaining estimates remain the same. First, we apply the PSM for each coping strategy. In particular, in terms of the PSM, the “control” group, as in the previous estimates, remains the same and includes respondents and households that have not adopted any coping strategy. The “treated” group includes those who have adopted the coping strategies explored, and thus, we have implemented six different pairs of treated-control groups for each coping strategy. The results are slightly higher in some cases than those in Table 2, and more specifically, the well-being costs ratio and the monetary values. Additionally, we observe that the results are closer when we consider the case of adopting only one coping strategy in Table 9. Then, in Table 13, we repeat the estimates of Table 10, where we obtain the changes in household income. In this case, the results seem quite similar, indicating that our estimates remain relatively robust.

For instance, considering the coping strategy of taking money out of saving in Egypt, we found the WBCR in Table 10 equal at 58, 42, 38 and 30 per cent respectively for a decrease in income at 1-25%, remain the same, increase between 1-25% and more than 25%. In Table 13, the respective



values are 54, 48, 36 and 26 per cent. Overall, considering the rest of the coping strategies, the results are close to Table 10. However, exceptions include the coping strategy of borrowing from a bank in Egypt and Morocco. In particular, the WBCR in the second category, where the household income remains the same during the COVID-19 period, is 92 per cent compared to 73 per cent in Egypt. Another difference is identified in the second category where the income decreases between 1 and 25 per cent in Morocco, which is 63 per cent in Table 13 compared to 53 per cent in Table 10. Another difference found is in Jordan and the coping strategy of taking money out of savings, the WBCR are significantly higher compared to those found in Table 10. This finding highlights the importance that even though the results remain robust, we should consider the potential selection bias and perform approaches similar to the PSM to estimate and compare the WBCR. Nevertheless, due to the large size, the estimates would require in this study, we focus on the method implemented to estimate the well-being costs by presenting the main findings for the well-being outcome of the economic perception since the changes in income are quite similar between the unmatched and matched samples.

## **6. Conclusions**

In this study, we have attempted to explore the role of various coping strategies followed during the COVID-19 pandemic in Egypt, Jordan, Morocco and Tunisia. Furthermore, we have estimated the well-being costs that show how much the respondents who have adopted a coping strategy require to equilibrate their well-being levels with those who have not adopted any coping strategy. The study may offer insights into the design of policies and safety nets, including unemployment benefits, health insurance and furlough retention schemes aiming to support people during the pandemic and other types of economic recessions. The findings also reveal a need for further studies and intervention for the population, especially those who have a higher risk of stress, such as women, informal and temporary workers and those implementing certain coping strategies. Moreover, we have shown a method that can be used to measure inequalities in subjective well-being, which can be extended and applied in future studies using panel data across various demographic and socio-economic groups. However, the surveys should record the exact amount of household income that will allow for more precise estimates of inequalities. Another interesting point for future studies is the well-being estimation using objective measures, such as material deprivation, exploring not only the inter-household but also intra-household inequalities.

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**Table 1. Summary Statistics for SWB Outcomes, Coping Strategies and Household Income**

Country		Panel A: SWB Measures					
<b>Egypt</b>	How worried are you about the economic situation?		<i>I have felt cheerful</i>	<i>I have felt calm and relaxed</i>	<i>I have felt active and vigorous</i>	<i>I woke up feeling fresh and rested</i>	<i>My daily life has been filled with things that interest me</i>
<b>Not at all worried</b>	19.20	<b>All of the time</b>	7.95	7.40	13.80	9.70	25.05
<b>A little worried</b>	16.65	<b>Most of the time</b>	12.15	10.20	10.95	10.25	14.25
<b>Rather worried</b>	18.25	<b>More than half the time</b>	5.90	7.05	10.95	7.50	10.30
<b>Very worried</b>	45.90	<b>Less than half the time</b>	14.45	17.60	18.30	20.85	16.65
		<b>Some of the time</b>	35.50	37.00	31.40	33.00	26.50
		<b>At no time</b>	24.05	20.75	14.60	18.70	7.25
<b>Jordan</b>	How worried are you about the economic situation?		<i>I have felt cheerful</i>	<i>I have felt calm and relaxed</i>	<i>I have felt active and vigorous</i>	<i>I woke up feeling fresh and rested</i>	<i>My daily life has been filled with things that interest me</i>
<b>Not at all worried</b>	9.93	<b>All of the time</b>	7.77	6.08	10.32	6.59	15.22
<b>A little worried</b>	10.63	<b>Most of the time</b>	15.46	13.85	18.44	18.05	18.48
<b>Rather worried</b>	20.48	<b>More than half the time</b>	7.69	7.30	10.24	8.67	9.69
<b>Very worried</b>	58.96	<b>Less than half the time</b>	10.87	14.52	15.58	15.50	13.10
		<b>Some of the time</b>	28.05	26.95	23.22	23.92	19.42
		<b>At no time</b>	30.16	31.30	22.20	27.27	24.09
<b>Morocco</b>	How worried are you about the economic situation?		<i>I have felt cheerful</i>	<i>I have felt calm and relaxed</i>	<i>I have felt active and vigorous</i>	<i>I woke up feeling fresh and rested</i>	<i>My daily life has been filled with things that interest me</i>
<b>Not at all worried</b>	17.88	<b>All of the time</b>	13.44	14.26	14.44	14.28	13.72
<b>A little worried</b>	22.83	<b>Most of the time</b>	21.64	21.48	21.82	21.67	16.83
<b>Rather worried</b>	9.54	<b>More than half the time</b>	6.44	6.66	6.43	6.36	4.17
<b>Very worried</b>	49.75	<b>Less than half the time</b>	8.78	8.16	8.03	8.06	5.07
		<b>Some of the time</b>	31.42	32.09	32.02	32.29	25.63
		<b>At no time</b>	18.28	17.35	17.26	17.34	34.58
<b>Tunisia</b>	How worried are you about the economic situation?		<i>I have felt cheerful</i>	<i>I have felt calm and relaxed</i>	<i>I have felt active and vigorous</i>	<i>I woke up feeling fresh and rested</i>	<i>My daily life has been filled with things that interest me</i>
<b>Not at all worried</b>	11.31	<b>All of the time</b>	10.19	7.87	12.62	11.59	27.26
<b>A little worried</b>	12.03	<b>Most of the time</b>	10.16	9.36	10.87	9.99	14.84
<b>Rather worried</b>	21.80	<b>More than half the time</b>	8.87	8.13	9.98	8.09	11.82
<b>Very worried</b>	54.86	<b>Less than half the time</b>	12.42	13.44	14.07	14.48	12.67
		<b>Some of the time</b>	30.18	30.34	27.91	28.25	20.75
		<b>At no time</b>	28.18	30.86	24.55	27.60	12.66

**Table 1 (Cont.) Summary Statistics for SWB Outcomes, Coping Strategies and Household Income**

<b>Country</b>		<b>Panel B: Coping Strategies</b>					
<b>Egypt</b>	<i>Taking money out of savings</i>	<i>Taking money from family, relatives, or friends</i>	<i>Taking money from family, relatives, or friends abroad</i>	<i>Going back to the village or family</i>	<i>Borrowing from a bank, employer, or private lender</i>	<i>Sell Assets</i>	
<b>Yes</b>	49.20	56.81	14.58	39.71	30.90	37.12	
<b>No</b>	50.80	43.19	85.42	60.29	69.10	62.88	
<b>Jordan</b>	<i>Taking money out of savings</i>	<i>Taking money from family, relatives, or friends</i>	<i>Taking money from family, relatives, or friends abroad</i>	<i>Going back to the village or family</i>	<i>Borrowing from a bank, employer, or private lender</i>	<i>Sell Assets</i>	
<b>Yes</b>	42.19	51.20	11.06	8.13	39.51	22.09	
<b>No</b>	57.81	48.80	88.94	91.87	60.49	77.91	
<b>Morocco</b>	<i>Taking money out of savings</i>	<i>Taking money from family, relatives, or friends</i>	<i>Taking money from family, relatives, or friends abroad</i>	<i>Going back to the village or family</i>	<i>Borrowing from a bank, employer, or private lender</i>	<i>Sell Assets</i>	
<b>Yes</b>	61.77	51.43	10.63	5.00	23.16	23.03	
<b>No</b>	38.23	48.57	89.37	95.00	76.84	76.97	
<b>Tunisia</b>	<i>Taking money out of savings</i>	<i>Taking money from family, relatives, or friends</i>	<i>Taking money from family, relatives, or friends abroad</i>	<i>Going back to the village or family</i>	<i>Borrowing from a bank, employer, or private lender</i>	<i>Sell Assets</i>	
<b>Yes</b>	73.08	68.99	33.63	38.17	42.46	39.08	
<b>No</b>	26.92	31.01	66.37	61.83	57.54	60.92	
<b>Country</b>		<b>Panel C: Household Income</b>					
<b>Egypt</b>	<i>Household Income in February 2020</i>	<i>Change in Income</i>		<b>Jordan</b>	<i>Household Income in February 2020</i>	<i>Change in Income</i>	
<b>Less than 1,750 EGP</b>	34.72	Decreased by more than 25%	22.55	<b>Less than 260 JOD</b>	28.02	Decreased by more than 25%	28.40
<b>1,750- less than 2,500 EGP</b>	29.80	Decreased by 1-25%	20.60	<b>260-less than 420 JOD</b>	35.48	Decreased by 1-25%	23.11
<b>2,500-less than 4,000 EGP</b>	23.80	Stayed the same	46.85	<b>420-less than 660 JOD</b>	19.44	Stayed the same	39.78
<b>4,000 or more</b>	11.68	Increased by 1-25%	8.50	<b>660 or more JOD</b>	17.06	Increased by 1-25%	6.51
		Increased by more than 25%	1.50			Increased by more than 25%	2.20
<b>Morocco</b>	<i>Household Income in February 2020</i>	<i>Change in Income</i>		<b>Tunisia</b>	<i>Household Income in February 2020</i>	<i>Change in Income</i>	<i>Change in Income</i>
<b>Less than 2500 MAD</b>	49.85	Decreased by more than 25%	50.11	<b>Less than 400 TND</b>	21.61	Decreased by more than 25%	30.02
<b>2,500 - less than 5,000 MAD</b>	32.47	Decreased by 1-25%	14.00	<b>400- less than 550 TND</b>	21.81	Decreased by 1-25%	19.01
<b>5,000 - less than 10,000 MAD</b>	12.40	Stayed the same	30.77	<b>550-less than 1100 TND</b>	31.40	Stayed the same	43.41
<b>10,000 or more</b>	5.28	Increased by 1-25%	3.22	<b>1100 or more</b>	25.18	Increased by 1-25%	5.15
		Increased by more than 25%	1.90			Increased by more than 25%	2.41



