

Changing Global Labor Markets: Well-Being Differences Across Jobs, Age, and Gender (with a Focus on the Middle East and North Africa)

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February 2021

This paper was made possible with support from the Yamamoto-Scheffelin Endowment for Policy Research.

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Abstract

Our analysis in this paper deepens the scope of our earlier comparative work across regions by looking across employment groups, education, age, and gender, in detail in the Middle East and North Africa (MENA). Our specific focus on MENA confirms some expected results, but also yields findings that run counter to dominant narratives, as well as to what might be expected given the developments in the last few decades in the region. We find the unemployed to be systematically the group with the lowest well-being within any gender, age, or education group. However, male unemployed youth exhibit higher levels of well-being than the unemployed belonging to other age groups. This runs counter to the narrative that the frustration of youth was a likely catalyst for the 2011 Arab Spring uprisings. Prime age males in unstable work or in unemployment display lower levels of well-being. Within youth respondents, both full-time employed and unemployed women report higher well-being than their male counterparts under the same labor market situation – a possible partial explanation could be the lower stigma associated with female unemployment. What stands out is the complexity and at times unexpected manner with which people of different ages, gender, and education navigate labor markets in this complex and at times troubled region. Youth across all the countries report higher levels of optimism and life satisfaction than the common narrative suggests. Our exploration suggests a remarkable amount of complexity – and ability to adapt – among populations in challenging and changing labor market conditions.

Introduction

Global labor markets are in flux. Technology driven growth has changed the nature of work and the rewards across skill groups everywhere, with the gap between skilled and unskilled labor increasing in most places. Artificial intelligence threatens to exacerbate those trends. Integrated global capital markets, trade, and the gig economy have made the world a smaller and more interconnected place, with great benefits for many. But these same trends uproot traditional labor markets as we know them, making stable jobs with the usual benefits a luxury for the low-skilled in many places. In part as a result of these trends, the phenomena of prime aged workers out of the labor force has become a more common feature of labor markets in both rich and developing economies.

Understanding these trends and their implications for social welfare and stability is a first step to navigating them. We use the metrics of well-being to try and understand the effects of these trends across population groups, countries, and regions. In a recent paper (Pinto and Graham, 2019), we compared the well-being and ill-being of prime aged males out of the labor force (OLF) in four regions: European Union, Latin America, Middle East and North Africa (MENA), and the U.S. These are regions with large differences in their levels of poverty and inequality, as well as in the prevalence of welfare programs, informal economies, and gender norms.

Rather surprisingly, we found that prime aged males OLF are the most unhappy, stressed, and angry in the U.S., while they are much more content – in relative terms – in Latin America and MENA, both regions which feature large pre-existing informal sectors. We posit that the higher levels of well-being of the OLF in these two regions has something to do with these regions' longer-term trajectory of unstable employment in the informal sector, and the associated lower levels of stigma attached to being OLF. In this paper, we look more closely at MENA – a region with high levels of unemployment and gender discrimination – to explore how different employment, age, and gender cohorts there are faring in today's labor markets.

MENA has recently had its growth forecast for 2019 reduced to 1.5%, reflecting a long-standing challenge for the region, whose growth has been slow by comparison with countries of similar income levels (Arezki et al. 2019). Assaad (2014) provides a good overview of some of the key stylized facts about the MENA economies and some of the associated challenges. Countries in the region have been characterized by the presence of an oversized public sector, high youth unemployment, and persistently low female labor participation. Large investment in education over the past decades has led to clear improvements in enrollment and educational attainment throughout the region, even achieving gender parity at most levels of education (World Bank 2019). Yet, large intergenerational education mobility has not translated into economic mobility, unlike in other regions. Furthermore, the substantial human capital investments that took place were subjected to significant distortions, as public sector employment has historically been guaranteed for those with the applicable education certifications. This has led to the absence of a link between credentials and skills, with human capital investments directed at finding public sector employment, rather than to acquire the skills necessary to navigate the realities of competitive global economies (Assaad 2014, World Bank 2019).

Despite very significant educational improvements, female labor force participation has generally remained stagnant – in most of the region’s countries it is still below 25%¹; the same is true of the wage gaps in both the public and private sectors, which are particularly high in comparison with other regions, while informal employment is also more prevalent among women (ILO 2007, OECD 2017). At the same time, despite much lower labor participation, female unemployment rates continue to exceed those of their male counterparts in every country with data available², and the gap does not appear to have decreased in recent decades. Gender barriers are often codified into the framework regulating family law, access to justice, and labor rights, with consequences for gender norms and participation in the country’s economic life. While some encouraging reforms took place in the aftermath of the 2011 “Arab Spring” uprisings, they have not yielded substantial labor market changes (OECD 2017).

Likewise, the improved educational attainments of the younger cohorts have not yielded better labor market prospects, with the region’s youth unemployment rates remaining among the highest in the world. The challenges faced by the youth were compounded by their having to bear the brunt of structural reforms that effectively changed the social contract that had long been in place. Here, too, International Labor Organization (ILO) data suggests that this situation has not improved since 2000 and, as with the overall unemployment rate, the female youth unemployment rate is generally higher than the male. Alongside the oversized public sector, the private sector has remained weak and reliant on rent-seeking, something that has also led to increased informality in the countries where the governments have greater fiscal constraints (and less oil wealth).

Still, there are large heterogeneities across the region. In 2017, while Egypt and Morocco continued to have real GDP per capita growing at over 2%, all the Gulf Cooperation Council (GCC) countries had negative per capita growth in real terms (Arezki et al. 2019). Although unemployment rates in the region are high on average, unemployment is nearly non-existent in Kuwait, Qatar, and the United Arab Emirates (UAE). The same three countries are the only ones in the region where female labor participation rates exceed 50%. There are significant heterogeneities among the unemployed across countries as well. As an example, in three MENA countries – Egypt, Jordan, and Tunisia – the majority of Egypt’s unemployed are very long-term (over 2 years), unlike those in the latter two. The educational compositions also differed, with those in Egypt being far more likely to have at least secondary education. Those with less than that have a very low probability of accessing formal jobs and, therefore, are also not likely to be in the pool of formally unemployed workers.

In the wake of the Arab Spring uprisings, much research focused on frustration as a possible catalyst, especially from unemployed males and youth. However, the results were not fully conclusive or consistent. Some authors pointed to a steep decrease in life satisfaction in the years preceding the Arab Spring, especially for those in the middle class (Ianchovichina et al. 2015). Others find an association between life satisfaction and some of the commonly highlighted causes for the uprisings: unfavorable labor market conditions, perceptions of widespread corruption, cronyism, and inequality of opportunity (Arampatzi et al. 2015). Nevertheless, survey evidence from the countries where uprisings took place shows that neither the middle class nor the youth

¹ ILO modelled labor force participation estimates, available at <https://ilostat.ilo.org/data/>, accessed on August 23, 2019.

² ILO data available at <https://ilostat.ilo.org/data/>, accessed on August 23, 2019.

appear particularly dissatisfied by comparison with other groups in the same countries (Cammett and Salti 2018). Additionally, the research is limited by lack of formal testing for systematic differences between the countries in MENA where the uprisings did and did not take place.

Earlier research by one of us at the time attempted such a comparison and found no systematic differences in life satisfaction trends across the countries in MENA with and without Arab Spring uprisings (Graham and Chattopadhyay 2012). Additionally, despite the public frustration, most of the countries where uprisings took place were experiencing positive levels of economic growth. This is suggestive of a “progress paradox” phenomenon that we have found in other countries and regions around the world, in which significant segments of the population are left behind at times of prosperity (Graham, Laffan, and Pinto, 2018; Graham and Lora, 2009).

As in our research noted above (Pinto and Graham 2019), prime aged males OLF in MENA do not seem to be particularly unhappy or frustrated compared to those employed full-time in the region. This contrast with the unemployed having the lowest well-being of the employment groups in the region. In contrast, in the U.S., prime aged males out of the labor force are a particularly troubled group, both in terms of reported well-being and in terms of health and other markers of ill-being.

Here, we seek to complement that research by focusing in greater depth on the MENA region. We analyze some of the key divides that are present within labor markets, namely those cutting across labor market status, age, gender, education, and country type – in some cases our results confirm the hypotheses guiding our exploration, but in others we obtain surprising results that counter some of the predominant narratives.

While we find the unemployed to have the lowest well-being within any gender, age, or education group, the unemployed youth exhibit higher levels of well-being than the unemployed belonging to other age groups. Within both youth and prime age respondents, women report higher well-being than their male counterparts under the same labor market situation, and that gender heterogeneity is particularly acute within prime age respondents who are out of the labor force (OLF) – the gender results, however, need to be interpreted cautiously, as they may reflect differences in response scales.

Within male respondents, age heterogeneities are particularly visible when it comes to those who are OLF. Consistent with the labor market absence being related to education investments, the OLF youth report higher well-being across nearly every dimension, relative to prime age OLF males. When it comes to labor market heterogeneities across education groups, we find the unemployed to be equally unhappy or dissatisfied regardless of their educational level. Finally, the differences across country types are surprisingly small.

1. Data

We use data from multiple waves of the Gallup World Poll (GWP), a cross-sectional nationally representative survey that is collected yearly across more than 150 countries, covering the period from 2010 to 2018. For MENA, the initial GWP sample covers 19 countries, but we only included

countries surveyed in a majority of the 9-year period between 2010 and 2018, leaving us with 17 countries.³

Our key outcome of interest is well-being, in its multiple dimensions. We therefore take advantage of the broad well-being focus and comprehensiveness of the GWP to consider a wide range of indicators which we combine to create 13 separate indices⁴ (see Appendix 1 for full details):

- (i) **Evaluative well-being**, which seeks to capture how individuals currently assess their own lives and their expectations for the future. As specific indicators, we use both current and expected life satisfaction questions (measured on a 0-10 scale, from worst to best life satisfaction, respectively). Current life satisfaction is the standard measure of evaluative well-being, while expected life satisfaction is a measure of optimism about the future.
- (ii) and (iii) relate to **Hedonic well-being**, which aims to capture how individuals' moods and how they experience their daily lives. We divide this domain into two indices: one for **negative affect**, represented by four indicators (having felt stress, worry, anger, or sadness in the previous day); and another for **positive affect**, composed of five indicators (having felt enjoyment, having smiled or laughed, having been treated with respect, having felt well-rested, and having learned something interesting in the previous day). All indicators in this dimension, as well as all the other dimensions, are binary.
- (iv) **Food and shelter**, assessing whether respondents are able to meet those basic needs. The two binary indicators for this index relate to whether or not individuals lacked money for meeting either need over the previous twelve months.
- (v) **Personal health**, measuring the self-perception of the respondent's health. The three indicators used are whether the respondents have health problems that prevent them from doing the activities that someone their age would typically do, and whether they did not experience physical pain the previous day and felt well-rested.
- (vi) **Community basics**, evaluating life in a community across a range of areas, from public transportation to healthcare. Seven indicators are used, assessing whether individuals are satisfied with public transportation, roads and highways, air quality, water quality, affordable housing, educational system, and quality healthcare in their area of residence.
- (vii) **Community attachment**, measuring overall satisfactions with the area of residence, along with the remaining there. The three indicators correspond to satisfaction with the area of residence, the likelihood of staying (rather than moving away), and whether the respondent would recommend the city/area as a place to live.

³ Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, West Bank and Gaza, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates, and Yemen.

⁴ Within each index, respondents are only kept in the sample if they answered all the questions that are part of it. Gallup computes its indices differently, as it does not require a given respondent to answer all questions within an index in order to calculate it for that individual; however, we believe our strategy will increase the consistency across the computation of the indices and avoid biases caused by differential item response rates.

- (viii) **Civic engagement**, seeking to assess individual's connections to their community of residence. The three indicators that are part of this index measure whether respondents, over the previous month, have donated to charity, volunteered, or helped a stranger.
- (ix) **Social life**, assessing respondents' social support structure. The two indicators relate to the existence of friends or family that respondents can count on to help when needed, and to being satisfied with the opportunity to make friends in the area of residence.
- (x) **Youth development**, measuring the perceptions of the community's focus on children's welfare. The indicators that compose assess if respondents believe that children are treated with respect and dignity and whether they have the chance to learn and grow every day.
- (xi) **Financial life**, for respondents' perceptions of their own economic situations. The three indicators that form this index assess if respondents feel satisfied with their standard of living, if they think their standard of living is getting better, and if they are not finding it difficult to get by on their current income level.
- (xii) **Job climate**, for perceptions of local-level economic situation and opportunities. The two indicators assess whether the respondent thinks it is a good time to find a job in the area of residence and whether the local economic conditions are getting better.
- (xiii) **Economic confidence**, for perceptions of the national-level economic situation. The two indicators assess whether the respondent thinks if the country's economic conditions are good/excellent and whether they are getting better.

As part of its surveys for each country, the GWP also collects a wide range of demographic and socioeconomic data, including questions on the respondent's age, gender, education, and employment status, which are the key independent variables that we focus on. The latter can be classified into 6 possible situations: (a) employed full-time; (b) employed part-time; (c) self-employed; (d) employed part-time, wanting full-time; (e) unemployed, and (f) out of the workforce. The age variable allows us to group respondents into different bins, both based on decades (15-24 years old, 25-34, 35-44, 45-54, 55-64, and 65+) and by dividing them into youth (<25), prime age (25-54), and older (>54) individuals. The education variable is coded in three homogeneous categories: primary education (up to 8 years of schooling), secondary (9-15 years of schooling), and tertiary (>15 years of schooling). All these categories across the different variables are essential for us to be able to explore different heterogeneities across them, as detailed in the next section.

2. Methodology

a) Gender, generational, and educational divides across employment status

The starting point for this paper is the well-being of the youth (<25 years old). As such, our first specification restricts the sample to only those individuals and focuses on the well-being associated

with each employment status, as well as on gender-based heterogeneities across that dimension. Therefore, we use a specification as shown in Equation (1) below:

$$(1) SWB_{ict} = \alpha_0 + \sum_{j=1}^6 \beta_j * Emp_status_{j,ict} + \gamma_1 * Female_{ict} + \sum_{j=1}^6 \theta_j * Emp_status_{j,ict} * Female_{ict} + \delta_1 * (X_{ict}) + \pi_c + \tau_t + \varepsilon_{ict}$$

SWB represents each of the 13 well-being indices described in the previous section for individual *i*, from country *c*, in year *t*. *Emp_status* is one of our key variables of interest and represents one of the six categories previously described (full-time employment is used as the reference/omitted category). *Female* is the binary indicator for gender (with male being the reference/omitted category) and *Emp_status * Female* is the interaction term. Therefore, our key parameters of interest are β_j , γ_1 , and θ_j . *X* is a vector containing the other individual-level socio-demographic controls – marital status, educational level, urban/rural location, being native-born, pre-tax household income in international U.S. dollars (in log form), household size, and the importance of religion in daily life, as well as controls for the month and days of week where the interview took place. π_c and τ_t represent country and year fixed effects, respectively.

We then move along the age distribution and consider only prime-age (25-54) respondents instead of the youth. As before, we are also interested in the gender divide, so our empirical specification is analogous to that of Equation (1), but now we restrict the sample to prime-age individuals.

Then, we switch the focus only to male respondents, who compose most of the local labor force and focus on assessing the generational divide across different employment statuses. This specification can then be formalized as in Equation (2) below:

$$(2) SWB_{ict} = \alpha_0 + \sum_{j=1}^6 \beta_j * Emp_status_{j,ict} + \sum_{k=1}^3 \gamma_k * Age_group_{k,ict} + \sum_{j=1}^6 \sum_{k=1}^3 \theta_{j,k} * Emp_status_{j,ict} * Age_group_{k,ict} + \delta_1 * (X_{ict}) + \pi_c + \tau_t + \varepsilon_{ict}$$

SWB, *X*, π_c , and τ_t have the same meaning as in Equation (1). The difference is that, given our interest in generational divides, we now interact employment status with age group – defined here based on three categories: youth (<25), prime age (25-54), and older (55+) – instead of gender. Therefore, our key parameters of interest are now β_j , γ_k , and $\theta_{j,k}$.

Another line of analysis, when restricting the sample to male respondents, is to look at the divide along educational lines across employment status. This specification can be formalized as in Equation (3) below, and is very similar to the previous ones:

$$(3) SWB_{ict} = \alpha_0 + \sum_{j=1}^6 \beta_j * Emp_status_{j,ict} + \sum_{k=1}^3 \gamma_k * Educ_group_{k,ict} + \sum_{j=1}^6 \sum_{k=1}^3 \theta_{j,k} * Emp_status_{j,ict} * Educ_group_{k,ict} + \delta_1 * (X_{ict}) + \pi_c + \tau_t + \varepsilon_{ict}$$

SWB, *X*, π_c , and τ_t have the same meaning as in Equation (1). Equation (3) is analogous to (2), but now we interact employment status with educational group – also defined based as having three categories: primary education (8 or less years of schooling), secondary education (8-15 years of schooling), and tertiary education (16 or more years of schooling). Just as before, Therefore, our key parameters of interest are now β_j , γ_k , and $\theta_{j,k}$.

b) Heterogeneities by country type

Our final line of analysis seeks to assess if any of the employment status heterogeneities – across gender, age, and education – also vary significantly depending on the type of country that is being analyzed. In particular, we assigned countries to one of two groups and split the sample accordingly: i) gulf or oil-rich⁵; ii) non-gulf and not oil-rich.⁶ Then, for each subsample, we ran the same regression as detailed in part a) and formalized in Equations (1)-(3), looking at gender, age, and educational divides across employment statuses.

All regression estimates throughout this paper, for both specifications, are obtained through OLS and are computed using Gallup’s sampling weights. Moreover, to avoid biases caused by outliers and potentially large reporting errors, we exclude from our sample the respondents in the top percentile of household income in each country and year.⁷ Finally, we assign an income of \$1 to all respondents reporting no income so that such observations are not dropped when taking the logarithm of household income.

3. Results

We divide this section into the same two subsections as Section 2 and each of the subsections below illustrates and describes the main results from estimating the specifications illustrated by Equations (1) to (3) above. For brevity and ease of interpretation, for each table we display only the coefficients relating to the terms that are part of the heterogeneity being explored (i.e., the variables that are part of the interaction term in each case).

Given the specifications described in Section 2, the estimated coefficients represent the association between the variables of interest and the specific well- or ill-being indicator, *after* accounting for all the remaining sociodemographic controls (e.g., marital status, rural location, native born, household income, etc.), as well as year, month, day of week, and country effects.

It is important to note that because of the cross-sectional nature of our data and of the restrictions that imposes on our methodology, we cannot infer causality. Thus, it is possible that some of the ill-being that we find might stem, for example, from lower levels of well-being resulting in individuals self-selecting into particular labor market categories, rather than the other way around.

a) Gender, generational, and educational divides across employment status

The starting point in our empirical investigation is the youth (i.e., those under 25 years old). We first explore the gender heterogeneities across labor market status, as specified in Equation (1), and Table 1 displays the corresponding estimates.

⁵ As a basis for this, World Bank data (<https://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS>) on oil rents as a percentage of GDP was used; in particular, a country was deemed oil-rich if its oil rents surpassed 10% of GDP.

⁶ Within the countries that are part of our sample, this led us to include Algeria, Bahrain, Iran, Iraq, Kuwait, Libya, Saudi Arabia, and United Arab Emirates in the first group, and Egypt, Jordan, Lebanon, Morocco, Palestine (WBG), Syria, Tunisia, Turkey, and Yemen in the second.

⁷ The results do not meaningfully change when relaxing either/both restrictions (available from the authors on request).

Given the interaction term we are using, the labor market status variables in the first five rows shows the coefficients for male respondents in each of those situations, with the omitted category being those who are full-time employed. As expected, unemployed males typically have the lowest well-being levels for each of the dimensions considered, with every index being significantly lower than among full-time employed males. On the other end of the spectrum we have the OLF youth, which is likely to correspond to those who are still in school; among males, this is the group that typically reports the highest level of well-being, along with those who are employed part time. This makes intuitive sense: full-time employed youth are most likely those who left school at an early age and therefore have lower future prospects than those pursuing a university degree.

The sixth row shows the coefficients for full-time employed women (by comparison with the omitted category, full-time employed men). Contrary to what would be intuitively expected in a region with extensive gender discrimination, women report significantly higher evaluative well-being, reflected in both current and future life satisfaction. However, as Montgomery (2016) shows, this is likely due to differing response scales across gender. She uses vignettes to test differences in how men and women respond to the same life satisfaction questions and finds that women's responses are biased upwards due to low expectations and/or to fear of responding honestly. Adjusting for these biases, the life satisfaction of women in the MENA region would likely be significantly lower than men's. Additionally, in many of the other well-being dimensions that we measure, full-time employed women score lower well-being on negative affect, personal health, social life, job climate, and economic confidence.