**Table 1 (Cont.) Summary Statistics for SWB Outcomes, Coping Strategies and Household Income**

	Egypt		t-statistic and Chi-Square Kruskal-Wallis Test	Jordan		t-statistic and Chi-Square Kruskal-Wallis Test
	Yes	No		Yes	No	
<i>Taking money out of savings</i>						
Gender	0.6283	0.6341	-0.2123 [0.8319]	0.5311	0.5083	0.8556 [0.3924]
Age	34.888	35.637	-1.1436 [0.2530]	34.618	35.856	-1.9244 [0.0545]
Household Income	2,258.106	2,245.715	0.1664 [0.8678]	438.518	377.129	5.3039 [0.000]
Education Level-Less than basic)	12.91	17.56		4.59	8.74	
Education Level-Basic-Elementary	8.82	13.01		16.72	23.44	
Education Level-Secondary	45.20	46.18	19.362 (0.0001)	36.89	36.72	27.012 [0.0001]
Education Level-Higher Education	33.07	23.25		41.80	31.10	
Marital Status-Singles	26.14	27.50		29.84	31.70	
Marital Status -Married	69.76	68.13	0.038 (0.8262)	65.41	63.04	0.300 [0.5841]
Marital Status -Widowed-Divorced	4.10	4.72		4.75	5.26	
Employed (Yes)	0.5905	0.5382	1.8671 [0.0621]	0.4770	0.3911	3.2707 [0.0011]
Household Size	4.910	4.648	2.3172 [0.0207]	5.345	5.217	1.1053 [0.2692]
Rural Area	0.5574	0.5317	0.9143 [0.3607]	0.8737	0.8528	0.8816 [0.3781]
	Morocco		t-statistic and Chi-Square Kruskal-Wallis Test	Tunisia		t-statistic and Chi-Square Kruskal-Wallis Test
	Yes	No		Yes	No	
<i>Taking money out of savings</i>						
Gender	0.6497	0.6516	-0.1250 [0.9005]	0.5946	0.5376	3.4149 [0.0006]
Age	36.190	37.532	-3.6914 [0.0002]	38.067	42.384	-10.009 [0.000]
Household Income	3,355.684	3,756.746	-4.921 [0.000]	799.620	697.821	6.7644 [0.000]
Education Level-Less than basic)	36.72	35.93		20.91	31.32	
Education Level-Basic-Elementary	19.83	17.56	2.995 [0.0835]	14.88	15.91	36.991 (0.000)
Education Level-Secondary	17.49	17.51		38.49	29.48	
Education Level-Higher Education	25.96	29.00		25.72	23.28	
Marital Status-Singles	33.92	35.98		35.44	27.05	
Marital Status -Married	61.65	60.18	2.473 (0.1148)	61.07	67.67	31.334 (0.000)
Marital Status -Widowed-Divorced	4.43	3.84		3.49	5.28	
Employed (Yes)	0.5067	0.5343	-1.8149 [0.0696]	0.6375	0.5543	6.2778 [0.000]
Household Size	4.938	4.931	0.0790 [0.9371]	4.500	4.437	1.0088 [0.3131]
Rural Area	0.7117	0.7328	-1.5425 [0.1230]	0.7149	0.6951	1.916 [0.1966]

**Table 1 (Cont.) Summary Statistics for SWB Outcomes, Coping Strategies and Household Income**

	Egypt		t-statistic and Chi-Square Kruskal-Wallis Test	Jordan		t-statistic and Chi-Square Kruskal-Wallis Test
	Yes	No		Yes	No	
<i>Taking money from family, relatives, or friends</i>						
Gender	0.6390	0.6341	0.1909 [0.8486]	0.5302	0.5083	0.9043 [0.3660]
Age	34.912	35.637	-1.2203 [0.2226]	36.502	35.856	1.1407 [0.2541]
Household Income	1,922.363	2,245.715	-4.877 [0.000]	294.609	377.129	-8.492 [0.000]
Education Level-Less than basic)	17.92	17.56		16.31	8.74	
Education Level-Basic-Elementary	13.23	13.01		30.22	23.44	
Education Level-Secondary	47.96	46.18	0.524 (0.4792)	32.26	36.72	44.081 [0.000]
Education Level-Higher Education	20.89	23.25		21.21	31.10	
Marital Status-Singles	19.28	27.15		16.65	31.70	
Marital Status -Married	76.76	68.13	8.443 (0.0037)	77.88	63.04	42.011 [0.000]
Marital Status -Widowed-Divorced	3.96	4.72		5.47	5.26	
Employed (Yes)	0.5883	0.5382	1.8935 [0.0585]	0.3797	0.3911	-0.4863 [0.6268]
Household Size	4.844	4.648	1.9734 [0.0486]	5.451	5.217	2.2120 [0.0271]
Rural Area	0.5129	0.5317	-0.7004 [0.4838]	0.8734	0.8528	0.8608 [0.3895]
	Morocco		t-statistic and Chi-Square Kruskal-Wallis Test	Tunisia		t-statistic and Chi-Square Kruskal-Wallis Test
	Yes	No		Yes	No	
<i>Taking money from family, relatives, or friends</i>						
Gender	0.5780	0.6516	-4.540 [0.000]	0.6177	0.5376	4.695 [0.000]
Age	36.858	37.532	-1.6816 [0.0927]	38.423	42.384	-9.2593 [0.000]
Household Income	2,550.65	3,756.746	-11.109 [0.000]	692.862	697.821	-0.3242 [0.7458]
Education Level-Less than basic)	44.62	35.93		27.10	31.32	
Education Level-Basic-Elementary	20.86	17.56	58.778 [0.000]	17.70	15.91	0.172 (0.6781)
Education Level-Secondary	16.75	17.51		36.26	29.48	
Education Level-Higher Education	17.77	29.00		18.94	23.28	
Marital Status-Singles	28.69	35.98		31.25	27.05	
Marital Status -Married	64.13	60.18	31.201 (0.000)	63.82	67.67	6.324 (0.0119)
Marital Status -Widowed-Divorced	7.18	3.84		4.93	5.28	
Employed (Yes)	0.4376	0.5343	5.828 [0.000]	0.6329	0.5543	5.8040 [0.000]
Household Size	5.106	4.931	1.890 [0.0588]	4.552	4.437	1.5548 [0.1201]
Rural Area	0.6672	0.7328	-4.300	0.6754	0.6951	-1.2130

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[0.000]

[0.2252]

**Table 1 (Cont.) Summary Statistics for SWB Outcomes, Coping Strategies and Household Income**

	Egypt		t-statistic and Chi-Square Kruskal-Wallis Test	Jordan		t-statistic and Chi-Square Kruskal-Wallis Test
	Yes	No		Yes	No	
<i>Sell Assets</i>						
Gender	0.6473	0.6341	0.4160 [0.6775]	0.5907	0.5083	2.2442 [0.0250]
Age	36.041	35.637	0.5179 [0.6047]	35.696	35.856	-0.1793 [0.8577]
Household Income	1,812.825	2,245.715	-5.182 [0.000]	331.021	377.129	-2.909 [0.000]
Education Level-Less than basic)	21.76	17.56		16.88	8.74	
Education Level-Basic-Elementary	13.77	13.01		23.63	23.44	
Education Level-Secondary	43.53	46.18	2.623 (0.1053)	32.49	36.72	6.573 [0.0104]
Education Level-Higher Education	20.94	23.25		27.00	31.10	
Marital Status-Singles	18.18	27.15		16.46	31.70	
Marital Status -Married	76.58	68.13	8.732 (0.0031)	78.06	63.04	17.205 [0.000]
Marital Status -Widowed-Divorced	5.23	4.72		5.48	5.26	
Employed (Yes)	0.5977	0.5382	1.8149 [0.0698]	0.4135	0.3911	0.6206 [0.5350]
Household Size	5.046	4.648	3.1012 [0.0020]	5.485	5.217	1.6257 [0.1043]
Rural Area	0.5151	0.5317	-0.5005 [0.6169]	0.8565	0.8528	0.1049 [0.9165]
	Morocco		t-statistic and Chi-Square Kruskal-Wallis Test	Tunisia		t-statistic and Chi-Square Kruskal-Wallis Test
	Yes	No		Yes	No	
<i>Sell Assets</i>						
Gender	0.7151	0.6516	2.704 [0.0069]	0.6187	0.5376	3.548 [0.0004]
Age	37.244	37.532	-0.4696 [0.6387]	38.091	42.384	-0.4696 [0.6387]
Household Income	2,554.348	3,756.746	-6.649 [0.000]	642.434	697.821	-2.657 [0.0079]
Education Level-Less than basic)	50.48	35.93		29.77	31.32	
Education Level-Basic-Elementary	18.74	17.56	53.589 (0.000)	24.15	15.91	12.439 (0.0004)
Education Level-Secondary	16.44	17.51		35.64	29.48	
Education Level-Higher Education	14.34	29.00		10.44	23.28	
Marital Status-Singles	28.30	35.98		30.94	27.05	
Marital Status -Married	65.01	60.18	14.070 (0.000)	63.97	67.67	2.972 (0.0847)
Marital Status -Widowed-Divorced	6.69	3.84		5.09	5.28	
Employed (Yes)	0.4359	0.5343	-3.9602 [0.0001]	0.6214	0.5543	3.8096 [0.0001]
Household Size	5.504	4.931	4.2176 [0.000]	4.768	4.437	3.5618 [0.0004]
Rural Area	0.4933	0.7328	-10.5263 [0.000]	0.6514	0.6951	-2.0218 [0.0433]

p-values of t-statistics in brackets for continuous and dummy variables, and p-values in parentheses of Kruskal-Wallis test for the categorical variables.

**Table 2. SWB and Coping Strategies for the Economic Situation Perception using Household Income**

	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.2175*** (0.0579)	0.1334** (0.0577)	0.0822*** (0.0271)	0.0913*** (0.0339)
Household Income	-0.2517*** (0.0466)	-0.3356*** (0.0422)	-0.2245*** (0.0225)	-0.0747*** (0.0179)
Gender (Female)	0.2563*** (0.0676)	-0.0084 (0.0563)	0.0814** (0.0348)	0.0956** (0.0375)
Age	0.0524** (0.0226)	0.0342** (0.0152)	0.0411*** (0.0089)	0.0677*** (0.0152)
Age Squared	-0.0008*** (0.0003)	-0.0004** (0.0002)	-0.00057*** (0.0001)	-0.0007*** (0.0002)
Education Level (Reference Category- Less than basic)				
Basic-Elementary	0.0959 (0.1104)	0.2946*** (0.0865)	0.1781*** (0.0433)	0.0566 (0.0543)
Secondary	0.1563* (0.0855)	0.2601*** (0.0846)	0.1211*** (0.0459)	0.1616*** (0.0474)
Higher Education	0.1142 (0.0934)	0.4303*** (0.0922)	0.1156** (0.0465)	0.2386*** (0.0571)
Marital Status (Reference Category- Singles)				
Married	0.1545** (0.0775)	0.1213* (0.0655)	0.0847** (0.0392)	0.1805*** (0.0472)
Widowed- Divorced	0.1508 (0.1647)	0.0826 (0.1221)	0.1749** (0.0801)	0.0364 (0.0973)
Employed (Yes)	-0.0128 (0.0362)	-0.0081 (0.0285)	-0.0244 (0.0335)	0.1721*** (0.0385)
Household Size	0.0145 (0.0213)	0.0101 (0.0117)	0.0083* (0.0047)	0.0136 (0.0094)
Rural Area	-0.0773 (0.0652)	-0.0373 (0.0693)	-0.0822** (0.0351)	0.0267 (0.0405)
Camp Area		-0.5928*** (0.1781)		
No- Observations	1,832	2,427	6,093	5,016
Wald Chi-Square Test	199.22 [0.000]	102.12 [0.000]	208.03 [0.000]	194.82 [0.000]
Well-being costs ratio (WBCR)	11.2%	6.8%	4.5%	18.5%
WBCR monetary values	260 EGP	28 JOD	170 MAD	178 TND