Table 1 - Youth respondents, by employment status and gender

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	0.312*** (0.041)	-0.062*** (0.007)	0.050*** (0.006)	0.048*** (0.007)	0.079*** (0.006)	0.024*** (0.007)	0.025*** (0.008)	-0.041*** (0.006)	0.012* (0.007)	0.009 (0.009)	0.047*** (0.008)	0.001 (0.009)	-0.003 (0.010)
Employed PT	0.232*** (0.087)	-0.043*** (0.015)	0.036*** (0.012)	0.046*** (0.015)	0.043*** (0.013)	0.018 (0.014)	-0.002 (0.017)	0.034*** (0.013)	0.023 (0.014)	0.006 (0.019)	0.070*** (0.015)	0.044** (0.019)	-0.004 (0.022)
Self-employed	-0.068 (0.068)	0.017 (0.011)	-0.009 (0.010)	0.010 (0.011)	-0.002 (0.010)	-0.004 (0.010)	-0.008 (0.012)	0.033*** (0.009)	-0.011 (0.011)	-0.013 (0.014)	0.033*** (0.011)	-0.026** (0.012)	-0.020 (0.014)
Employed PT, wants FT	-0.105 (0.082)	0.033** (0.013)	-0.011 (0.012)	-0.047*** (0.014)	0.007 (0.011)	-0.014 (0.012)	-0.034** (0.015)	0.040*** (0.011)	0.011 (0.012)	-0.024 (0.016)	-0.042*** (0.014)	-0.027* (0.014)	-0.028* (0.017)
Unemployed	-0.564*** (0.060)	0.067*** (0.010)	-0.058*** (0.009)	-0.049*** (0.010)	0.021** (0.008)	-0.040*** (0.009)	-0.064*** (0.011)	-0.032*** (0.008)	-0.037*** (0.010)	-0.060*** (0.012)	-0.123*** (0.011)	-0.088*** (0.011)	-0.062*** (0.013)
Female	0.336*** (0.060)	0.033*** (0.012)	-0.001 (0.010)	0.009 (0.011)	-0.024** (0.010)	-0.002 (0.010)	-0.002 (0.013)	-0.004 (0.010)	-0.032*** (0.011)	-0.018 (0.013)	0.008 (0.012)	-0.027* (0.014)	-0.044*** (0.015)
(OLF) * (Female)	-0.138** (0.066)	0.002 (0.013)	-0.008 (0.011)	-0.018 (0.012)	0.015 (0.011)	-0.004 (0.012)	-0.009 (0.014)	-0.030*** (0.011)	0.017 (0.012)	-0.018 (0.015)	-0.004 (0.013)	0.017 (0.015)	0.037** (0.017)
(Employed PT) * (Female)	0.144 (0.131)	-0.005 (0.025)	0.008 (0.020)	-0.034 (0.024)	-0.005 (0.022)	0.004 (0.023)	0.007 (0.028)	-0.016 (0.021)	-0.001 (0.024)	-0.027 (0.031)	0.003 (0.025)	0.010 (0.032)	0.004 (0.032)
(Self-employed) * (female)	0.158 (0.148)	-0.048* (0.026)	0.026 (0.022)	-0.034 (0.026)	0.055** (0.022)	-0.003 (0.022)	0.012 (0.027)	-0.042* (0.022)	0.002 (0.026)	-0.004 (0.033)	0.039 (0.026)	0.084*** (0.029)	0.063** (0.031)
(Employed PT, wants FT) * (Female)	0.154 (0.139)	-0.007 (0.026)	0.036 (0.022)	-0.018 (0.027)	0.033 (0.021)	0.017 (0.023)	-0.017 (0.030)	-0.023 (0.021)	-0.004 (0.024)	-0.017 (0.030)	0.051** (0.026)	0.014 (0.028)	0.049 (0.033)
(Unemployed) * (Female)	0.362*** (0.095)	-0.030* (0.018)	0.047*** (0.015)	-0.017 (0.017)	0.002 (0.015)	0.032** (0.015)	0.027 (0.019)	-0.004 (0.014)	0.017 (0.017)	0.008 (0.020)	0.049*** (0.018)	0.045** (0.019)	0.054** (0.022)
Observations	39,755	37,010	35,764	41,094	33,271	29,969	28,782	34,988	32,861	34,464	31,503	29,406	23,184
R-squared	0.198	0.096	0.087	0.118	0.071	0.163	0.076	0.129	0.081	0.200	0.212	0.177	0.236

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for age, marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Year, country, month, and day of the week fixed effects are also included. Respondents in the top percentile of household income for each country-year pair are excluded.

The remaining rows correspond to the gender by employment status interactions. The coefficients are mainly non-significant across the different employment situation, with the main exception being that the well-being of unemployed young women is substantially higher than that of unemployed young men. A possible interpretation for these results comes from social norms and expectations: given the low female labor force participation across MENA countries, the stigma associated with unemployment is likely to be lower than for women.

Then, we turn our attention to prime-age respondents (25 to 54 years old) and again explore gender heterogeneities across labor market situations. The specification used is analogous to the one underlying the results in Table 1 – only the sample differed. However, the estimates we obtain for prime age respondents, shown in Table 2, differ from the youth ones in a number of important ways.

First, and opposite to what we observed among the youth, prime age OLF men exhibit significantly lower well-being than prime age men who are employed full-time (the reference category), roughly at the same level as those who are underemployed (employed part-time while wanting full-time), but still significantly better than that of prime age unemployed men. This contrast relative to OLF youth is to be expected, as in prime age their exit from the labor force is unlikely to be voluntary and even more so to be related to investments in human capital for the future – which presumably is the main reason male youth respondents are OLF.

Second, the well-being gap between unemployed and full-time employed prime age males is greater than the one observed within the youth. This is an interesting point, as it is in line with the findings of Cammett and Salti (2018), but runs counter to some popular narratives pointing to youth dissatisfaction and frustration as a possible motivating factor for the Arab Spring uprisings.

Third, whereas among the youth the well-being differences between OLF males and females were very minor, that is no longer the case among prime age individuals. Now, OLF women report significantly higher well-being than OLF men in 12 of the 13 dimensions being considered. A possible interpretation for these results comes from the likely different reasons for labor force dropout across genders: for men, that may be more likely linked to inability to find a job or to health concerns⁸, whereas for women it may be more likely that it is related to gender norms and family responsibilities.

Fourth, while full-time employed women report higher evaluative well-being than full-time employed men, as was the case with youth, now that the well-being gap for the prime ages is greater in each of the other labor market categories. Still, the caveat pointed out earlier continues to apply: these gaps might be erased if adequate corrections for response scale differences were available.

⁸ The fact that OLF males are associated with the most negative effect on the health well-being index out of any other employment categories suggests that at least some OLF men have fully dropped out of the labor force and not simply switched into the informal sector. Not that self-employed males – the most likely category to overlap with those who are in the informal sector – are not negatively associated with the health index; the same applies to OLF women, whose reason to drop out of the labor force is assumed to be less linked to physical problems or inability to work.

For the unemployed category, both youth and prime age women continue to report significantly higher well-being levels than unemployed men. Again, given prevailing societal norms, it is possible that the unemployment stigma on women, while still clearly negative, is not as pronounced as it is for men – and that this pattern cuts across age groups.

Table 2 – Prime age respondents, by employment status and gender

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
Prime-age (25-54) OLF	-0.255*** (0.035)	0.023*** (0.006)	-0.047*** (0.005)	-0.005 (0.006)	-0.047*** (0.005)	-0.003 (0.005)	-0.016*** (0.006)	-0.052*** (0.005)	-0.029*** (0.006)	-0.019*** (0.006)	-0.026*** (0.006)	-0.035*** (0.007)	-0.021*** (0.007)
Employed PT	0.112** (0.049)	-0.019** (0.008)	0.005 (0.007)	0.027*** (0.008)	-0.013 (0.008)	0.010 (0.008)	0.012 (0.009)	0.011 (0.007)	0.004 (0.009)	-0.019* (0.010)	0.049*** (0.009)	0.022** (0.011)	-0.008 (0.012)
Self-employed	-0.055* (0.031)	0.009* (0.005)	-0.013*** (0.004)	0.033*** (0.005)	-0.003 (0.004)	-0.004 (0.005)	0.003 (0.005)	0.019*** (0.004)	-0.011** (0.005)	0.001 (0.006)	0.019*** (0.005)	-0.016*** (0.006)	-0.026*** (0.006)
Employed PT, wants FT	-0.395*** (0.046)	0.040*** (0.008)	-0.027*** (0.006)	-0.064*** (0.008)	-0.021*** (0.007)	-0.021*** (0.007)	-0.030*** (0.008)	0.006 (0.006)	-0.014** (0.007)	-0.034*** (0.008)	-0.074*** (0.008)	-0.042*** (0.008)	-0.024*** (0.009)
Unemployed	-0.819*** (0.047)	0.117*** (0.008)	-0.111*** (0.006)	-0.106*** (0.008)	-0.038*** (0.007)	-0.047*** (0.007)	-0.074*** (0.008)	-0.045*** (0.006)	-0.056*** (0.008)	-0.052*** (0.009)	-0.171*** (0.007)	-0.091*** (0.007)	-0.063*** (0.009)
Female	0.257*** (0.028)	0.036*** (0.005)	-0.006 (0.004)	0.012** (0.005)	-0.044*** (0.005)	0.006 (0.005)	0.020*** (0.005)	-0.012** (0.005)	-0.007 (0.005)	-0.022*** (0.006)	0.026*** (0.005)	-0.001 (0.007)	-0.031*** (0.007)
(Prime-age (25-54) OLF) * (Female)	0.331*** (0.045)	-0.040*** (0.008)	0.045*** (0.007)	0.023*** (0.008)	0.064*** (0.007)	0.032*** (0.007)	0.018** (0.008)	-0.015** (0.007)	0.028*** (0.008)	0.032*** (0.008)	0.041*** (0.008)	0.034*** (0.009)	0.026*** (0.010)
(Employed PT) * (Female)	0.246*** (0.073)	-0.003 (0.013)	0.008 (0.011)	-0.001 (0.013)	0.006 (0.012)	0.028** (0.012)	-0.001 (0.013)	-0.006 (0.011)	0.036*** (0.012)	0.026* (0.015)	0.035** (0.013)	0.016 (0.016)	0.019 (0.018)
(Self-employed) * (Female)	0.187*** (0.072)	0.018 (0.012)	0.004 (0.010)	-0.039*** (0.011)	-0.011 (0.011)	0.003 (0.010)	0.005 (0.011)	-0.019** (0.009)	0.033*** (0.011)	0.022 (0.014)	0.009 (0.012)	0.019 (0.013)	0.039*** (0.014)
(Employed PT, wants FT) * (Female)	0.446*** (0.082)	-0.002 (0.014)	0.019* (0.011)	-0.012 (0.014)	-0.009 (0.013)	0.029** (0.013)	-0.010 (0.015)	0.018 (0.011)	0.002 (0.014)	0.041** (0.016)	0.040*** (0.014)	0.036** (0.016)	0.019 (0.017)
(Unemployed) * (Female)	0.463*** (0.066)	-0.031*** (0.011)	0.074*** (0.009)	0.009 (0.011)	0.013 (0.010)	0.039*** (0.010)	-0.001 (0.012)	0.010 (0.009)	0.010 (0.011)	0.024* (0.012)	0.067*** (0.011)	0.046*** (0.012)	0.040*** (0.013)
Observations	105,346	103,998	99,821	115,167	94,726	81,785	78,870	96,182	92,664	93,935	86,666	82,539	63,852
R-squared	0.230	0.083	0.107	0.136	0.099	0.191	0.074	0.160	0.070	0.230	0.234	0.221	0.340

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for age, marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Year, country, month, and day of the week fixed effects are also included. Respondents in the top percentile of household income for each country-year pair are excluded.

We then focus specifically on the male subsample, given the relatively low levels of female labor force participation. Table 3 shows the results for the age heterogeneities across labor market statuses.

The first five rows show the coefficients for each labor market status of prime age men (the omitted age group category; the omitted labor market status, as before, corresponds to full-time employed men). As expected, these results mirror the ones found in Table 2: within prime age males, the unemployed are by far the ones with the lowest well-being in each of the 13 dimensions (the same happens within the other age groups); the OLF and the underemployed have higher well-being than the unemployed, but lower than any other category. Those who are employed part-time generally have the highest levels of well-being. Those who are self-employed are more of a mixed case compared to the full-time employed, with lower hedonic well-being and more pessimism about the economy and the job climate, but better perceptions about their financial life, higher civic engagement, and higher (self-reported) ability to meet basic food and shelter needs.

The next two lines correspond to youth and older full-time employed males, both of which tend to report higher well-being than their prime age male counterparts, although in somewhat different dimensions. Full-time employed youth have significantly higher evaluative and hedonic well-being, as well as higher scores in the financial and social dimensions, along with more optimism regarding the economy and job climate. A possible interpretation would be that the newest generation is the most well-educated and hence more satisfied and optimistic about the future, even after accounting for all the socio-economic and demographic controls. The older full-time employed report higher current life satisfaction but lower expected life satisfaction in five years, as would be intuitively expected given their age; they also score higher in the indices related to their community, ability to meet basic needs, financial life, and expectations about the job climate; the only dimension where they score lower is health, as expected given their more advanced age.

The remaining lines correspond to the interaction effects and give us some additional valuable information. On one hand, it confirms what Tables 1 and 2 had already suggested: prime age OLF men report much lower well-being than young OLF respondents. OLF youth – presumably largely in college – report higher well-being across nearly every dimension; that is consistent with their labor market absence being related to accumulating human capital and investing in their future. On the other hand, while the unemployed report the lowest wellbeing *within* any age group, unemployed youth exhibit higher levels of well-being than any of the other unemployed cohorts. Again, this contradicts the common narratives that portray unemployed youth in the region as particularly frustrated and dissatisfied with their situation. For the underemployed, it also appears as though both the young and elder age groups report slightly higher well-being than prime age individuals in the same labor market category.

Finally, we analyze the well-being heterogeneities across labor market status and education groups - Table 4 shows our estimates and the overarching picture from these results allows us to draw four main observations:

- First, there are clear well-being level differences across employment status, where the unemployed are still, by far, those with the lowest well-being *within* each education level.
- Second, well-being levels tends to increase very significantly with education, *within* each labor market status.

- Third, the education-based well-being heterogeneities across employment status are generally insignificant. The main exception to that comes from those who are OLF: here, respondents with either primary or secondary education report higher well-being than those with tertiary education (as always, these differences occur after controlling for socio-demographic characteristics, income, and the set of fixed effects we are using, as detailed in the previous section). A second exception appears to be those who are self-employed: here too, those with primary or second education seem to fare better. This may be due to frustrated expectations among this relatively small cohort that is well educated but not able to find jobs comparable to their skills.

Table 3 – Male respondents, by employment status and age group

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.244*** (0.035)	0.024*** (0.006)	-0.042*** (0.005)	-0.007 (0.006)	-0.053*** (0.005)	0.002 (0.005)	-0.012** (0.006)	-0.050*** (0.005)	-0.028*** (0.006)	-0.018*** (0.006)	-0.022*** (0.006)	-0.028*** (0.007)	-0.020*** (0.007)
Employed PT	0.146*** (0.049)	-0.021** (0.008)	0.011 (0.007)	0.027*** (0.009)	-0.013 (0.008)	0.014* (0.008)	0.013 (0.009)	0.011 (0.007)	0.006 (0.009)	-0.019* (0.010)	0.054*** (0.009)	0.029*** (0.011)	-0.003 (0.012)
Self-employed	-0.038 (0.031)	0.014*** (0.005)	-0.012*** (0.004)	0.026*** (0.005)	-0.006 (0.004)	0.001 (0.005)	0.000 (0.005)	0.020*** (0.004)	-0.011** (0.005)	-0.001 (0.006)	0.022*** (0.005)	-0.014** (0.006)	-0.028*** (0.006)
Employed PT, wants FT	-0.344*** (0.046)	0.044*** (0.008)	-0.022*** (0.006)	-0.067*** (0.008)	-0.021*** (0.007)	-0.015** (0.007)	-0.029*** (0.007)	0.004 (0.006)	-0.012* (0.007)	-0.031*** (0.008)	-0.064*** (0.008)	-0.034*** (0.008)	-0.022** (0.009)
Unemployed	-0.765*** (0.047)	0.118*** (0.008)	-0.104*** (0.007)	-0.111*** (0.008)	-0.035*** (0.007)	-0.039*** (0.007)	-0.075*** (0.008)	-0.047*** (0.006)	-0.054*** (0.008)	-0.051*** (0.009)	-0.160*** (0.007)	-0.082*** (0.007)	-0.061*** (0.009)
Youth (15-24)	0.294*** (0.039)	-0.027*** (0.007)	0.019*** (0.006)	0.010 (0.007)	0.004 (0.006)	0.016** (0.006)	-0.003 (0.008)	-0.017*** (0.006)	0.030*** (0.007)	0.002 (0.008)	0.053*** (0.007)	0.035*** (0.008)	0.021** (0.010)
Older (55+)	-0.026 (0.056)	-0.013 (0.009)	0.006 (0.008)	0.044*** (0.009)	-0.035*** (0.009)	0.022** (0.009)	0.017* (0.009)	0.014 (0.009)	-0.000 (0.009)	0.022** (0.010)	0.018* (0.009)	0.020* (0.011)	0.020 (0.012)
(OLF)*(Youth (15-24))	0.604*** (0.053)	-0.093*** (0.009)	0.098*** (0.008)	0.059*** (0.009)	0.138*** (0.008)	0.025*** (0.009)	0.042*** (0.010)	0.009 (0.008)	0.046*** (0.009)	0.028*** (0.010)	0.073*** (0.010)	0.030*** (0.011)	0.024* (0.012)
(OLF)*(Older (55+))	0.097 (0.073)	-0.020 (0.012)	-0.005 (0.010)	0.011 (0.012)	-0.064*** (0.012)	0.014 (0.011)	0.064*** (0.012)	0.009 (0.011)	0.022* (0.012)	0.031** (0.013)	0.008 (0.012)	-0.008 (0.014)	-0.012 (0.015)
(Employed PT)*(Youth (15-24))	0.084 (0.100)	-0.015 (0.017)	0.021 (0.014)	0.025 (0.017)	0.048*** (0.016)	0.008 (0.016)	-0.015 (0.019)	0.020 (0.015)	0.016 (0.016)	0.025 (0.021)	0.012 (0.018)	0.009 (0.022)	-0.010 (0.025)
(Employed PT)*(Older (55+))	-0.009 (0.130)	-0.017 (0.019)	0.006 (0.017)	0.010 (0.020)	-0.048** (0.020)	0.015 (0.018)	0.047** (0.018)	0.009 (0.018)	0.009 (0.020)	0.059** (0.024)	0.033* (0.020)	-0.018 (0.023)	0.008 (0.026)
(Self-employed)*(Youth (15-24))	0.062 (0.074)	0.005 (0.012)	0.005 (0.011)	-0.013 (0.012)	0.006 (0.010)	0.000 (0.011)	-0.009 (0.013)	0.012 (0.010)	0.002 (0.012)	-0.011 (0.015)	0.011 (0.012)	-0.015 (0.014)	0.008 (0.015)
(Self-employed)*(Older (55+))	-0.045 (0.089)	-0.013 (0.014)	-0.005 (0.011)	-0.002 (0.013)	-0.021 (0.014)	0.004 (0.013)	0.046*** (0.013)	-0.016 (0.012)	0.022* (0.013)	0.043*** (0.016)	0.007 (0.014)	-0.004 (0.016)	0.027 (0.018)
(Employed PT, wants FT)*(Youth (15-24))	0.276*** (0.093)	-0.008 (0.015)	0.012 (0.013)	0.025 (0.016)	0.030** (0.013)	0.005 (0.013)	-0.007 (0.017)	0.035*** (0.012)	0.022 (0.014)	0.006 (0.018)	0.018 (0.015)	0.000 (0.016)	-0.008 (0.019)
(Employed PT, wants FT)*(Older (55+))	0.100 (0.158)	-0.009 (0.023)	0.014 (0.019)	-0.006 (0.024)	-0.007 (0.022)	0.046** (0.021)	0.077*** (0.022)	-0.015 (0.018)	-0.028 (0.022)	0.082*** (0.026)	0.063*** (0.023)	0.004 (0.025)	-0.009 (0.026)
(Unemployed)*(Youth (15-24))	0.287*** (0.075)	-0.062*** (0.013)	0.057*** (0.011)	0.069*** (0.013)	0.069*** (0.011)	0.005 (0.011)	0.014 (0.014)	0.013 (0.010)	0.024** (0.012)	-0.008 (0.015)	0.039*** (0.013)	-0.007 (0.013)	0.002 (0.015)
(Unemployed)*(Older (55+))	-0.152 (0.153)	0.039* (0.023)	0.013 (0.019)	-0.032 (0.024)	-0.042* (0.022)	-0.026 (0.020)	0.049** (0.022)	-0.010 (0.020)	-0.013 (0.022)	-0.009 (0.026)	-0.007 (0.021)	-0.007 (0.022)	0.024 (0.028)
Observations	86,178	84,335	81,142	93,378	76,705	66,942	63,644	78,386	75,358	76,698	71,342	68,861	53,054
R-squared	0.242	0.086	0.127	0.125	0.128	0.209	0.078	0.137	0.081	0.231	0.256	0.230	0.341

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Year, country, month, and day of the week fixed effects are also included. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 4 – Male respondents, by employment status and education group