**Table 2 (Cont.) SWB and Coping Strategies for the Economic Situation Perception using Household Income**

	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )	0.1859*** (0.0553)	0.2836*** (0.0527)	0.2036*** (0.0327)	0.0745** (0.0339)
Household Income	-0.2344*** (0.0471)	-0.2466*** (0.0383)	-0.2116*** (0.0226)	-0.0675*** (0.0180)
No- Observations	1,832	2,427	6,093	5,016
Wald Chi-Square Test	198.84 [0.000]	122.26 [0.000]	244.01 [0.000]	192.85 [0.000]
Well-being costs ratio (WBCR)	10.5%	19.3%	12.5%	17%
WBCR monetary values	240 EGP	80 JOD	475 MAD	165 TND
	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2010** (0.0959)	0.3798*** (0.1269)	0.1509*** (0.0821)	0.0087 (0.0557)
Household Income	-0.2511*** (0.0466)	-0.2757*** (0.0378)	-0.2251*** (0.0225)	-0.0712*** (0.0187)
No- Observations	1,832	2,427	6,093	5,016
Wald Chi-Square Test	164.14 [0.000]	100.67 [0.000]	211.10 [0.000]	188.05 [0.000]
Well-being costs ratio (WBCR)	10%	19%	8.5%	n.s.
WBCR monetary values	230 EGP	78 JOD	323 MAD	n.s,
	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Going back to the village or family</i> )	0.1575** (0.0693)	0.3180*** (0.1431)	0.2031 (0.1295)	0.0081 (0.0524)
Household Income	-0.2493*** (0.0465)	-0.2784*** (0.0378)	-0.2243*** (0.0225)	-0.0714*** (0.0179)
No- Observations	1,832	2,427	6,093	5,016
Wald Chi-Square Test	173.21 [0.000]	95.66 [0.000]	210.46 [0.000]	187.65 [0.000]
Well-being costs ratio (WBCR)	8.5%	16.5%	n.s.	n.s.
WBCR monetary values	200 EGP	67 JOD	n.s,	n.s,
	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.3365*** (0.0796)	0.2976*** (0.0612)	0.2203*** (0.0513)	0.1648*** (0.0479)
Household Income	-0.2519*** (0.0465)	-0.2798*** (0.0376)	-0.2225*** (0.0224)	-0.0741*** (0.0179)
No- Observations	1,832	2,427	6,093	5,016
Wald Chi-Square Test	197.12 [0.000]	113.69 [0.000]	224.96 [0.000]	204.02 [0.000]
Well-being costs ratio (WBCR)	16%	16%	12.3 %	31.5%
WBCR monetary values	370 EGP	66 JOD	468 MAD	300 TND
	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Sell Assets</i> )	0.2183*** (0.0754)	0.3028*** (0.0889)	0.1638*** (0.0557)	0.1503** (0.0515)
Household Income	-0.2356*** (0.0470)	-0.2756*** (0.0378)	-0.2227*** (0.0226)	-0.0689*** (0.0178)
No- Observations	1,832	2,427	6,093	5,016
Wald Chi-Square Test	182.44 [0.000]	103.11 [0.000]	216.75 [0.000]	198.35 [0.000]
Well-being costs ratio (WBCR)	11.5%	16.3%	9.4%	31%
WBCR monetary values	265 EGP	67 JOD	357 MAD	298 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 3. SWB and Coping Strategies for Mental Well-Being Index using Household Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.1595*** (0.0410)	0.1199*** (0.0414)	0.0453* (0.0250)	0.0237 (0.0639)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2163*** (0.0385)	0.1295*** (0.0366)	0.1565*** (0.0273)	0.1777*** (0.0234)
Household Income	-0.2243*** (0.0324)	-0.1964*** (0.0268)	-0.1176*** (0.0201)	-0.1195*** (0.0126)	-0.2046*** (0.0326)	-0.1699*** (0.0271)	-0.1195*** (0.0191)	-0.1099*** (0.0126)
No- Observations	1,832	2,427	6,093	5,016	1,832	2,427	6,093	5,016
R-Square	0.0620	0.0494	0.0272	0.0462	0.0702	0.0509	0.0337	0.0568
Well-being costs ratio (WBCR)	9.5%	10.5%	5.2%	n.s.	14%	14.5%	18%	24.5%
WBCR monetary values	220 EGP	43 JOD	198 MAD	n.s.	325 EGP	60 JOD	684 MAD	235 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.1417* (0.0767)	0.0177 (0.0813)	0.0415 (0.0681)	0.0662* (0.0379)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.0325 (0.0454)	0.1239 (0.0980)	0.2531** (0.1011)	0.1458*** (0.0331)
Household Income	-0.2241*** (0.0324)	-0.1854*** (0.0267)	-0.1302*** (0.0191)	-0.1193*** (0.0125)	-0.2231*** (0.0325)	-0.1855*** (0.0266)	-0.1297*** (0.0191)	-0.1177*** (0.0125)
No- Observations	1,832	2,427	6,093	5,016	1,832	2,427	6,093	5,016
Wald Chi-Square Test	0.0558	0.0461	0.0286	0.0467	0.0546	0.0467	0.0295	0.0494
Well-being costs ratio (WBCR)	8.5%	n.s.	n.s.	8.5%	n.s.	n.s.	26.5%	19%
WBCR monetary values	200 EGP	n.s.	n.s.	82 TND	n.s.	n.s.	1,007 MAD	182 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.2668*** (0.0512)	0.1079*** (0.0406)	0.1217*** (0.0428)	0.1842*** (0.0314)				
Coping Strategy ( <i>Sell Assets</i> )					0.1785*** (0.0494)	0.1806*** (0.0573)	0.1824*** (0.0438)	0.1218*** (0.0333)
Household Income	-0.2226*** (0.0322)	-0.1857*** (0.0266)	-0.1288*** (0.0191)	-0.1221*** (0.0126)	-0.2046*** (0.0326)	-0.1835*** (0.0267)	-0.1279*** (0.0191)	-0.1166*** (0.0126)
No- Observations	1,832	2,427	6,093	5,016	1,832	2,427	6,093	5,016
Wald Chi-Square Test	0.0668	0.0488	0.0298	0.0522	0.0611	0.0620	0.0312	0.0485
Well-being costs ratio (WBCR)	16.2%	10.2%	13%	23%	11.5%	17.3%	19.4%	16%
WBCR monetary values	372 EGP	42 JOD	494 MAD	220 TND	265 EGP	71 JOD	737 MAD	154 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 4. SWB and Coping Strategies for the Perception on Economic Situation and Mental Well-Being Index using Predicted Values of Household Income**

<b>Panel A: DV Economic Situation Perception</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.1781*** (0.0559)	0.1232** (0.0555)	0.0796*** (0.0288)	0.0902*** (0.0316)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.1881*** (0.0527)	0.2897*** (0.0516)	0.2123*** (0.0328)	0.0734** (0.0303)
Household Income	-0.2904*** (0.0865)	-0.3821*** (0.1029)	-0.2593*** (0.0267)	-0.1086*** (0.0222)	-0.3066*** (0.0859)	-0.3724*** (0.0936)	-0.2520*** (0.0245)	-0.1071*** (0.0220)
No- Observations	2,000	2,547	6,093	5,016	2,000	2,547	6,093	5,016
Wald Chi-Square Test	194.75 [0.000]	111.36 [0.000]	150.77 [0.000]	263.03 [0.000]	194.08 [0.000]	140.73 [0.000]	196.52 [0.000]	268.06 [0.000]
Well-being costs ratio (WBCR)	9.5%	5.7%	4%	15%	8.7%	12%	11.7%	14%
WBCR monetary values	220 EGP	24 JOD	152 MAD	145 TND	200 EGP	49 JOD	445 MAD	135 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2099* (0.1201)	0.3513*** (0.1236)	0.1482*** (0.0818)	0.0110 (0.0506)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.1829** (0.0671)	0.3137** (0.1414)	0.1915 (0.1291)	0.0115 (0.0578)
Household Income	-0.3422*** (0.0853)	-0.3836*** (0.1030)	-0.2696*** (0.0264)	-0.1011*** (0.0223)	-0.3684*** (0.0845)	-0.3854*** (0.1027)	-0.2679*** (0.0263)	-0.1109*** (0.0223)
No- Observations	1,832	2,427	6,093	5,016	1,832	2,427	6,093	5,016
Wald Chi-Square Test	182.94 [0.000]	118.49 [0.000]	154.05 [0.000]	256.78 [0.000]	197.12 [0.000]	111.63 [0.000]	153.53 [0.000]	257.16 [0.000]
Well-being costs ratio (WBCR)	9%	14%	8%	n.s.	7%	13%	n.s.	n.s.
WBCR monetary values	207 EGP	57 JOD	304 MAD	n.s.	160 EGP	53 JOD	n.s.	n.s.
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.3145*** (0.0772)	0.2820*** (0.0592)	0.2199*** (0.0512)	0.1787*** (0.0436)				
Coping Strategy ( <i>Sell Assets</i> )					0.2093*** (0.0728)	0.2930*** (0.0866)	0.1617*** (0.0555)	0.1756** (0.0478)
Household Income	-0.3650*** (0.0852)	-0.3808*** (0.1031)	-0.2615*** (0.0257)	-0.1089*** (0.0224)	-0.3014*** (0.0848)	-0.3736*** (0.1027)	-0.2741*** (0.0258)	-0.1058*** (0.0221)
No- Observations	1,832	2,427	6,093	5,016	1,832	2,427	6,093	5,016
Wald Chi-Square Test	184.95 [0.000]	129.09 [0.000]	169.22 [0.000]	272.22 [0.000]	188.69 [0.000]	123.26 [0.000]	162.92 [0.000]	271.34 [0.000]
Well-being costs ratio (WBCR)	13%	11%	11%	26%	10%	12%	8.5%	28%
WBCR monetary values	300 EGP	45 JOD	418 MAD	250 TND	230 EGP	49 JOD	323 MAD	270 TND
<b>Panel B: DV Mental Well-Being</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.1383*** (0.0401)	0.1138*** (0.0402)	0.0478* (0.0247)	0.0145 (0.0221)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2180*** (0.0377)	0.1507*** (0.0356)	0.1634*** (0.0272)	0.1979*** (0.0214)
Household Income	-0.3233*** (0.0931)	-0.3095*** (0.0747)	-0.2248*** (0.0381)	-0.1843*** (0.0284)	-0.3194*** (0.0935)	-0.2707*** (0.0745)	-0.2129*** (0.0375)	-0.1860*** (0.0276)
No- Observations	2,000	2,547	6,093	6,009	2,000	2,547	6,093	6,009
R-Square	0.0498	0.0396	0.0282	0.0376	0.0598	0.0451	0.0335	0.0521
Well-being costs ratio (WBCR)	7.5%	9%	4%	n.s.	11.5%	12%	15%	21%
WBCR monetary values	175 EGP	37 JOD	152 MAD	n.s.	265 EGP	49 JOD	570 MAD	200 TND



**Table 4 (Cont.) SWB and Coping Strategies for the Perception on Economic Situation and Mental Well-Being Index using Predicted Values of Household Income**

<b>Panel B: DV Mental Well-Being</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.1519** (0.0741)	0.0138 (0.0816)	0.0407 (0.0683)	0.0698** (0.0350)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.0494 (0.0492)	0.1198 (0.0960)	0.2574** (0.1018)	0.1472*** (0.0389)
Household Income	-0.3141*** (0.0927)	-0.2832*** (0.0748)	-0.2178*** (0.0382)	-0.1818*** (0.0284)	-0.3123*** (0.0926)	-0.2973*** (0.0749)	-0.2064*** (0.0380)	-0.1888*** (0.0302)
No- Observations	2,000	2,547	6,093	6,009	2,000	2,547	6,093	6,009
R-Square	0.0459	0.0386	0.0279	0.0382	0.0448	0.0392	0.0287	0.0406
Well-being costs ratio (WBCR)	7%	n.s.	n.s.	7%	n.s.	n.s.	23%	15%
WBCR monetary values	160 EGP	n.s.	n.s.	67 TND	n.s.	n.s.	874 MAD	144 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.2695*** (0.0510)	0.1079*** (0.0406)	0.1255*** (0.0431)	0.1835*** (0.0287)				
Coping Strategy ( <i>Sell Assets</i> )					0.1949*** (0.0479)	0.1806*** (0.0573)	0.1877*** (0.0442)	0.1623*** (0.0305)
Household Income	-0.3160*** (0.0925)	-0.1857*** (0.0266)	-0.2034*** (0.0381)	-0.1803*** (0.0287)	-0.3245*** (0.0930)	-0.1835*** (0.0267)	-0.2013*** (0.0378)	-0.1792*** (0.0282)
No- Observations	2,000	2,547	6,093	6,009	2,000	2,547	6,093	6,009
R-Square	0.0537	0.0488	0.0289	0.0434	0.0520	0.0620	0.0303	0.0485
Well-being costs ratio (WBCR)	13%	10.2%	10.5%	18.3%	9.5%	17.3%	16%	14.8%
WBCR monetary values	300 EGP	42 JOD	400 MAD	173 TND	220 EGP	71 JOD	608 MAD	142 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 5. SWB and Coping Strategies for the Perception on Economic Situation and Mental Well-Being Index using Wages**