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.186*** (0.053)	-0.009 (0.010)	-0.022*** (0.008)	-0.016* (0.009)	-0.000 (0.007)	-0.007 (0.008)	-0.024** (0.010)	-0.037*** (0.009)	-0.011 (0.009)	-0.030*** (0.010)	-0.008 (0.009)	-0.011 (0.012)	-0.023* (0.012)
Employed PT	0.063 (0.086)	-0.026* (0.015)	0.003 (0.012)	-0.015 (0.015)	-0.026** (0.013)	0.002 (0.013)	0.024 (0.015)	0.014 (0.015)	0.022 (0.014)	-0.011 (0.016)	0.047*** (0.013)	0.051*** (0.019)	-0.020 (0.022)
Self-employed	-0.025 (0.054)	0.030*** (0.010)	-0.019** (0.008)	-0.014 (0.009)	-0.017** (0.008)	-0.009 (0.008)	-0.012 (0.010)	0.038*** (0.009)	-0.010 (0.009)	-0.018* (0.010)	0.003 (0.009)	0.002 (0.013)	-0.030** (0.013)
Employed PT, wants FT	-0.296*** (0.077)	0.035** (0.014)	0.004 (0.011)	-0.071*** (0.014)	-0.018 (0.011)	-0.030*** (0.011)	-0.045*** (0.014)	0.022* (0.012)	0.002 (0.013)	-0.061*** (0.015)	-0.052*** (0.015)	-0.026 (0.016)	-0.026 (0.018)
Unemployed	-0.682*** (0.082)	0.097*** (0.014)	-0.080*** (0.012)	-0.087*** (0.014)	-0.044*** (0.011)	-0.036*** (0.012)	-0.075*** (0.016)	-0.052*** (0.012)	-0.051*** (0.013)	-0.061*** (0.015)	-0.150*** (0.014)	-0.057*** (0.015)	-0.039** (0.016)
Elementary education (<= 8 years)	-0.834*** (0.042)	0.045*** (0.007)	-0.075*** (0.006)	-0.147*** (0.007)	-0.096*** (0.006)	0.041*** (0.006)	-0.000 (0.007)	-0.100*** (0.006)	-0.056*** (0.007)	0.015** (0.007)	-0.130*** (0.007)	0.033*** (0.008)	0.026*** (0.009)
Secondary education (9-15 years)	-0.424*** (0.028)	0.011** (0.005)	-0.028*** (0.004)	-0.069*** (0.005)	-0.043*** (0.004)	0.023*** (0.004)	0.000 (0.005)	-0.045*** (0.005)	-0.012*** (0.005)	-0.004 (0.005)	-0.051*** (0.005)	0.044*** (0.007)	0.035*** (0.007)
(OLF)*(Elementary education (<= 8 years))	0.162** (0.069)	0.015 (0.012)	0.000 (0.010)	0.039*** (0.012)	-0.041*** (0.010)	0.014 (0.011)	0.034*** (0.013)	-0.004 (0.011)	0.000 (0.012)	0.041*** (0.013)	0.000 (0.012)	-0.011 (0.014)	0.012 (0.015)
(OLF)*(Secondary education (9-15 years))	0.271*** (0.059)	-0.019* (0.011)	0.033*** (0.009)	0.035*** (0.010)	-0.019** (0.008)	0.028*** (0.009)	0.043*** (0.011)	-0.017* (0.010)	0.007 (0.010)	0.021* (0.011)	0.026** (0.010)	-0.004 (0.013)	0.010 (0.014)
(Employed PT)*(Elementary education)	0.120 (0.116)	-0.007 (0.019)	0.022 (0.016)	0.080*** (0.019)	0.025 (0.018)	0.018 (0.017)	0.009 (0.019)	0.002 (0.018)	-0.016 (0.019)	0.020 (0.022)	0.035* (0.018)	-0.019 (0.024)	0.046* (0.028)
(Employed PT)*(Secondary education)	0.116 (0.101)	0.006 (0.017)	0.009 (0.014)	0.040** (0.017)	0.022 (0.015)	0.019 (0.016)	-0.032* (0.018)	0.004 (0.017)	-0.013 (0.016)	-0.002 (0.020)	0.005 (0.016)	-0.032 (0.023)	-0.004 (0.026)
(Self-employed)*(Elementary education)	0.088 (0.075)	-0.032** (0.013)	0.017 (0.011)	0.067*** (0.012)	0.026** (0.011)	0.016 (0.011)	0.018 (0.013)	-0.017 (0.011)	0.005 (0.012)	0.038*** (0.014)	0.046*** (0.012)	-0.011 (0.015)	0.036** (0.016)
(Self-employed)*(Secondary education)	-0.071 (0.064)	-0.008 (0.012)	0.001 (0.009)	0.029*** (0.010)	0.005 (0.009)	0.007 (0.010)	0.014 (0.012)	-0.023** (0.011)	-0.001 (0.010)	0.014 (0.012)	0.011 (0.011)	-0.032** (0.014)	-0.012 (0.015)
(Employed PT, wants FT)*(Elementary education)	0.021 (0.106)	0.001 (0.018)	-0.021 (0.015)	0.015 (0.019)	0.008 (0.015)	0.038** (0.015)	0.010 (0.019)	-0.013 (0.015)	-0.011 (0.017)	0.082*** (0.020)	-0.001 (0.019)	-0.012 (0.020)	0.027 (0.023)
(Employed PT, wants FT)*(Secondary education)	0.032 (0.094)	0.017 (0.017)	-0.036*** (0.013)	0.012 (0.017)	-0.006 (0.013)	0.011 (0.013)	0.034** (0.017)	-0.011 (0.014)	-0.016 (0.015)	0.016 (0.018)	-0.005 (0.018)	-0.008 (0.019)	-0.019 (0.021)
(Unemployed)*(Elementary education)	-0.074 (0.104)	0.020 (0.018)	-0.022 (0.015)	0.008 (0.017)	0.019 (0.015)	-0.013 (0.015)	0.001 (0.019)	0.011 (0.015)	-0.007 (0.017)	-0.000 (0.019)	0.015 (0.017)	-0.031* (0.018)	-0.014 (0.020)
(Unemployed)*(Secondary education)	0.017 (0.094)	-0.005 (0.016)	0.002 (0.013)	-0.005 (0.015)	0.028** (0.013)	0.003 (0.013)	0.015 (0.018)	0.005 (0.014)	0.008 (0.015)	0.016 (0.017)	-0.010 (0.016)	-0.037** (0.017)	-0.027 (0.018)
Observations	86,178	84,335	81,142	93,378	76,705	66,942	63,644	78,386	75,358	76,698	71,342	68,861	53,054
R-squared	0.241	0.084	0.125	0.124	0.125	0.209	0.079	0.137	0.081	0.231	0.256	0.230	0.341

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for age, marital status, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Year, country, month, and day of the week fixed effects are also included. Respondents in the top percentile of household income for each country-year pair are excluded.

- Fourth, and related to the previous point, the group with the lowest well-being – the unemployed – seem equally unhappy or dissatisfied regardless of their educational level, unlike the OLF and part-time employed. This would appear to run against simple narratives that point to highly educated groups as the most frustrated and/or those driving political protest or dissatisfaction.

b) *Heterogeneities by country type*

The final step in our analysis involves assessing splitting the sample by country type and, *within* each type, investigate whether they display similar patterns when looking at the type of heterogeneities highlighted in section a) above. Overall, the patterns appear to not differ very substantially by country type.

Tables 5a and 5b replicate Table 1 – on gender heterogeneities across labor market status, within the youth subsample – for non-resource-rich and resource-rich countries, respectively. From there, we can primarily observe four main differences by country type. The gap between part-time employed and full-time employed males in evaluative and hedonic well-being is smaller in non-resource-rich countries (columns (1)-(3)). OLF males report higher evaluative well-being relative to those employed full-time in non-resource rich countries (column (1)). On the other hand, the gap between underemployed and full-time employed males is higher across a number of dimensions, particularly those related to hedonic well-being (columns (2) and (3)) and to financial issues (columns (4) and (11)) in non-resource-rich countries. Within the self-employed, underemployed, and unemployed categories, women tend to report higher evaluative and hedonic well-being (columns (1)-(3)) than their male counterparts in non-resource-rich countries.

Tables 6a and 6b replicate Table 2 – on gender heterogeneities across labor market status, now within the prime age subsample – again for the same two types of countries. Here, no particularly notable divergences emerge across country type.

Tables 7a and 7b then replicate Table 3 by country type, focusing on the age heterogeneities across employment status for the male subsample. In non-resource-rich countries, within the full-time employed, youth respondents report higher hedonic well-being (columns (2)-(3)) and greater confidence about the job climate and economic situation (columns (12)-(13)) than prime age respondents – the same pattern is not observable in resource-rich countries. On the other hand, in resource-rich countries, within the underemployed, the youth respondents are closer to the well-being level of the full-time employed than in non-resource-rich countries.

Finally, Tables 8a and 8b replicate Table 4 and focus on the education heterogeneities across employment status, again restricted to the male subsample in each country type. Within the full-time employed, the evaluative well-being gap between those with primary or secondary education and those with tertiary education is greater in non-resource-rich countries (column (1)); additionally, in resource-rich countries, full-time employed respondents with primary or secondary education report higher optimism regarding the job climate and the economy (columns (12)-(13)) than full-time employed respondents with tertiary education. On the other hand, in non-resource-rich countries, within those with primary or secondary education – but not within those with

tertiary education – the OLF report higher well-being across multiple dimensions than the full-time employed; this also happens in resource-rich countries, but to a much lower extent.

Table 5a - Youth respondents, by employment status and gender, non-resource-rich countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	0.433*** (0.054)	-0.074*** (0.010)	0.065*** (0.009)	0.038*** (0.009)	0.095*** (0.008)	0.032*** (0.009)	0.032*** (0.011)	-0.025*** (0.008)	0.025*** (0.009)	0.009 (0.012)	0.045*** (0.010)	0.010 (0.011)	-0.007 (0.013)
Employed PT	0.326*** (0.122)	-0.052** (0.022)	0.059*** (0.019)	-0.006 (0.025)	0.055*** (0.021)	0.026 (0.022)	-0.003 (0.025)	0.025 (0.017)	0.015 (0.023)	-0.028 (0.030)	0.073*** (0.022)	0.034 (0.025)	0.004 (0.031)
Self-employed	-0.105 (0.086)	0.024 (0.015)	-0.004 (0.013)	-0.001 (0.014)	0.021 (0.013)	-0.005 (0.014)	-0.008 (0.016)	0.028** (0.011)	-0.014 (0.015)	-0.032* (0.019)	0.033** (0.015)	-0.024 (0.015)	-0.025 (0.017)
Employed PT, wants FT	-0.136 (0.114)	0.051*** (0.020)	-0.034* (0.017)	-0.068*** (0.019)	0.000 (0.017)	-0.001 (0.016)	-0.039* (0.021)	0.041*** (0.015)	-0.010 (0.018)	-0.059** (0.024)	-0.061*** (0.019)	-0.026 (0.018)	-0.017 (0.022)
Unemployed	-0.591*** (0.083)	0.074*** (0.014)	-0.041*** (0.012)	-0.069*** (0.014)	0.039*** (0.012)	-0.036*** (0.013)	-0.068*** (0.015)	-0.022** (0.010)	-0.028** (0.014)	-0.061*** (0.018)	-0.125*** (0.014)	-0.083*** (0.013)	-0.071*** (0.016)
Female	0.280*** (0.083)	0.033** (0.016)	-0.007 (0.014)	-0.007 (0.014)	-0.022 (0.014)	-0.001 (0.015)	0.001 (0.017)	-0.006 (0.012)	-0.028* (0.016)	-0.040* (0.020)	-0.002 (0.016)	0.007 (0.017)	-0.026 (0.018)
(OLF) * (Female)	-0.072 (0.091)	0.010 (0.017)	-0.009 (0.015)	-0.006 (0.016)	0.006 (0.015)	-0.014 (0.016)	-0.022 (0.018)	-0.031** (0.013)	0.005 (0.017)	-0.001 (0.022)	0.009 (0.017)	-0.019 (0.019)	0.031 (0.020)
(Employed PT) * (Female)	0.121 (0.192)	-0.017 (0.036)	0.034 (0.031)	-0.001 (0.040)	0.012 (0.033)	0.018 (0.035)	0.014 (0.039)	-0.007 (0.028)	0.024 (0.039)	0.060 (0.048)	-0.019 (0.037)	0.011 (0.045)	-0.048 (0.045)
(Self-employed) * (Female)	0.399** (0.180)	-0.079** (0.035)	0.041 (0.029)	-0.035 (0.035)	0.036 (0.029)	-0.008 (0.028)	-0.022 (0.034)	-0.045* (0.026)	0.047 (0.035)	0.014 (0.043)	0.050 (0.034)	0.058 (0.036)	0.070** (0.033)
(Employed PT, wants FT) * (Female)	0.236 (0.218)	-0.066* (0.036)	0.067* (0.036)	0.056 (0.038)	0.029 (0.033)	0.008 (0.032)	-0.019 (0.042)	-0.011 (0.028)	0.014 (0.040)	-0.004 (0.047)	0.095** (0.038)	-0.001 (0.035)	0.032 (0.043)
(Unemployed) * (Female)	0.476*** (0.132)	-0.053** (0.024)	0.047** (0.021)	0.033 (0.023)	-0.003 (0.020)	0.010 (0.022)	0.023 (0.026)	0.013 (0.018)	-0.007 (0.024)	0.016 (0.030)	0.064*** (0.024)	0.007 (0.023)	0.045* (0.026)
Observations	22,971	19,964	19,554	21,613	17,449	16,302	17,255	20,007	17,638	19,565	19,294	17,901	13,492
R-squared	0.164	0.089	0.075	0.127	0.060	0.090	0.060	0.092	0.076	0.114	0.183	0.081	0.112