<b>Panel A: DV Economic Situation Perception</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.3433*** (0.0895)	0.3158*** (0.0971)	0.0301* (0.0165)	0.1052** (0.0508)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2801*** (0.0848)	0.3367*** (0.0969)	0.2809*** (0.0664)	0.1543*** (0.0509)
Wages	-0.0681** (0.0332)	-0.0613*** (0.0255)	-0.0455*** (0.0174)	-0.0487*** (0.0157)	-0.0540** (0.0235)	-0.0596** (0.0229)	-0.0432** (0.0175)	-0.0454*** (0.0156)
No- Observations	816	799	1,646	2,313	816	799	1,646	2,313
Wald Chi-Square Test	54.18 [0.000]	56.79 [0.000]	97.90 [0.000]	128.65 [0.000]	151.92 [0.000]	65.89 [0.000]	122.93 [0.000]	132.04 [0.000]
Well-being costs ratio (WBCR)	60%	72%	7.4%	14.5%	61.5%	76%	60%	22.5%
WBCR monetary values	1,260 EGP	285 JOD	240 MAD	132 TND	1,290 EGP	300 JOD	1,940 MAD	205 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2890** (0.1327)	0.2878** (0.1347)	0.0230 (0.1616)	0.0129 (0.0819)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.1632 (0.1016)	0.1465 (0.2161)	0.1977 (0.2307)	0.0561 (0.0741)
Wages	-0.0660** (0.0329)	-0.0621** (0.0255)	-0.0456*** (0.0174)	-0.0478*** (0.0156)	-0.0634* (0.0330)	-0.0622** (0.0255)	-0.0455*** (0.0174)	-0.0477*** (0.0158)
No- Observations	816	799	1,646	2,313	816	799	1,646	2,313
Wald Chi-Square Test	31.74 [0.000]	46.59 [0.000]	97.38 [0.000]	123.60 [0.000]	130.60 [0.000]	42.76 [0.000]	98.52 [0.000]	124.12 [0.000]
Well-being costs ratio (WBCR)	48%	58%	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
WBCR monetary values	1,010 EGP	230 JOD	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.2128** (0.0968)	0.3518*** (0.1035)	0.1663** (0.0776)	0.1950*** (0.0655)				
Coping Strategy ( <i>Sell Assets</i> )					0.4159*** (0.1193)	0.2988* (0.1663)	0.5464*** (0.1364)	0.2309*** (0.0848)
Wages	-0.0656** (0.0331)	-0.0620*** (0.0257)	-0.0439** (0.0174)	-0.0478*** (0.0156)	-0.0655*** (0.0333)	-0.0630** (0.0256)	-0.0444*** (0.0173)	-0.0473*** (0.0156)
No- Observations	816	799	1,646	2,313	816	799	1,646	2,313
Wald Chi-Square Test	132.71 [0.000]	61.98 [0.000]	98.50 [0.000]	133.72 [0.000]	182.44 [0.000]	46.10 [0.000]	114.32 [0.000]	131.28 [0.000]
Well-being costs ratio (WBCR)	38%	74.5%	40%	25%	70%	65%	108%	29%
WBCR monetary values	800 EGP	295 JOD	1,293 MAD	227 TND	1,470 EGP	257 JOD	3,491 MAD	264 TND
<b>Panel B: DV Mental Well-Being</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.2156*** (0.0645)	0.1355** (0.0608)	0.0478* (0.0247)	0.0227 (0.0356)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2346*** (0.0621)	0.1491** (0.0672)	0.1634*** (0.0272)	0.2014*** (0.0348)
Wages	-0.0193 (0.0246)	-0.0748*** (0.0193)	-0.2248*** (0.0381)	-0.0409*** (0.0101)	-0.0178 (0.0247)	-0.0709*** (0.0193)	-0.2129*** (0.0375)	-0.0386*** (0.0099)
No- Observations	816	799	1,646	2,313	816	799	1,646	2,313
R-Square	0.0575	0.0761	0.0282	0.0433	0.0613	0.0773	0.0335	0.0568
Well-being costs ratio (WBCR)	n.s.	29%	4%	n.s.	n.s.	33.5%	15%	71%
WBCR monetary values	n.s.	115 JOD	152 MAD	n.s.	n.s.	132 JOD	570 MAD	646 TND

**Table 5 (Cont.) SWB and Coping Strategies for the Perception on Economic Situation and Mental Well-Being Index using Wages**

<b>Panel B: DV Mental Well-Being</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2185* (0.1226)	0.0309 (0.1725)	0.0407 (0.0683)	0.1480** (0.0612)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.0436 (0.0733)	0.3093** (0.1490)	0.2574** (0.1018)	0.1419*** (0.0464)
Wages	-0.0179 (0.0245)	-0.0756*** (0.0193)	-0.2178*** (0.0382)	-0.0409*** (0.0100)	-0.0181 (0.0248)	-0.0747*** (0.0192)	-0.2064*** (0.0380)	-0.0406*** (0.0101)
No- Observations	816	799	1,646	2,313	816	799	1,646	2,313
R-Square	0.0459	0.0719	0.0279	0.0455	0.0455	0.0765	0.0287	0.0462
Well-being costs ratio (WBCR)	n.s.	n.s.	n.s.	47%	n.s.	66%	23%	48%
WBCR monetary values	n.s.	n.s.	n.s.	428 TND	n.s.	260 JOD	874 MAD	437 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.1636** (0.0782)	0.1916*** (0.0709)	0.1255*** (0.0431)	0.2126*** (0.0422)				
Coping Strategy ( <i>Sell Assets</i> )					0.1964*** (0.0810)	0.3115*** (0.1109)	0.1877*** (0.0442)	0.1807*** (0.0532)
Wages	-0.0174 (0.0246)	-0.0726*** (0.0194)	-0.2034*** (0.0381)	-0.0406*** (0.0101)	-0.0181 (0.0245)	-0.0765*** (0.0191)	-0.2013*** (0.0378)	-0.0402*** (0.0106)
No- Observations	816	799	1,646	2,313	816	799	1,646	2,313
Wald Chi-Square Test	0.0497	0.0798	0.0289	0.0526	0.0518	0.0826	0.0303	0.0476
Well-being costs ratio (WBCR)	n.s.	42.3%	10.5%	72%	n.s.	65%	16%	62%
WBCR monetary values	n.s.	167 JOD	400 MAD	655 TND	n.s.	256 JOD	608 MAD	564 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 6. SWB and Coping Strategies for the Mental Well-Being Index Across Gender using the Household Income**

<b>Panel A: Males Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.3997*** (0.0641)	0.1011** (0.0417)	0.0555* (0.0315)	0.0721 (0.0471)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2222*** (0.0507)	0.0985** (0.0433)	0.1715*** (0.0353)	0.3001*** (0.0470)
Household Income	-0.2471*** (0.0501)	-0.2426*** (0.0425)	-0.1215*** (0.0218)	-0.1475*** (0.0275)	-0.2811*** (0.0487)	-0.2234*** (0.0424)	-0.1112*** (0.0220)	-0.1461*** (0.0276)
No- Observations	1,131	1,252	3,896	2,859	1,131	1,252	3,896	2,859
R-Square	0.1192	0.0595	0.0341	0.0589	0.1070	0.0599	0.0391	0.0851
Well-being costs ratio (WBCR)	12%	7.2%	6%	n.s.	11%	7.5%	20.5%	31.5%
WBCR monetary values	300 EGP	31 JOD	245 MAD	n.s.	275 EGP	32 JOD	840 MAD	330 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.3919*** (0.1094)	0.0093 (0.0722)	0.0179 (0.0854)	0.2012** (0.0835)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.2616*** (0.0683)	0.3444*** (0.1247)	0.2119* (0.1168)	0.1992*** (0.0676)
Household Income	-0.3278*** (0.0678)	-0.2333*** (0.0422)	-0.1216*** (0.0219)	-0.1413*** (0.0274)	-0.2286*** (0.0520)	-0.2318*** (0.0421)	-0.1215*** (0.0218)	-0.1422*** (0.0274)
No- Observations	1,131	1,252	3,896	2,157	1,131	1,252	3,896	2,859
R-Square	0.1136	0.0574	0.0334	0.0615	0.0977	0.0616	0.0340	0.0626
Well-being costs ratio (WBCR)	15.5%	n.s.	n.s.	22%	13%	24%	23%	21%
WBCR monetary values	388 EGP	n.s.	n.s.	230 TND	325 EGP	107 JOD	943 MAD	220 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.5396*** (0.0757)	0.1145* (0.0587)	0.1795*** (0.0508)	0.1746*** (0.0670)				
Coping Strategy ( <i>Sell Assets</i> )					0.3206*** (0.0777)	0.2098*** (0.0796)	0.1617*** (0.0555)	0.2654*** (0.0632)
Household Income	-0.2707*** (0.0585)	-0.2324*** (0.0421)	-0.1183*** (0.0219)	-0.1475*** (0.0275)	-0.2509*** (0.0583)	-0.2320*** (0.0424)	-0.2741*** (0.0258)	-0.1374*** (0.0274)
No- Observations	1,131	1,252	3,896	2,859	1,131	1,252	3,896	2,859
R-Square	0.1518	0.0600	0.0361	0.0618	0.1358	0.0638	0.0335	0.0677
Well-being costs ratio (WBCR)	25.5%	8.5%	20 %	18%	17%	15%	8.5%	29.5%
WBCR monetary values	638 EGP	37 JOD	820 MAD	190 TND	425 EGP	65 JOD	323 MAD	310 TND
<b>Panel B: Females Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.2002** (0.0812)	0.1298** (0.0544)	0.0286** (0.0131)	0.0039 (0.0161)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2356*** (0.0739)	0.1768*** (0.0494)	0.1743*** (0.0532)	0.1282** (0.0548)
Household Income	-0.1535*** (0.0562)	-0.1965*** (0.0398)	-0.1278*** (0.0334)	-0.1009*** (0.0320)	-0.1124*** (0.0547)	-0.1533*** (0.0403)	-0.1197*** (0.0219)	-0.1088*** (0.0317)
No- Observations	701	1,175	2,197	2,157	701	1,175	2,197	2,157
R-Square	0.0683	0.0587	0.0198	0.0689	0.0598	0.0645	0.0359	0.0738
Well-being costs ratio (WBCR)	8.5%	12%	3%	n.s.	19%	21%	19.5%	19.5%
WBCR monetary values	161 EGP	40 JOD	110 MAD	n.s.	360 EGP	69 JOD	800 MAD	156 TND

**Table 6 (Cont.) SWB and Coping Strategies for the Mental Well-Being Index Across Gender using the Household Income**

<b>Panel B: Females Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2760** (0.1301)	0.0059 (0.0103)	0.1221 (0.1133)	0.0195 (0.0828)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.2140** (0.0922)	0.1339 (0.1422)	0.3355** (0.1487)	0.1531** (0.0672)
Household Income	-0.1398** (0.0524)	-0.1841*** (0.0395)	-0.1278*** (0.0334)	-0.1034*** (0.0317)	-0.1404** (0.0629)	-0.1836*** (0.0396)	-0.1275*** (0.0333)	-0.1019*** (0.0316)
No- Observations	701	1,175	2,197	2,157	701	1,175	2,197	2,157
R-Square	0.0798	0.0544	0.0202	0.0683	0.0843	0.0552	0.0213	0.0708
Well-being costs ratio (WBCR)	27%	n.s.	n.s.	n.s.	25%	n.s.	36.5%	23.5%
WBCR monetary values	515 EGP	n.s.	n.s.	n.s.	475 EGP	n.s.	1,315 MAD	188 TND
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.2892*** (0.0984)	0.1182** (0.0455)	0.1059* (0.0583)	0.2649*** (0.0705)				
Coping Strategy ( <i>Sell Assets</i> )					0.1949*** (0.0479)	0.1672** (0.0775)	0.1775** (0.0754)	0.2416*** (0.0748)
Household Income	-0.1352** (0.0655)	-0.1863*** (0.0394)	-0.1284*** (0.0333)	-0.1059*** (0.0317)	-0.3245*** (0.0930)	-0.1815*** (0.0395)	-0.1274*** (0.0333)	-0.0997*** (0.0315)
No- Observations	701	1,175	2,197	2,157	701	1,175	2,197	2,157
R-Square	0.1213	0.0573	0.0197	0.0793	0.0520	0.0559	0.0218	0.0764
Well-being costs ratio (WBCR)	29.5%	11.5%	11.5%	39.5%	9.5%	18%	19.5%	38%
WBCR monetary values	560 EGP	38 JOD	415 MAD	315 TND	220 EGP	59 JOD	702 MAD	304 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 7. SWB and Coping Strategies for the Perception on Economic Situation using Wages across Formal Employment and Job Security**

<b>Panel A1: Formal Employment Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.3263*** (0.0503)	0.3923*** (0.1192)	0.0325 (0.0783)	0.1039** (0.0498)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2487** (0.1122)	0.4934** (0.1334)	0.3163*** (0.0935)	0.1226** (0.0528)
Wages	-0.1604*** (0.0594)	-0.0716** (0.0349)	-0.0812*** (0.0257)	-0.0493** (0.0238)	-0.1566*** (0.0597)	-0.0693** (0.0338)	-0.0801*** (0.0256)	-0.0488** (0.0225)
No- Observations	503	505	887	1,288	503	505	887	1,288
Wald Chi-Square Test	879.13 [0.000]	138.13 [0.000]	178.28 [0.000]	188.08 [0.000]	837.62 [0.000]	152.39 [0.000]	188.43 [0.000]	190.16 [0.000]
Well-being costs ratio (WBCR)	21%	78%	n.s.	10.5%	19%	80%	40%	19%
WBCR monetary values	525 EGP	360 JOD	n.s.	135 TND	475 EGP	370 JOD	1,680 MAD	230 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.4514 (0.3075)	0.3518** (0.1675)	0.3740 (0.2447)	0.0840 (0.1406)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.5165*** (0.1930)	0.2528 (0.3401)	0.5632 (0.4229)	0.0423 (0.1058)
Wages	-0.1634*** (0.0587)	-0.0747** (0.0358)	-0.0833*** (0.0257)	-0.0485** (0.0229)	-0.1584*** (0.0585)	-0.0720** (0.0353)	-0.0816*** (0.0257)	-0.0479** (0.0225)
No- Observations	503	505	887	1,288	503	505	887	1,288
R-Square	767.10 [0.000]	136.15 [0.000]	178.86 [0.000]	185.15 [0.000]	789.36 [0.000]	131.67 [0.000]	182.22 [0.000]	185.46 [0.000]
Well-being costs ratio (WBCR)	n.s.	64%	n.s.	n.s.	34%	n.s.	n.s.	n.s.
WBCR monetary values	n.s.	295 JOD	n.s.	n.s.	850 EGP	n.s.	n.s.	n.s.
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.1592* (0.0882)	0.3648*** (0.1326)	0.2516* (0.1281)	0.1760*** (0.0621)				
Coping Strategy ( <i>Sell Assets</i> )					0.1477 (0.2249)	0.3387* (0.1833)	0.5542** (0.2641)	0.1214** (0.0497)
Wages	-0.1564*** (0.0527)	-0.0729** (0.0358)	-0.0782*** (0.0257)	-0.0473** (0.0218)	-0.1664*** (0.0591)	-0.0725** (0.0356)	-0.0807*** (0.0256)	-0.0457*** (0.0223)
No- Observations	503	505	887	1,288	503	505	887	1,288
R-Square	721.02 [0.000]	147.18 [0.000]	178.71 [0.000]	191.84 [0.000]	n.s. [0.000]	134.87 [0.000]	182.89 [0.000]	187.72 [0.000]
Well-being costs ratio (WBCR)	16%	65%	32%	20%	n.s.	60%	70%	15%
WBCR monetary values	435 EGP	300 JOD	1,345 MAD	240 TND	1,470 EGP	275 JOD	2,940 MAD	180 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
<b>Panel A2: Informal Employment Sample</b>								
Coping Strategy ( <i>Taking money out of savings</i> )	0.4821*** (0.1476)	0.1674 (0.1275)	0.0462** (0.0219)	0.1302** (0.0579)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.3599*** (0.1074)	0.1960 (0.1532)	0.3645*** (0.1140)	0.1668** (0.0779)
Wages	-0.0411** (0.0202)	-0.0464** (0.0223)	-0.0306** (0.0142)	-0.0432** (0.0206)	-0.0410** (0.0199)	-0.0458** (0.0221)	-0.337** (0.0129)	-0.0423** (0.0205)
No- Observations	313	294	759	1,025	816	294	759	1,025
Wald Chi-Square Test	1,096.97 [0.000]	148.52 [0.000]	97.90 [0.000]	201.31 [0.000]	151.92 [0.000]	147.64 [0.000]	122.93 [0.000]	190.13 [0.000]
Well-being costs ratio (WBCR)	76%	n.s.	21%	36%	80%	n.s.	86%	26%
WBCR monetary values	1,370 EGP	n.s.	525 MAD	200 TND	1,440 EGP	n.s.	2,150 MAD	145 TND

**Table 7 (Cont.) SWB and Coping Strategies for the Perception on Economic Situation using Wages across Formal Employment and Job Security**

<b>Panel A2: Informal Employment Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.3907** (0.1710)	0.2719 (0.3618)	0.1795 (0.2294)	0.0517 (0.1318)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.1477 (0.2249)	0.1541 (0.3223)	0.1058 (0.3944)	0.1375 (0.1202)
Wages	-0.0472** (0.0226)	-0.0471** (0.0227)	-0.0318** (0.0144)	-0.0428** (0.0206)	-0.1664 (0.0426)	-0.0461** (0.0221)	-0.0314** (0.0142)	-0.0419** (0.0205)
No- Observations	313	294	759	1,025	313	294	759	1,025
R-Square	988.17 [0.000]	143.17 [0.000]	144.41 [0.000]	188.70 [0.000]	130.60 [0.000]	144.23 [0.000]	143.28 [0.000]	189.88 [0.000]
Well-being costs ratio (WBCR)	78%	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
WBCR monetary values	1,400 EGP	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.2490** (0.1123)	0.2896** (0.1282)	0.1371* (0.0704)	0.3002** (0.1430)				
Coping Strategy ( <i>Sell Assets</i> )					0.4859*** (0.1505)	0.1476** (0.0618)	0.6601*** (0.2263)	0.3105*** (0.1069)
Wages	-0.0708** (0.0352)	-0.0459** (0.0222)	-0.0319** (0.0148)	-0.0422** (0.0204)	-0.0750** (0.0335)	-0.0477** (0.0221)	-0.0324** (0.0145)	-0.0435** (0.0207)
No- Observations	313	294	759	1,025	313	294	759	1,025
R-Square	1,204.63 [0.000]	151.76 [0.000]	143.68 [0.000]	133.72 [0.000]	892.57 [0.000]	145.96 [0.000]	114.32 [0.000]	131.28 [0.000]
Well-being costs ratio (WBCR)	45%	90%	48%	32%				
WBCR monetary values	765 EGP	285 JOD	1,200 MAD	176 TND	1,500 EGP	215 JOD	3,800 MAD	270 TND
<b>Panel B1: Permanent Employment Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.4181*** (0.1119)	0.3687*** (0.1054)	0.0574 (0.0726)	0.0958* (0.0546)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2020** (0.0911)	0.4744*** (0.1161)	0.1785* (0.0972)	0.1444*** (0.0490)
Wages	-0.0994** (0.0445)	-0.0494** (0.0248)	-0.0689*** (0.0233)	-0.0471*** (0.0133)	-0.0951** (0.0442)	-0.0926** (0.0429)	-0.0706*** (0.0235)	-0.0446*** (0.0131)
No- Observations	512	616	1,021	1,361	512	616	1,021	1,361
R-Square	837.40 [0.000]	664.96 [0.000]	101.44 [0.000]	103.47 [0.000]	578.72 [0.000]	613.79 [0.000]	120.90 [0.000]	106.84 [0.000]
Well-being costs ratio (WBCR)	48.5%	79%	n.s.	4.5%	28%	79%	22%	18%
WBCR monetary values	1,250 EGP	370 JOD	n.s.	98 TND	730 EGP	370 JOD	880 MAD	207 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.6335** (0.2783)	0.5723** (0.3140)	0.0380 (0.2444)	0.1564 (0.1275)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.3633** (0.1413)	0.2779 (0.2294)	0.2079 (0.3030)	0.0493 (0.1047)
Wages	-0.1001** (0.0438)	-0.0948** (0.0405)	-0.0698*** (0.0233)	-0.0466*** (0.0132)	-0.0875** (0.0463)	-0.0922** (0.0407)	-0.0693*** (0.0233)	-0.0471*** (0.0132)
No- Observations	512	616	1,021	1,361	512	616	1,021	1,361
R-Square	602.15 [0.000]	654.02 [0.000]	101.58 [0.000]	104.81 [0.000]	618.65 [0.000]	672.16 [0.000]	102.73 [0.000]	102.75 [0.000]
Well-being costs ratio (WBCR)	61%	80%	n.s.	n.s.	46%	n.s.	n.s.	n.s.
WBCR monetary values	1,590 EGP	375 JOD	n.s.	n.s.	1,200 EGP	n.s.	n.s.	n.s.