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Controls for age, gender, marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 5b - Youth respondents, by employment status and gender, resource-rich countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	0.138** (0.062)	-0.048*** (0.012)	0.034*** (0.010)	0.062*** (0.012)	0.063*** (0.010)	0.012 (0.011)	0.022* (0.013)	-0.067*** (0.012)	-0.001 (0.011)	0.005 (0.012)	0.051*** (0.014)	-0.015 (0.018)	0.022 (0.019)
Employed PT	0.117 (0.123)	-0.033 (0.022)	0.009 (0.018)	0.100*** (0.019)	0.036* (0.018)	0.008 (0.019)	0.001 (0.025)	0.024 (0.020)	0.029 (0.019)	0.031 (0.025)	0.062*** (0.022)	0.024 (0.030)	-0.024 (0.033)
Self-employed	-0.037 (0.111)	0.013 (0.019)	-0.012 (0.016)	0.023 (0.019)	-0.025 (0.016)	-0.016 (0.016)	-0.008 (0.022)	0.048*** (0.018)	-0.013 (0.017)	0.011 (0.022)	0.011 (0.021)	-0.042* (0.024)	-0.006 (0.027)
Employed PT, wants FT	-0.116 (0.116)	0.004 (0.020)	0.025 (0.016)	-0.011 (0.022)	0.019 (0.016)	-0.024 (0.018)	-0.017 (0.024)	0.039** (0.018)	0.041** (0.018)	0.022 (0.023)	-0.012 (0.022)	-0.024 (0.026)	-0.037 (0.028)
Unemployed	-0.529*** (0.087)	0.063*** (0.017)	-0.060*** (0.015)	-0.013 (0.016)	0.007 (0.013)	-0.038*** (0.015)	-0.045** (0.018)	-0.037** (0.015)	-0.038** (0.015)	-0.052*** (0.017)	-0.122*** (0.020)	-0.122*** (0.022)	-0.046* (0.024)
Female	0.376*** (0.085)	0.032* (0.019)	0.010 (0.015)	0.031* (0.018)	-0.017 (0.016)	-0.005 (0.015)	-0.006 (0.020)	-0.014 (0.018)	-0.026 (0.016)	-0.003 (0.017)	0.024 (0.020)	-0.095*** (0.027)	-0.077*** (0.029)
(OLF) * (Female)	-0.182* (0.096)	-0.005 (0.021)	-0.012 (0.017)	-0.035* (0.020)	0.017 (0.017)	0.013 (0.017)	0.008 (0.022)	-0.015 (0.020)	0.018 (0.018)	-0.025 (0.019)	-0.033 (0.023)	0.071** (0.030)	0.021 (0.033)
(Employed PT) * (Female)	0.168 (0.179)	0.032 (0.038)	-0.021 (0.029)	-0.071** (0.033)	-0.041 (0.032)	-0.017 (0.032)	-0.006 (0.042)	0.009 (0.033)	-0.042 (0.032)	-0.096** (0.042)	-0.001 (0.037)	0.077 (0.052)	0.082 (0.052)
(Self-employed) * (Female)	-0.132 (0.241)	-0.011 (0.042)	0.017 (0.035)	-0.048 (0.041)	0.070* (0.037)	0.016 (0.037)	0.060 (0.055)	-0.002 (0.043)	-0.042 (0.040)	-0.013 (0.056)	0.025 (0.049)	0.190*** (0.059)	0.104 (0.069)
(Employed PT, wants FT) * (Female)	0.033 (0.181)	0.043 (0.038)	-0.028 (0.029)	-0.072* (0.038)	0.022 (0.029)	0.011 (0.031)	-0.005 (0.043)	-0.038 (0.034)	-0.056* (0.032)	-0.051 (0.039)	-0.012 (0.037)	0.040 (0.047)	0.057 (0.050)
(Unemployed) * (Female)	0.201 (0.134)	-0.030 (0.027)	0.032 (0.022)	-0.059** (0.026)	0.001 (0.023)	0.047** (0.023)	0.031 (0.030)	-0.038 (0.025)	0.021 (0.025)	-0.012 (0.028)	0.032 (0.031)	0.121*** (0.036)	0.070* (0.039)
Observations	16,784	14,104	13,420	16,282	13,177	11,483	9,326	12,265	12,624	12,320	9,620	9,137	7,797
R-squared	0.188	0.117	0.106	0.118	0.101	0.217	0.121	0.121	0.091	0.284	0.182	0.160	0.245

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Controls for age, gender, marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 6a – Prime age respondents, by employment status and gender, non-resource-rich countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.181*** (0.052)	0.044*** (0.009)	-0.041*** (0.008)	-0.029*** (0.010)	-0.077*** (0.009)	-0.012 (0.008)	-0.034*** (0.009)	-0.054*** (0.006)	-0.038*** (0.009)	-0.032*** (0.011)	-0.030*** (0.009)	-0.025*** (0.008)	-0.021** (0.010)
Employed PT	0.138* (0.073)	0.007 (0.013)	0.013 (0.011)	0.023* (0.013)	-0.013 (0.013)	0.013 (0.012)	0.000 (0.013)	0.014 (0.010)	-0.022 (0.014)	-0.054*** (0.016)	0.055*** (0.014)	0.027* (0.014)	0.001 (0.016)
Self-employed	-0.031 (0.041)	0.004 (0.007)	-0.001 (0.006)	0.029*** (0.007)	-0.002 (0.006)	0.000 (0.006)	-0.005 (0.007)	0.024*** (0.006)	-0.015** (0.007)	0.004 (0.009)	0.025*** (0.007)	0.000 (0.007)	-0.007 (0.008)
Employed PT, wants FT	-0.361*** (0.070)	0.049*** (0.012)	-0.032*** (0.010)	-0.075*** (0.012)	-0.028** (0.011)	-0.030*** (0.010)	-0.067*** (0.012)	-0.000 (0.009)	-0.025** (0.012)	-0.052*** (0.014)	-0.079*** (0.011)	-0.044*** (0.009)	-0.014 (0.012)
Unemployed	-0.824*** (0.064)	0.121*** (0.011)	-0.106*** (0.010)	-0.124*** (0.012)	-0.050*** (0.010)	-0.039*** (0.009)	-0.101*** (0.012)	-0.038*** (0.008)	-0.053*** (0.012)	-0.059*** (0.013)	-0.156*** (0.010)	-0.063*** (0.009)	-0.053*** (0.012)
Female	0.282*** (0.043)	0.031*** (0.008)	0.002 (0.007)	-0.003 (0.007)	-0.039*** (0.007)	0.013* (0.007)	0.014* (0.008)	-0.017*** (0.006)	-0.002 (0.008)	-0.024** (0.010)	0.044*** (0.008)	0.019** (0.008)	-0.002 (0.009)
(OLF) * (Female)	0.340*** (0.066)	-0.070*** (0.012)	0.049*** (0.010)	0.054*** (0.012)	0.098*** (0.011)	0.046*** (0.011)	0.030** (0.012)	0.003 (0.009)	0.045*** (0.012)	0.049*** (0.014)	0.037*** (0.012)	0.016 (0.012)	0.017 (0.013)
(Employed PT) * (Female)	0.323*** (0.108)	-0.007 (0.020)	0.002 (0.017)	0.008 (0.019)	0.010 (0.019)	0.037** (0.018)	-0.001 (0.020)	0.006 (0.015)	0.069*** (0.020)	0.055** (0.024)	0.033* (0.020)	0.021 (0.022)	0.017 (0.023)
(Self-employed) * (Female)	0.154* (0.092)	0.029* (0.015)	-0.017 (0.013)	-0.017 (0.014)	-0.004 (0.014)	-0.010 (0.015)	0.004 (0.015)	-0.021* (0.012)	0.034** (0.016)	0.033* (0.019)	-0.012 (0.015)	-0.001 (0.016)	0.011 (0.017)
(Employed PT, wants FT) * (Female)	0.376*** (0.125)	-0.018 (0.021)	0.032* (0.019)	0.033 (0.022)	0.006 (0.022)	0.055*** (0.020)	0.021 (0.022)	0.024 (0.017)	0.001 (0.023)	0.072*** (0.025)	0.060*** (0.021)	0.050** (0.020)	0.012 (0.022)
(Unemployed) * (Female)	0.536*** (0.094)	-0.034** (0.016)	0.069*** (0.014)	0.031* (0.016)	0.020 (0.015)	0.035** (0.014)	0.021 (0.017)	0.019 (0.012)	0.006 (0.017)	0.032 (0.020)	0.050*** (0.015)	0.026* (0.014)	0.022 (0.017)
Observations	52,442	46,490	45,404	50,184	40,534	37,852	40,011	46,108	40,564	44,621	43,463	41,491	29,486
R-squared	0.127	0.069	0.061	0.124	0.079	0.091	0.060	0.108	0.054	0.111	0.151	0.067	0.115

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for age, marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 6b – Prime age respondents, by employment status and gender, resource-rich countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.300*** (0.048)	0.001 (0.009)	-0.049*** (0.007)	0.012 (0.008)	-0.012 (0.007)	-0.003 (0.008)	0.004 (0.009)	-0.048*** (0.008)	-0.024*** (0.008)	-0.018** (0.008)	-0.020** (0.009)	-0.054*** (0.011)	-0.027** (0.012)
Employed PT	0.096 (0.066)	-0.036*** (0.012)	-0.007 (0.010)	0.025** (0.012)	-0.009 (0.011)	0.016 (0.011)	0.024** (0.012)	0.012 (0.011)	0.016 (0.012)	0.004 (0.014)	0.052*** (0.014)	0.014 (0.018)	-0.016 (0.019)
Self-employed	-0.048 (0.047)	0.020** (0.009)	-0.030*** (0.007)	0.034*** (0.008)	-0.007 (0.007)	-0.006 (0.007)	0.020** (0.009)	0.014* (0.008)	-0.004 (0.008)	-0.013 (0.009)	0.017* (0.009)	-0.040*** (0.012)	-0.043*** (0.012)
Employed PT, wants FT	-0.405*** (0.060)	0.039*** (0.011)	-0.025*** (0.009)	-0.059*** (0.011)	-0.015 (0.009)	-0.008 (0.010)	0.009 (0.011)	0.014 (0.010)	-0.006 (0.010)	-0.020* (0.011)	-0.075*** (0.013)	-0.050*** (0.015)	-0.025 (0.016)
Unemployed	-0.752*** (0.068)	0.097*** (0.012)	-0.106*** (0.010)	-0.081*** (0.012)	-0.021** (0.010)	-0.057*** (0.011)	-0.044*** (0.013)	-0.047*** (0.010)	-0.059*** (0.012)	-0.050*** (0.012)	-0.187*** (0.013)	-0.125*** (0.015)	-0.062*** (0.015)
Female	0.246*** (0.037)	0.034*** (0.008)	-0.010 (0.006)	0.024*** (0.007)	-0.043*** (0.006)	0.002 (0.006)	0.027*** (0.007)	-0.010 (0.007)	-0.012* (0.007)	-0.022*** (0.007)	0.007 (0.008)	-0.027** (0.011)	-0.047*** (0.011)
(OLF) * (Female)	0.275*** (0.061)	-0.015 (0.012)	0.035*** (0.010)	-0.007 (0.011)	0.024** (0.010)	0.018* (0.010)	0.007 (0.012)	-0.036*** (0.011)	0.012 (0.011)	0.018 (0.012)	0.040*** (0.013)	0.062*** (0.016)	0.041** (0.017)
(Employed PT) * (Female)	0.166* (0.100)	0.010 (0.019)	0.017 (0.016)	-0.013 (0.018)	-0.002 (0.017)	0.012 (0.017)	-0.009 (0.019)	-0.028 (0.018)	0.014 (0.017)	0.008 (0.021)	0.019 (0.021)	0.011 (0.027)	0.020 (0.029)
(Self-employed) * (Female)	0.192* (0.116)	-0.004 (0.021)	0.031* (0.018)	-0.063*** (0.019)	-0.029 (0.018)	0.012 (0.017)	-0.001 (0.021)	-0.015 (0.018)	0.016 (0.019)	0.007 (0.024)	0.029 (0.022)	0.054* (0.028)	0.054* (0.028)
(Employed PT, wants FT) * (Female)	0.467*** (0.106)	-0.002 (0.020)	0.012 (0.016)	-0.037* (0.020)	-0.013 (0.018)	-0.001 (0.018)	-0.042** (0.021)	0.013 (0.018)	0.000 (0.019)	0.012 (0.022)	0.039* (0.022)	0.043 (0.027)	0.019 (0.028)
(Unemployed) * (Female)	0.329*** (0.093)	-0.011 (0.017)	0.059*** (0.014)	-0.015 (0.016)	0.003 (0.015)	0.037** (0.015)	-0.026 (0.018)	-0.006 (0.015)	0.017 (0.017)	0.020 (0.018)	0.086*** (0.018)	0.072*** (0.021)	0.032 (0.022)
Observations	52,904	45,173	42,872	51,441	42,969	34,927	29,851	38,757	41,151	38,850	32,481	31,074	26,718
R-squared	0.215	0.107	0.107	0.155	0.116	0.234	0.092	0.109	0.063	0.285	0.184	0.147	0.281

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for age, marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 7a – Male respondents, by employment status and age group, non-resource-rich countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.178*** (0.052)	0.042*** (0.009)	-0.035*** (0.008)	-0.026*** (0.010)	-0.081*** (0.009)	-0.009 (0.008)	-0.025*** (0.009)	-0.049*** (0.006)	-0.032*** (0.009)	-0.029*** (0.011)	-0.022** (0.009)	-0.019** (0.008)	-0.013 (0.010)
Employed PT	0.172** (0.073)	0.003 (0.013)	0.018 (0.011)	0.026* (0.013)	-0.011 (0.013)	0.013 (0.012)	0.005 (0.013)	0.014 (0.010)	-0.019 (0.014)	-0.053*** (0.016)	0.061*** (0.016)	0.031** (0.014)	0.008 (0.016)
Self-employed	-0.028 (0.041)	0.006 (0.007)	-0.000 (0.006)	0.031*** (0.007)	-0.006 (0.006)	-0.000 (0.006)	-0.003 (0.007)	0.024*** (0.006)	-0.016** (0.007)	0.004 (0.009)	0.028*** (0.007)	-0.000 (0.007)	-0.005 (0.008)
Employed PT, wants FT	-0.290*** (0.070)	0.049*** (0.012)	-0.026** (0.010)	-0.070*** (0.012)	-0.027** (0.011)	-0.024** (0.010)	-0.061*** (0.012)	-0.003 (0.009)	-0.021* (0.012)	-0.046*** (0.014)	-0.060*** (0.011)	-0.037*** (0.009)	-0.005 (0.012)
Unemployed	-0.759*** (0.064)	0.118*** (0.011)	-0.096*** (0.010)	-0.124*** (0.012)	-0.044*** (0.010)	-0.034*** (0.009)	-0.096*** (0.012)	-0.042*** (0.008)	-0.049*** (0.012)	-0.056*** (0.014)	-0.138*** (0.010)	-0.055*** (0.009)	-0.045*** (0.012)
Youth (15-24)	0.369*** (0.055)	-0.037*** (0.010)	0.032*** (0.009)	0.012 (0.010)	-0.004 (0.009)	0.015 (0.009)	-0.005 (0.011)	-0.020*** (0.008)	0.037*** (0.010)	0.006 (0.012)	0.072*** (0.010)	0.049*** (0.011)	0.037*** (0.012)
Older (55+)	-0.113 (0.081)	0.015 (0.014)	0.005 (0.011)	0.033** (0.015)	-0.060*** (0.014)	0.029** (0.013)	0.026** (0.013)	0.029** (0.011)	-0.005 (0.015)	0.032* (0.017)	0.038*** (0.014)	0.026* (0.015)	-0.020 (0.015)
(OLF)*(Youth (15-24))	0.625*** (0.074)	-0.116*** (0.013)	0.100*** (0.012)	0.065*** (0.013)	0.172*** (0.012)	0.039*** (0.012)	0.057*** (0.014)	0.027*** (0.010)	0.058*** (0.013)	0.034** (0.016)	0.067*** (0.013)	0.030** (0.014)	0.007 (0.016)
(OLF)*(Older (55+))	0.200* (0.102)	-0.074*** (0.018)	0.005 (0.014)	0.030* (0.018)	0.002 (0.018)	0.034** (0.016)	0.068*** (0.016)	-0.002 (0.014)	0.027 (0.019)	0.042** (0.021)	0.001 (0.017)	-0.016 (0.018)	0.021 (0.019)
(Employed PT)*(Youth (15-24))	0.137 (0.142)	-0.044* (0.026)	0.036* (0.022)	-0.029 (0.028)	0.047* (0.024)	0.009 (0.025)	-0.011 (0.028)	0.012 (0.020)	0.031 (0.027)	0.026 (0.034)	0.010 (0.026)	0.003 (0.029)	-0.012 (0.035)
(Employed PT)*(Older (55+))	0.079 (0.179)	-0.063** (0.028)	-0.007 (0.025)	-0.001 (0.029)	-0.016 (0.031)	0.012 (0.026)	0.045* (0.026)	-0.009 (0.024)	0.039 (0.030)	0.097*** (0.036)	-0.008 (0.028)	-0.019 (0.031)	0.039 (0.035)
(Self-employed)*(Youth (15-24))	-0.062 (0.094)	0.019 (0.017)	-0.005 (0.014)	-0.032** (0.016)	0.024* (0.014)	-0.004 (0.015)	-0.002 (0.018)	0.005 (0.012)	0.004 (0.016)	-0.032 (0.021)	0.005 (0.016)	-0.023 (0.016)	-0.016 (0.019)
(Self-employed)*(Older (55+))	0.053 (0.114)	-0.018 (0.019)	-0.022 (0.016)	-0.007 (0.019)	-0.012 (0.019)	-0.013 (0.018)	0.029* (0.018)	-0.035** (0.015)	0.027 (0.020)	0.033 (0.023)	-0.031* (0.019)	-0.026 (0.020)	0.023 (0.020)
(Employed PT, wants FT)*(Youth (15-24))	0.180 (0.133)	0.002 (0.023)	-0.008 (0.020)	0.002 (0.022)	0.026 (0.020)	0.024 (0.019)	0.020 (0.024)	0.045*** (0.017)	0.012 (0.022)	-0.013 (0.027)	-0.006 (0.021)	0.011 (0.020)	-0.008 (0.025)
(Employed PT, wants FT)*(Older (55+))	0.229 (0.222)	0.030 (0.035)	-0.014 (0.031)	0.027 (0.034)	0.008 (0.034)	0.053* (0.030)	0.088*** (0.031)	-0.030 (0.024)	-0.033 (0.035)	0.099** (0.040)	0.018 (0.034)	0.023 (0.031)	0.009 (0.033)
(Unemployed)*(Youth (15-24))	0.237** (0.103)	-0.049*** (0.018)	0.061*** (0.015)	0.055*** (0.018)	0.089*** (0.016)	-0.001 (0.016)	0.028 (0.019)	0.021* (0.012)	0.023 (0.018)	-0.005 (0.022)	0.015 (0.017)	-0.028* (0.015)	-0.024 (0.019)
(Unemployed)*(Older (55+))	-0.184 (0.192)	0.033 (0.034)	-0.003 (0.026)	-0.072** (0.035)	-0.059* (0.033)	-0.002 (0.028)	0.068** (0.032)	-0.031 (0.022)	-0.027 (0.032)	-0.030 (0.040)	-0.087*** (0.028)	-0.034 (0.027)	0.016 (0.035)
Observations	43,436	38,301	37,446	41,238	33,190	31,447	32,890	37,993	33,359	36,914	36,098	34,845	24,878
R-squared	0.152	0.090	0.095	0.133	0.126	0.096	0.070	0.079	0.073	0.113	0.189	0.082	0.121