**Table 7 (Cont.) SWB and Coping Strategies for the Perception on Economic Situation using Wages across Formal Employment and Job Security**

<b>Panel B1: Permanent Employment Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.3235** (0.1524)	0.3216*** (0.1095)	0.2601** (0.1234)	0.1926** (0.0882)				
Coping Strategy ( <i>Sell Assets</i> )					0.3126* (0.1651)	0.2253* (0.1248)	0.5008** (0.2089)	0.1820* (0.1088)
Wages	-0.0931** (0.0440)	-0.0942*** (0.0417)	-0.0655*** (0.0233)	-0.0463*** (0.0131)	-0.0954** (0.0442)	-0.0945** (0.0407)	-0.0677*** (0.0233)	-0.0461*** (0.0132)
No- Observations	512	616	1,021	1,361	512	616	1,021	1,361
R-Square	602.60 [0.000]	632.78 [0.000]	103.17 [0.000]	112.09 [0.000]	601.67 [0.000]	46.10 [0.000]	108.59 [0.000]	106.95 [0.000]
Well-being costs ratio (WBCR)	43%	58%	44%	19%	37%	46%	67%	16%
WBCR monetary values	1,120 EGP	270 JOD	1,760 MAD	220 TND	960 EGP	215 JOD	2,680 MAD	185 TND
<b>Panel B2: Temporary Employment Sample</b>	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.2392** (0.1129)	0.2311* (0.1242)	0.0228 (0.1143)	0.1168** (0.0540)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.3496** (0.1473)	0.3044 (0.2157)	0.3932*** (0.0901)	0.1683** (0.0819)
Wages	-0.0456** (0.0217)	-0.0667** (0.0317)	-0.0253** (0.0115)	-0.0278** (0.0135)	-0.0433** (0.0205)	-0.0696** (0.0322)	-0.0269** (0.0121)	-0.0249** (0.0118)
No- Observations	304	183	625	952	304	183	625	952
R-Square	592.68 [0.000]	2,383.64 [0.000]	30.08 [0.000]	53.84 [0.000]	600.18 [0.000]	2,378.69 [0.000]	31.04 [0.000]	56.04 [0.000]
Well-being costs ratio (WBCR)	31.5%	36%	n.s.	19%	78%	n.s.	68%	26%
WBCR monetary values	550 EGP	108 JOD	n.s.	110 TND	1,370 EGP	n.s.	185 MAD	150 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.0558 (0.2778)	0.1513 (0.1185)	0.1422 (0.2365)	0.3110** (0.1546)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.0701 (0.1611)	0.4373 (0.3718)	0.1835 (0.3963)	0.0730 (0.1252)
Wages	-0.0441** (0.0202)	-0.0712** (0.0324)	-0.0247** (0.0118)	-0.0270** (0.0134)	-0.0433** (0.0192)	-0.0705** (0.0316)	-0.0252** (0.0108)	-0.0269** (0.0132)
No- Observations	304	183	625	952	304	183	625	952
R-Square	598.29 [0.000]	2,413.91 [0.000]	31.06 [0.000]	58.38 [0.000]	619.88 [0.000]	2,455.56 [0.000]	30.19 [0.000]	51.24 [0.000]
Well-being costs ratio (WBCR)	n.s.	n.s.	n.s.	28%	n.s.	n.s.	n.s.	n.s.
WBCR monetary values	n.s.	n.s.	n.s.	162 TND	n.s.	n.s.	n.s.	n.s.
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.1502 (0.2047)	0.6236** (0.2578)	0.1090 (0.2048)	0.2651*** (0.0803)				
Coping Strategy ( <i>Sell Assets</i> )					0.4623*** (0.1039)	0.4134** (0.1979)	0.8328*** (0.2551)	0.2586** (0.1153)
Wages	-0.0452** (0.0214)	-0.0695** (0.0318)	-0.0230** (0.0106)	-0.0267** (0.0122)	-0.0446** (0.0208)	-0.0686** (0.0309)	-0.0228** (0.0105)	-0.0264** (0.0132)
No- Observations	304	183	625	952	304	183	625	952
R-Square	615.80 [0.000]	2,360.08 [0.000]	30.01 [0.000]	53.26 [0.000]	621.05 [0.000]	2,425.07 [0.000]	41.90 [0.000]	55.52 [0.000]
Well-being costs ratio (WBCR)	n.s.	89%	n.s.	29%	91%	73%	156%	37%
WBCR monetary values	n.s.	265 JOD	n.s.	170 TND	1,590 EGP	220 JOD	4,220 MAD	215 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.



**Table 8. SWB and Adoption of One Coping Strategy for the Perception on Economic Situation using Household Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.3311*** (0.0711)	0.3037*** (0.0558)	0.1399*** (0.0420)	0.1229*** (0.0348)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2519*** (0.0565)	0.3455*** (0.0611)	0.2891*** (0.0474)	0.1154*** (0.0465)
Household Income	-0.1774** (0.604)	-0.2957*** (0.0517)	-0.2943*** (0.0281)	-0.0729*** (0.0208)	-0.1679*** (0.0564)	-0.2685*** (0.0467)	-0.2397*** (0.0331)	-0.0816*** (0.0273)
No- Observations	1,122	1,349	3,467	3,599	1,305	1,640	2,663	3,153
Wald Chi-Square Test	576.31 [0.000]	100.38 [0.000]	222.58 [0.000]	150.42 [0.000]	707.14 [0.000]	125.19 [0.000]	188.81 [0.000]	163.00 [0.000]
Well-being costs ratio (WBCR)	22%	13.5%	6.5%	24%	15%	23%	16%	22%
WBCR monetary values	550 EGP	62 JOD	220 MAD	265 TND	330 EGP	83 JOD	495 MAD	215 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.3580*** (0.1006)	0.5503*** (0.1373)	0.3118*** (0.0951)	0.0701 (0.0689)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.4072*** (0.1169)	0.4940*** (0.1519)	0.2736* (0.1540)	0.0801 (0.0662)
Household Income	-0.2006* (0.1090)	-0.2912*** (0.0627)	-0.2701*** (0.0422)	-0.1119*** (0.0327)	-0.2428*** (0.0932)	-0.2886*** (0.0628)	-0.2694*** (0.0435)	-0.1124*** (0.0315)
No- Observations	634	881	1,392	1,473	922	852	1,295	1,585
Wald Chi-Square Test	679.30 [0.000]	80.80 [0.000]	110.01 [0.000]	99.26 [0.000]	182.66 [0.000]	77.31 [0.000]	96.47 [0.000]	80.98 [0.000]
Well-being costs ratio (WBCR)	18%	25%	13.5%	n.s.	16%	19.5%	12%	n.s.
WBCR monetary values	430 EGP	105 JOD	525 MAD	n.s.	385 EGP	82 JOD	480 MAD	n.s.
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.4685*** (0.0924)	0.4128*** (0.0699)	0.3356*** (0.0654)	0.2331*** (0.0603)				
Coping Strategy ( <i>Sell Assets</i> )					0.4194*** (0.0877)	0.5081*** (0.0983)	0.2982*** (0.0718)	0.2648*** (0.0652)
Household Income	-0.2059*** (0.0732)	-0.2601*** (0.0525)	-0.2364*** (0.0392)	-0.1128*** (0.0315)	-0.1992*** (0.0682)	-0.2911*** (0.0596)	-0.2552*** (0.0399)	-0.1504*** (0.0313)
No- Observations	801	1,312	1,632	1,708	873	1,006	1,631	1,615
Wald Chi-Square Test	1,272.14 [0.000]	116.83 [0.000]	121.51 [0.000]	136.67 [0.000]	897.71 [0.000]	92.55 [0.000]	125.32 [0.000]	118.86 [0.000]
Well-being costs ratio (WBCR)	25%	22%	17%	30%	23%	25%	14%	28%
WBCR monetary values	600 EGP	90 JOD	645 MAD	273 TND	525 EGP	102 JOD	510 MAD	295 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 9. SWB and Adoption of One Coping Strategy for the Mental Well-Being Index using Household Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.3272*** (0.0517)	0.1780*** (0.0480)	0.1051*** (0.0254)	0.1729*** (0.0328)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.3410*** (0.0483)	0.2071*** (0.0443)	0.2525*** (0.0401)	0.2176*** (0.0334)
Household Income	-0.2172*** (0.0428)	-0.2120*** (0.0368)	-0.1466*** (0.0235)	-0.1096*** (0.0146)	-0.1936*** (0.0402)	-0.1877*** (0.0335)	-0.1416*** (0.0281)	-0.1112*** (0.0163)
No- Observations	1,122	1,349	3,467	3,599	1,305	1,640	2,663	3,153
R-Square	0.1145	0.0638	0.0458	0.0548	0.1044	0.0616	0.0585	0.0804
Well-being costs ratio (WBCR)	20%	14%	8.5%	23%	22%	19%	22.5%	29%
WBCR monetary values	500 EGP	65 JOD	280 MAD	250 TND	488 EGP	68 JOD	700 MAD	280 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2607*** (0.0531)	0.1414 (0.0847)	0.1656** (0.0792)	0.1516*** (0.0482)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.1467*** (0.265)	0.1542** (0.0643)	0.3385*** (0.1201)	0.2275*** (0.0444)
Household Income	-0.2591*** (0.0599)	-0.2260*** (0.0465)	-0.1686*** (0.0371)	-0.1448*** (0.0233)	-0.2092*** (0.0478)	-0.2341*** (0.0475)	-0.1617*** (0.0379)	-0.1114*** (0.0225)
No- Observations	634	881	1,392	1,473	922	852	1,295	1,585
Wald Chi-Square Test	0.0827	0.0827	0.0613	0.1106	0.1142	0.0850	0.0621	0.1047
Well-being costs ratio (WBCR)	13%	n.s.	12%	15.5%	9.4%	11%	27%	29%
WBCR monetary values	327 EGP	n.s.	470 MAD	145 TND	225 EGP	46 JOD	1,080 MAD	285 TND
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.4186*** (0.0621)	0.1945*** (0.0491)	0.2197*** (0.0554)	0.2764*** (0.0421)				
Coping Strategy ( <i>Sell Assets</i> )					0.3746*** (0.0619)	0.2463*** (0.0654)	0.3084*** (0.0575)	0.2813*** (0.0447)
Household Income	-0.2297*** (0.0523)	-0.2152*** (0.0374)	-0.1613*** (0.0346)	-0.0925*** (0.0219)	-0.1947*** (0.0507)	-0.1898*** (0.0447)	-0.1917*** (0.0347)	-0.1287*** (0.0229)
No- Observations	801	1,312	1,632	1,708	873	1,006	1,631	1,615
Wald Chi-Square Test	0.1498	0.0740	0.0592	0.0879	0.1137	0.0753	0.0745	0.1134
Well-being costs ratio (WBCR)	23.5%	15%	16%	42%	24.5%	22%	21%	32%
WBCR monetary values	575 EGP	61 JOD	608 MAD	380 TND	560 EGP	90 JOD	765 MAD	335 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\* and \*\* indicate significance at the 1% and 5% level.

**Table 10. SWB and Coping Strategies for the Perception on Economic Situation using Changes in Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.1672*** (0.0561)	0.0863* (0.0455)	0.0522* (0.0297)	0.0583* (0.0304)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.1784*** (0.0528)	0.2672*** (0.0549)	0.1688*** (0.0330)	0.0970*** (0.0304)
Household Income Change (Decrease 1-25%)	-0.2641*** (0.0803)	-0.3573*** (0.0687)	-0.3555*** (0.0421)	-0.1413*** (0.0446)	-0.2592*** (0.0801)	-0.3320*** (0.0692)	-0.3249*** (0.0420)	-0.1352*** (0.0447)
Household Income Change (Stay the Same)	-0.3792*** (0.1088)	-0.3714*** (0.1096)	-0.3668*** (0.1108)	-0.2704*** (0.0371)	-0.3860*** (0.1087)	-0.3478*** (0.1086)	-0.3683*** (0.1102)	-0.2662*** (0.0370)
Household Income Change (Increase 1-25%)	-0.3832*** (0.0686)	-0.5239*** (0.1653)	-0.4893*** (0.0859)	-0.3063*** (0.0707)	-0.3889*** (0.0689)	-0.4878*** (0.1656)	-0.4802*** (0.0861)	-0.3009*** (0.0709)
Household Income Change (Increase >25%)	-0.4618** (0.1997)	-0.6203*** (0.0627)	-0.6037*** (0.0347)	-0.4008*** (0.1012)	-0.4603** (0.1953)	-0.5774*** (0.0634)	-0.5784*** (0.0345)	-0.3981*** (0.1016)
No- Observations	2,000	2,549	6,093	6,134	2,000	2,549	6,093	6,134
Wald Chi-Square Test	108.74 [0.000]	141.87 [0.000]	426.78 [0.000]	311.29 [0.000]	114.09 [0.000]	164.10 [0.000]	447.12 [0.000]	316.82 [0.000]
Well-being costs ratio (WBCR) (Decrease 1-25%)	58%	24%	15%	41%	63%	80%	52%	71%
Well-being costs ratio (WBCR) (Stay the Same)	42%	23%	14%	21%	45%	77%	46%	36%
Well-being costs ratio (WBCR) (Increase 1-25%)	38%	16%	11%	19%	41%	55%	35%	32%
Well-being costs ratio (WBCR) (Increase >25%)	30%	14%	9%	15%	32%	46%	29%	24%
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.2057* (0.1224)	0.3154** (0.1258)	0.1107** (0.0634)	0.0121 (0.0503)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.1718** (0.0673)	0.1548 (0.1225)	0.1207 (0.1317)	0.0221 (0.0477)
Household Income Change (Decrease 1-25%)	-0.2726*** (0.0801)	-0.3519*** (0.0689)	-0.3239*** (0.0421)	-0.2412*** (0.0446)	-0.2704*** (0.0801)	-0.3578*** (0.0688)	-0.3236*** (0.0420)	-0.1404*** (0.0449)
Household Income Change (Stay the Same)	-0.3954*** (0.1084)	-0.3697*** (0.1098)	-0.3699*** (0.1109)	-0.2751*** (0.0369)	-0.3880*** (0.1081)	-0.3704*** (0.1094)	-0.3663*** (0.1110)	-0.2743*** (0.0369)
Household Income Change (Increase 1-25%)	-0.4093*** (0.0681)	-0.5218*** (0.1669)	-0.4901*** (0.0857)	-0.3086*** (0.0708)	-0.3984*** (0.0683)	-0.5151*** (0.1651)	-0.4879*** (0.0856)	-0.3077*** (0.0708)
Household Income Change (Increase >25%)	-0.5264*** (0.1966)	-0.6129*** (0.0628)	-0.5974*** (0.0345)	-0.4009*** (0.1013)	-0.5032** (0.2002)	-0.6174*** (0.0628)	-0.5973*** (0.0345)	-0.4007*** (0.1013)
No- Observations	2,000	2,549	6,093	6,134	2,000	2,549	6,093	6,134
Wald Chi-Square Test	74.65 [0.000]	146.77 [0.000]	426.34 [0.000]	316.82 [0.000]	90.95 [0.000]	142.20 [0.000]	425.45 [0.000]	307.47 [0.000]
Well-being costs ratio (WBCR) (Decrease 1-25%)	75%	90%	34%	n.s.	64%	n.s.	n.s.	n.s.
Well-being costs ratio (WBCR) (Stay the Same)	52%	85%	30%	n.s.	44%	n.s.	n.s.	n.s.
Well-being costs ratio (WBCR) (Increase 1-25%)	50%	60%	23%	n.s.	43%	n.s.	n.s.	n.s.
Well-being costs ratio (WBCR) (Increase >25%)	39%	51%	19%	n.s.	34%	n.s.	n.s.	n.s.

**Table 10 (Cont.) SWB and Coping Strategies for the Perception on Economic Situation using Changes in Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy (Borrowing from a bank, employer)	0.2889*** (0.0775)	0.2557*** (0.0605)	0.1759*** (0.0515)	0.1317*** (0.0436)				
Coping Strategy (Sell Assets)					0.1929*** (0.0731)	0.2063*** (0.0558)	0.1123** (0.0559)	0.1455*** (0.0473)
Household Income Change (Decrease 1-25%)	-0.3084*** (0.0801)	-0.3656*** (0.0687)	-0.3292*** (0.0421)	-0.1398*** (0.0447)	-0.2621*** (0.0804)	-0.3573*** (0.0688)	-0.3206*** (0.0420)	-0.1532*** (0.0442)
Household Income Change (Stay the Same)	-0.3971*** (0.1083)	-0.3778*** (0.1092)	-0.3601*** (0.1107)	-0.2692*** (0.0371)	-0.3746*** (0.1082)	-0.3714*** (0.1096)	-0.3617*** (0.1108)	-0.2549*** (0.0376)
Household Income Change (Increase 1-25%)	-0.4003*** (0.0681)	-0.5293*** (0.1681)	-0.4846*** (0.0857)	-0.3076*** (0.0707)	-0.3859*** (0.0685)	-0.5239*** (0.1653)	-0.4868*** (0.0858)	-0.3010*** (0.0709)
Household Income Change (Increase >25%)	-0.4753** (0.1980)	-0.6130*** (0.0629)	-0.5921*** (0.0345)	-0.3992*** (0.1012)	-0.4732** (0.1989)	-0.6203*** (0.0626)	-0.5938*** (0.0346)	-0.4055*** (0.1015)
No- Observations	2,000	2,549	6,093	6,134	2,000	2,549	6,093	6,134
Wald Chi-Square Test	113.57 [0.000]	159.35 [0.000]	437.45 [0.000]	320.23 [0.000]	93.52 [0.000]	141.87 [0.000]	429.95 [0.000]	321.61 [0.000]
Well-being costs ratio (WBCR) (Decrease 1-25%)	94%	70%	53%	94%	74%	58%	35%	95%
Well-being costs ratio (WBCR) (Stay the Same)	73%	68%	50%	49%	52%	55%	31%	57%
Well-being costs ratio (WBCR) (Increase 1-25%)	72%	48%	36%	43%	50%	39%	23%	48%
Well-being costs ratio (WBCR) (Increase >25%)	60%	42%	30%	33%	41%	33%	19%	36%

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 11. SWB and Coping Strategies for the Mental Well-Being Index using Changes in Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.1264*** (0.0401)	0.0541 (0.0380)	0.0310 (0.0250)	0.0297 (0.0228)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.1290*** (0.0375)	0.1436*** (0.0356)	0.1427*** (0.0272)	0.1913*** (0.0211)
Household Income Change (Decrease 1-25%)	-0.1343** (0.0523)	-0.1347 (0.1034)	-0.1141 (0.0973)	-0.2549*** (0.0295)	-0.1358** (0.0625)	-0.1208 (0.1026)	-0.1035 (0.0969)	-0.2126*** (0.0295)
Household Income Change (Stay the Same)	-0.2348*** (0.0812)	-0.1871*** (0.0451)	-0.1284*** (0.0366)	-0.2868*** (0.0255)	-0.2363*** (0.0816)	-0.1758*** (0.0453)	-0.1808*** (0.0365)	-0.2764*** (0.0274)
Household Income Change (Increase 1-25%)	-0.2796*** (0.0485)	-0.2599*** (0.0422)	-0.1810** (0.0752)	-0.4159*** (0.0536)	-0.2734*** (0.0485)	-0.2403*** (0.0423)	-0.2017** (0.0952)	-0.3998*** (0.0535)
Household Income Change (Increase >25%)	-0.3928** (0.1868)	-0.4482*** (0.0748)	-0.2907*** (0.0296)	-0.4743*** (0.0803)	-0.3714** (0.1851)	-0.4391*** (0.0743)	-0.2755*** (0.0296)	-0.4653*** (0.0793)
No- Observations	2,000	2,549	6,093	6,134	2,000	2,549	6,093	6,134
R-Square	0.0554	0.0501	0.0376	0.0540	0.0650	0.0551	0.0418	0.0662
Well-being costs ratio (WBCR) (Decrease 1-25%)	94%	n.s.	n.s.	n.s.	95%	n.s.	n.s.	89%
Well-being costs ratio (WBCR) (Stay the Same)	54%	n.s.	n.s.	n.s.	55%	82%	79%	69%
Well-being costs ratio (WBCR) (Increase 1-25%)	45%	n.s.	n.s.	n.s.	47%	60%	70%	48%
Well-being costs ratio (WBCR) (Increase >25%)	32%	n.s.	n.s.	n.s.	35%	33%	52%	41%
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.1488** (0.0744)	0.0261 (0.0806)	0.0398 (0.0657)	0.0519* (0.0302)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.0372 (0.0444)	0.1153 (0.0952)	0.2121** (0.1011)	0.1333*** (0.0300)
Household Income Change (Decrease 1-25%)	-0.1610*** (0.0524)	-0.1287 (0.1036)	-0.1147 (0.0974)	-0.1532*** (0.0296)	-0.1408*** (0.0524)	-0.1239 (0.1036)	-0.1128 (0.0971)	-0.1606*** (0.0296)
Household Income Change (Stay the Same)	-0.2480*** (0.0805)	-0.1898*** (0.0451)	-0.1291*** (0.0366)	-0.2839*** (0.0255)	-0.2503*** (0.0808)	-0.1879*** (0.0452)	-0.2279*** (0.0367)	-0.2822*** (0.0255)
Household Income Change (Increase 1-25%)	-0.3001*** (0.0484)	-0.2648*** (0.0422)	-0.1812** (0.0752)	-0.4140*** (0.0546)	-0.2996*** (0.0483)	-0.2600*** (0.0423)	-0.2795*** (0.0750)	-0.4109*** (0.0534)
Household Income Change (Increase >25%)	-0.4372** (0.1866)	-0.4503*** (0.0749)	-0.2930*** (0.0294)	-0.4717*** (0.0803)	-0.4269** (0.1882)	-0.4484** (0.0747)	-0.2904*** (0.0294)	-0.4737*** (0.0801)
No- Observations	2,000	2,549	6,093	6,134	2,000	2,549	6,093	6,134
R-Square	0.0525	0.0493	0.0376	0.0662	0.0511	0.0498	0.0382	0.0566
Well-being costs ratio (WBCR) (Decrease 1-25%)	92%	n.s.	n.s.	34%	n.s.	n.s.	n.s.	83%
Well-being costs ratio (WBCR) (Stay the Same)	60%	n.s.	n.s.	18%	n.s.	n.s.	93%	47%
Well-being costs ratio (WBCR) (Increase 1-25%)	49%	n.s.	n.s.	13%	n.s.	n.s.	76%	32%
Well-being costs ratio (WBCR) (Increase >25%)	34%	n.s.	n.s.	11%	n.s.	n.s.	73%	28%

**Table 11 (Cont.) SWB and Coping Strategies for the Mental Well-Being Index using Changes in Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Borrowing from a bank, employer</i> )	0.2098*** (0.0513)	0.1010** (0.0403)	0.1009** (0.0428)	0.1714*** (0.0284)				0.1482*** (0.0301)
Coping Strategy ( <i>Sell Assets</i> )					0.1797*** (0.0481)	0.1541*** (0.0400)	0.1582*** (0.0438)	
Household Income Change (Decrease 1- 25%)	-0.2242*** (0.0519)	-0.1281 (0.1042)	-0.1103 (0.0974)	-0.1809*** (0.0294)	-0.2011** (0.0923)	-0.1347 (0.1034)	-0.1072 (0.0969)	-0.1701*** (0.0295)
Household Income Change (Stay the Same)	-0.2476*** (0.0809)	-0.1917*** (0.0451)	-0.1261*** (0.0367)	-0.2784*** (0.0255)	-0.2375*** (0.0805)	-0.1870*** (0.0451)	-0.1837*** (0.0367)	-0.2769*** (0.0255)
Household Income Change (Increase 1-25%)	-0.2906*** (0.0482)	-0.2587*** (0.0422)	-0.1786** (0.0754)	-0.4141*** (0.0535)	-0.2767*** (0.0488)	-0.2599*** (0.0423)	-0.2180** (0.1051)	-0.4083*** (0.0536)
Household Income Change (Increase >25%)	-0.3973** (0.1854)	-0.4505*** (0.0746)	-0.2891*** (0.0295)	-0.4723*** (0.0801)	-0.3951** (0.1881)	-0.4482*** (0.0748)	-0.2857*** (0.0295)	-0.4770*** (0.0802)
No- Observations	2,000	2,549	6,093	6,134	2,000	2,549	6,093	6,134
R-Square	0.0594	0.0515	0.0383	0.0590	0.0573	0.0573	0.0395	0.0570
Well-being costs ratio (WBCR) (Decrease 1- 25%)	94%	n.s.	n.s.	95%	89%	n.s.	n.s.	87%
Well-being costs ratio (WBCR) (Stay the Same)	85%	53%	80%	62%	75%	82%	86%	54%
Well-being costs ratio (WBCR) (Increase 1- 25%)	72%	39%	56%	41%	65%	59%	73%	36%
Well-being costs ratio (WBCR) (Increase >25%)	53%	22%	35%	36%	46%	34%	55%	31%

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 12. Propensity Score Matching Ordered Probit for the Estimates in Table 2-SWB and Coping Strategies for the Economic Situation Perception using Household Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy (Taking money out of savings)	0.3026*** (0.0815)	0.1969*** (0.0813)	0.1565*** (0.0502)	0.1182** (0.0502)				
Coping Strategy (Taking money from family, relatives, or friends)					0.2552*** (0.0767)	0.3458*** (0.0722)	0.2793*** (0.0582)	0.0947* (0.0532)
Household Income	-0.2174*** (0.0644)	-0.3126*** (0.0684)	-0.2774*** (0.0329)	-0.0720*** (0.0225)	-0.1987*** (0.0607)	-0.2270*** (0.0556)	-0.2172*** (0.0457)	-0.0628** (0.0264)
No- Observations	879	891	2,986	3,166	1,080	1,269	2,012	2,699
Wald Chi-Square Test	79.90 [0.000]	84.00 [0.000]	167.91 [0.000]	118.91 [0.000]	97.96 [0.000]	79.72 [0.000]	145.25 [0.000]	149.72 [0.000]
Well-being costs ratio (WBCR)	17.5%	9.5%	7.5%	22%	15.0%	23%	16%	21%
WBCR monetary values	400 EGP	38 JOD	225 MAD	210 TND	340 EGP	93 JOD	525 MAD	205 TND
Coping Strategy (Taking money from family, relatives, or friends abroad)	0.2896*** (0.1939)	0.4557*** (0.1875)	0.2032** (0.0975)	0.0583 (0.1013)				
Coping Strategy (Going back to the village or family)					0.1961*** (0.0960)	0.3604*** (0.1086)	0.2182* (0.1210)	0.0396 (0.0905)
Household Income	-0.2328*** (0.0528)	-0.2772** (0.1236)	-0.3038*** (0.1128)	-0.0961** (0.0410)	-0.2122*** (0.0777)	-0.2229** (0.0992)	-0.6702*** (0.1985)	-0.0981** (0.0435)
No- Observations	274	223	513	897	600	334	6,093	1,271
Wald Chi-Square Test	78.24 [0.000]	410.44 [0.000]	36.94 [0.000]	61.75 [0.000]	803.41 [0.000]	863.29 [0.000]	210.46 [0.000]	437.49 [0.000]
Well-being costs ratio (WBCR)	17%	25%	11%	n.s.	14%	19%	5.5%	n.s.
WBCR monetary values	390 EGP	101 JOD	360 MAD	n.s.	320 EGP	77 JOD	380 MAD	n.s.
Coping Strategy (Borrowing from a bank, employer)	0.3752*** (0.1177)	0.3268*** (0.0758)	0.2592*** (0.0928)	0.2184*** (0.0607)				
Coping Strategy (Sell Assets)					0.2861*** (0.0813)	0.3971*** (0.0968)	0.2147*** (0.0645)	0.2254** (0.0874)
Household Income	-0.2455** (0.0992)	-0.2667*** (0.0608)	-0.2163** (0.0909)	-0.01099*** (0.0420)	-0.2259** (0.0954)	-0.2549*** (0.0942)	-0.2222*** (0.0817)	-0.1373*** (0.0420)
No- Observations	541	849	1,083	1,052	542	399	968	928
Wald Chi-Square Test	93.74 [0.000]	46.16 [0.000]	453.31 [0.000]	106.09 [0.000]	1,166.43 [0.000]	40.37 [0.000]	504.09 [0.000]	462.24 [0.000]
Well-being costs ratio (WBCR)	19%	19.5%	17.5 %	34%	14.5%	20%	12.5%	27%
WBCR monetary values	430 EGP	78 JOD	575 MAD	335 TND	330 EGP	81 JOD	415 MAD	275 TND

Robust standard errors within parentheses, p-values within brackets, n.s. denotes non significance, \*\*\*, \*\* and \* indicate significance at the 1%, 5% and 10% level.

**Table 13. Propensity Score Matching Ordered Probit for the Estimates in Table 10-SWB and Coping Strategies for the Perception on Economic Situation using Changes in Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money out of savings</i> )	0.1977*** (0.0605)	0.1923*** (0.0474)	0.0491* (0.0262)	0.0815** (0.0390)				
Coping Strategy ( <i>Taking money from family, relatives, or friends</i> )					0.2237*** (0.0740)	0.3507*** (0.0704)	0.2047*** (0.0495)	0.1185** (0.0527)
Household Income Change (Decrease 1-25%)	-0.2563** (0.1238)	-0.3156** (0.1447)	-0.3293*** (0.0525)	-0.1269** (0.0546)	-0.1985** (0.0842)	-0.1982** (0.0844)	-0.3304** (0.1599)	-0.1548** (0.0601)
Household Income Change (Stay the Same)	-0.2972*** (0.0988)	-0.4239*** (0.1093)	-0.3960*** (0.1402)	-0.2231*** (0.0464)	-0.3679** (0.1726)	-0.3435*** (0.0915)	-0.3712*** (0.0623)	-0.2230** (0.0969)
Household Income Change (Increase 1-25%)	-0.3650*** (0.1134)	-0.5213*** (0.2450)	-0.4567*** (0.1054)	-0.2769*** (0.0873)	-0.3806*** (0.0905)	-0.4261** (0.1905)	-0.5589*** (0.0574)	-0.2544*** (0.0498)
Household Income Change (Increase >25%)	-0.4613*** (0.1558)	-0.6782*** (0.1021)	-0.5866*** (0.0449)	-0.3368*** (0.1194)	-0.4235*** (0.1439)	-0.4835*** (0.0846)	-0.6390*** (0.1218)	-0.4431*** (0.1275)
No- Observations	1,032	984	3,795	3,953	1,153	1,299	2,636	3,323
Wald Chi-Square Test	94.57 [0.000]	102.71 [0.000]	267.88 [0.000]	202.91 [0.000]	113.28 [0.000]	103.01 [0.000]	186.87 [0.000]	207.46 [0.000]
Well-being costs ratio (WBCR) (Decrease 1-25%)	54%	58%	13%	54%	67%	83%	59%	75%
Well-being costs ratio (WBCR) (Stay the Same)	48%	51%	11.5%	37%	48%	79%	51%	40%
Well-being costs ratio (WBCR) (Increase 1-25%)	36%	27%	8.5%	25%	45%	58%	38%	36%
Well-being costs ratio (WBCR) (Increase >25%)	26%	22%	7%	20%	37%	50%	28%	22%
	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy ( <i>Taking money from family, relatives, or friends abroad</i> )	0.3216* (0.1799)	0.4916*** (0.1836)	0.1537* (0.0818)	0.1223 (0.0878)				
Coping Strategy ( <i>Going back to the village or family</i> )					0.2353*** (0.0564)	0.2659 (0.2298)	0.1468 (0.2123)	0.0882 (0.0783)
Household Income Change (Decrease 1-25%)	-0.2477** (0.1028)	-0.4186** (0.1957)	-0.3195** (0.1516)	-0.1778** (0.0847)	-0.2329* (0.1277)	-0.3422** (0.1498)	-0.4009** (0.1951)	-0.1388* (0.0751)
Household Income Change (Stay the Same)	-0.3522** (0.1769)	-0.5987** (0.2417)	-0.3625** (0.1736)	-0.3128*** (0.0966)	-0.3333** (0.1433)	-0.3798** (0.1549)	-0.6881* (0.3818)	-0.1786** (0.0891)
Household Income Change (Increase 1-25%)	-0.4515** (0.2191)	-0.6377*** (0.2103)	-0.4833*** (0.1626)	-0.3883** (0.1814)	-0.3604** (0.1711)	-0.5891** (0.2853)	-0.7697** (0.3361)	-0.2435** (0.1134)
Household Income Change (Increase >25%)	-0.4967** (0.4106)	-0.7560** (0.3537)	-0.5895** (0.2827)	-0.4730** (0.2106)	-0.5756** (0.2653)	0.7417* (0.3985)	-0.9379*** (0.1938)	-0.3286** (0.1464)
No- Observations	296	293	478	879	632	238	262	1,064
Wald Chi-Square Test	1,421.61 [0.000]	660.33 [0.000]	45.77 [0.000]	113.20 [0.000]	510.85 [0.000]	1,008.97 [0.000]	556.10 [0.000]	492.25 [0.000]
Well-being costs ratio (WBCR) (Decrease 1-25%)	79%	92%	41%	n.s.	69%	n.s.	n.s.	n.s.
Well-being costs ratio (WBCR) (Stay the Same)	58%	81%	35%	n.s.	47%	n.s.	n.s.	n.s.
Well-being costs ratio (WBCR) (Increase 1-25%)	46%	55%	27%	n.s.	44%	n.s.	n.s.	n.s.
Well-being costs ratio (WBCR) (Increase >25%)	35%	38%	24%	n.s.	32%	n.s.	n.s.	n.s.



**Table 13 (Cont.) Propensity Score Matching Ordered Probit for the Estimates in Table 10- SWB and Coping Strategies for the Perception on Economic Situation using Changes in Income**

	Egypt	Jordan	Morocco	Tunisia	Egypt	Jordan	Morocco	Tunisia
Coping Strategy (Borrowing from a bank, employer)	0.3553*** (0.1052)	0.3499*** (0.0544)	0.2851*** (0.0971)	0.1803** (0.0826)				
Coping Strategy (Sell Assets)					0.2909*** (0.1009)	0.3080** (0.1210)	0.1312** (0.0545)	0.1911** (0.0793)
Household Income Change (Decrease 1-25%)	-0.3754** (0.1540)	-0.3255* (0.1712)	-0.3904** (0.1837)	-0.1523* (0.0788)	-0.2224** (0.0988)	-0.4001** (0.1862)	0.3350** (0.1545)	-0.1910** (0.0861)
Household Income Change (Stay the Same)	-0.3862* (0.1985)	-0.3482*** (0.1211)	-0.4388*** (0.1197)	-0.2566** (0.1185)	-0.3591** (0.1573)	-0.5801* (0.3023)	-0.3686*** (0.157)	-0.2686** (0.1123)
Household Income Change (Increase 1-25%)	-0.4529* (0.2368)	-0.6944*** (0.1150)	-0.5291** (0.2535)	-0.2856** (0.1317)	-0.3987** (0.1821)	-0.7386*** (0.1614)	-0.4977*** (0.1063)	-0.3975** (0.1932)
Household Income Change (Increase >25%)	-0.4728** (0.1852)	-0.7282** (0.2987)	-0.5809*** (0.1376)	-0.2425* (0.1329)	-0.4889** (0.2335)	-0.8937*** (0.1606)	-0.6231*** (0.2342)	-0.5557*** (0.2064)
No- Observations	428	856	677	1,052	2,000	716	841	1,111
Wald Chi-Square Test	614.47 [0.000]	88.73 [0.000]	453.88 [0.000]	84.38 [0.000]	93.52 [0.000]	66.04 [0.000]	644.07 [0.000]	1,467.72 [0.000]
Well-being costs ratio (WBCR) (Decrease 1-25%)	95%	76%	63%	93%	78%	63%	39%	93%
Well-being costs ratio (WBCR) (Stay the Same)	92%	71%	52%	55%	56%	59%	34%	64%
Well-being costs ratio (WBCR) (Increase 1-25%)	75%	55%	38%	47%	51%	37%	26%	48%
Well-being costs ratio (WBCR) (Increase >25%)	66%	44%	33%	38%	44%	28%	20%	29%