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 7b – Male respondents, by employment status and age group, resource-rich countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.277*** (0.048)	0.002 (0.009)	-0.043*** (0.007)	0.005 (0.008)	-0.016** (0.007)	0.005 (0.008)	0.004 (0.009)	-0.047*** (0.008)	-0.026*** (0.008)	-0.016* (0.008)	-0.018** (0.009)	-0.047*** (0.011)	-0.032*** (0.012)
Employed PT	0.138** (0.067)	-0.039*** (0.012)	0.001 (0.010)	0.023* (0.012)	-0.009 (0.011)	0.023** (0.011)	0.023* (0.012)	0.015 (0.011)	0.016 (0.012)	0.003 (0.014)	0.057*** (0.014)	0.022 (0.018)	-0.013 (0.019)
Self-employed	-0.001 (0.048)	0.027*** (0.009)	-0.026*** (0.007)	0.019** (0.008)	-0.010 (0.007)	0.003 (0.007)	0.015* (0.009)	0.011 (0.008)	-0.006 (0.008)	-0.015* (0.009)	0.020** (0.009)	-0.037*** (0.012)	-0.053*** (0.013)
Employed PT, wants FT	-0.365*** (0.060)	0.045*** (0.011)	-0.020** (0.009)	-0.068*** (0.011)	-0.017* (0.009)	-0.000 (0.010)	0.004 (0.011)	0.012 (0.010)	-0.008 (0.010)	-0.022* (0.011)	-0.072*** (0.013)	-0.043*** (0.015)	-0.030* (0.016)
Unemployed	-0.699*** (0.069)	0.095*** (0.012)	-0.099*** (0.010)	-0.092*** (0.012)	-0.020* (0.011)	-0.045*** (0.011)	-0.048*** (0.013)	-0.047*** (0.010)	-0.059*** (0.012)	-0.049*** (0.012)	-0.184*** (0.013)	-0.116*** (0.015)	-0.067*** (0.015)
Youth (15-24)	0.225*** (0.056)	-0.012 (0.011)	-0.002 (0.009)	-0.001 (0.011)	0.002 (0.009)	0.017* (0.009)	-0.009 (0.012)	-0.007 (0.011)	0.017* (0.010)	-0.006 (0.010)	0.028** (0.012)	0.014 (0.015)	-0.002 (0.016)
Older (55+)	0.101 (0.075)	-0.044*** (0.014)	0.027** (0.011)	0.043*** (0.013)	-0.012 (0.013)	0.019 (0.013)	0.006 (0.015)	0.003 (0.016)	-0.004 (0.013)	0.016 (0.013)	0.010 (0.015)	0.027 (0.020)	0.060*** (0.019)
(OLF)*(Youth (15-24))	0.491*** (0.077)	-0.068*** (0.015)	0.089*** (0.012)	0.065*** (0.014)	0.101*** (0.012)	0.019 (0.013)	0.034** (0.015)	-0.023* (0.014)	0.039*** (0.013)	0.030** (0.014)	0.081*** (0.016)	0.037* (0.021)	0.065*** (0.022)
(OLF)*(Older (55+))	-0.066 (0.110)	0.028 (0.020)	-0.017 (0.016)	0.027 (0.019)	-0.109*** (0.019)	-0.016 (0.018)	0.053*** (0.020)	0.009 (0.021)	0.032* (0.018)	0.002 (0.019)	-0.001 (0.022)	0.002 (0.028)	-0.011 (0.030)
(Employed PT)*(Youth (15-24))	0.063 (0.139)	0.001 (0.025)	0.010 (0.020)	0.086*** (0.023)	0.051** (0.021)	-0.005 (0.022)	-0.014 (0.028)	0.003 (0.023)	0.018 (0.022)	0.027 (0.028)	0.009 (0.026)	-0.001 (0.035)	-0.007 (0.038)
(Employed PT)*(Older (55+))	-0.115 (0.191)	0.034 (0.031)	0.017 (0.026)	0.026 (0.034)	-0.084*** (0.031)	-0.011 (0.030)	0.030 (0.032)	0.026 (0.035)	-0.010 (0.032)	-0.007 (0.041)	0.031 (0.034)	-0.005 (0.048)	-0.036 (0.050)
(Self-employed)*(Youth (15-24))	0.154 (0.122)	-0.011 (0.020)	0.012 (0.017)	0.017 (0.020)	-0.012 (0.017)	-0.009 (0.017)	-0.029 (0.023)	0.029 (0.019)	-0.006 (0.019)	0.014 (0.023)	-0.003 (0.022)	-0.009 (0.026)	0.044 (0.029)
(Self-employed)*(Older (55+))	-0.143 (0.154)	-0.004 (0.027)	-0.000 (0.020)	0.017 (0.025)	-0.022 (0.025)	0.011 (0.024)	0.040 (0.027)	0.025 (0.026)	0.006 (0.022)	0.026 (0.026)	0.057** (0.026)	0.047 (0.035)	0.065* (0.038)
(Employed PT, wants FT)*(Youth (15-24))	0.348*** (0.128)	-0.041* (0.023)	0.042** (0.018)	0.068*** (0.024)	0.039** (0.018)	-0.012 (0.020)	-0.023 (0.026)	0.020 (0.020)	0.048*** (0.020)	0.038 (0.025)	0.065*** (0.025)	0.014 (0.030)	-0.004 (0.032)
(Employed PT, wants FT)*(Older (55+))	-0.049 (0.221)	-0.027 (0.040)	0.023 (0.030)	-0.037 (0.043)	-0.002 (0.035)	-0.023 (0.037)	0.058* (0.034)	0.021 (0.041)	-0.018 (0.035)	0.056 (0.045)	0.080* (0.043)	-0.016 (0.052)	-0.018 (0.054)
(Unemployed)*(Youth (15-24))	0.275** (0.108)	-0.054*** (0.020)	0.052*** (0.017)	0.092*** (0.020)	0.048*** (0.017)	0.021 (0.018)	0.015 (0.022)	0.004 (0.018)	0.033* (0.019)	-0.001 (0.021)	0.069*** (0.024)	-0.002 (0.026)	0.028 (0.028)
(Unemployed)*(Older (55+))	-0.085 (0.245)	0.047 (0.038)	0.023 (0.036)	0.001 (0.040)	-0.028 (0.036)	-0.059* (0.034)	0.039 (0.035)	0.044 (0.043)	0.016 (0.036)	0.036 (0.042)	0.040 (0.042)	-0.010 (0.049)	0.035 (0.053)
Observations	42,742	36,478	34,675	41,604	34,759	28,453	23,821	31,544	33,481	31,503	26,804	25,945	22,011
R-squared	0.228	0.098	0.123	0.125	0.126	0.261	0.093	0.106	0.068	0.291	0.193	0.152	0.269

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for marital status, education, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 8a – Male respondents, by employment status and education group, non-resource-rich countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.275*** (0.088)	0.008 (0.015)	-0.023* (0.014)	-0.021 (0.015)	-0.011 (0.013)	-0.020 (0.015)	-0.035** (0.017)	-0.036*** (0.013)	-0.033** (0.016)	-0.066*** (0.019)	-0.064*** (0.016)	-0.027 (0.017)	-0.037** (0.018)
Employed PT	-0.059 (0.149)	0.033 (0.025)	-0.003 (0.021)	-0.074*** (0.024)	-0.025 (0.022)	0.002 (0.021)	0.006 (0.025)	0.045** (0.022)	0.007 (0.027)	-0.023 (0.031)	-0.008 (0.025)	-0.010 (0.028)	-0.008 (0.031)
Self-employed	-0.187** (0.087)	0.019 (0.014)	-0.007 (0.012)	-0.003 (0.011)	-0.015 (0.012)	0.006 (0.014)	0.004 (0.015)	0.042*** (0.013)	-0.018 (0.014)	0.007 (0.018)	-0.000 (0.014)	0.016 (0.016)	-0.003 (0.015)
Employed PT, wants FT	-0.378*** (0.144)	0.038 (0.026)	0.014 (0.022)	-0.083*** (0.023)	-0.010 (0.022)	-0.061*** (0.020)	-0.096*** (0.026)	0.031 (0.021)	-0.041 (0.025)	-0.116*** (0.028)	-0.083*** (0.024)	-0.053** (0.023)	-0.005 (0.027)
Unemployed	-0.709*** (0.126)	0.109*** (0.023)	-0.089*** (0.020)	-0.063*** (0.020)	-0.063*** (0.017)	-0.044** (0.019)	-0.080*** (0.027)	-0.046** (0.018)	-0.048** (0.021)	-0.085*** (0.028)	-0.178*** (0.022)	-0.044** (0.021)	-0.062*** (0.023)
Elementary education (<= 8 years)	-1.038*** (0.057)	0.047*** (0.010)	-0.079*** (0.009)	-0.136*** (0.010)	-0.088*** (0.009)	0.037*** (0.010)	-0.006 (0.011)	-0.132*** (0.008)	-0.071*** (0.010)	0.016 (0.013)	-0.169*** (0.010)	-0.019* (0.010)	-0.005 (0.012)
Secondary education (9-15 years)	-0.599*** (0.047)	0.025*** (0.008)	-0.043*** (0.007)	-0.056*** (0.007)	-0.054*** (0.007)	0.015* (0.008)	-0.008 (0.009)	-0.068*** (0.008)	-0.037*** (0.008)	-0.002 (0.011)	-0.095*** (0.009)	-0.005 (0.009)	0.014 (0.010)
(OLF)*(Elementary education (<= 8 years))	0.426*** (0.101)	-0.015 (0.018)	0.018 (0.016)	0.037** (0.017)	-0.024 (0.016)	0.023 (0.017)	0.033* (0.020)	0.009 (0.015)	0.024 (0.019)	0.081*** (0.022)	0.066*** (0.018)	0.024 (0.019)	0.039* (0.021)
(OLF)*(Secondary education (9-15 years))	0.475*** (0.095)	-0.049*** (0.017)	0.054*** (0.015)	0.032** (0.016)	0.041*** (0.015)	0.045*** (0.016)	0.052*** (0.019)	-0.009 (0.014)	0.038** (0.017)	0.046** (0.021)	0.090*** (0.017)	0.024 (0.019)	0.031 (0.020)
(Employed PT)*(Elementary education)	0.368*** (0.179)	-0.063** (0.030)	0.031 (0.025)	0.132*** (0.030)	0.032 (0.028)	-0.004 (0.027)	0.027 (0.030)	-0.016 (0.026)	-0.017 (0.032)	0.001 (0.038)	0.089*** (0.030)	0.053 (0.033)	0.031 (0.037)
(Employed PT)*(Secondary education)	0.288* (0.168)	-0.052* (0.029)	0.038 (0.024)	0.080*** (0.029)	0.026 (0.026)	0.035 (0.025)	-0.027 (0.030)	-0.045* (0.025)	-0.009 (0.030)	-0.010 (0.037)	0.079*** (0.029)	0.040 (0.033)	0.015 (0.036)
(Self-employed)*(Elementary education)	0.288*** (0.107)	-0.020 (0.018)	0.005 (0.015)	0.047*** (0.016)	0.019 (0.015)	-0.018 (0.017)	-0.013 (0.018)	-0.013 (0.015)	0.001 (0.018)	0.008 (0.022)	0.042** (0.018)	-0.018 (0.019)	0.013 (0.019)
(Self-employed)*(Secondary education)	0.099 (0.099)	-0.007 (0.016)	0.006 (0.014)	0.018 (0.014)	0.018 (0.013)	-0.003 (0.015)	-0.002 (0.017)	-0.030** (0.015)	0.014 (0.016)	-0.015 (0.021)	0.023 (0.016)	-0.030* (0.018)	-0.015 (0.018)
(Employed PT, wants FT)*(Elementary education)	0.180 (0.171)	0.016 (0.031)	-0.053** (0.026)	0.019 (0.029)	-0.013 (0.026)	0.048** (0.024)	0.033 (0.031)	-0.024 (0.023)	0.021 (0.030)	0.117*** (0.033)	0.031 (0.028)	0.033 (0.026)	0.024 (0.031)
(Employed PT, wants FT)*(Secondary education)	0.184 (0.166)	0.022 (0.030)	-0.049* (0.025)	0.021 (0.027)	-0.019 (0.025)	0.054** (0.023)	0.069** (0.029)	-0.026 (0.023)	0.021 (0.029)	0.053* (0.032)	0.021 (0.028)	0.017 (0.026)	-0.026 (0.031)
(Unemployed)*(Elementary education)	-0.010 (0.149)	0.004 (0.027)	-0.000 (0.023)	-0.046* (0.025)	0.023 (0.022)	0.002 (0.023)	-0.006 (0.030)	0.016 (0.020)	0.001 (0.026)	0.039 (0.033)	0.056** (0.025)	-0.007 (0.024)	0.036 (0.028)
(Unemployed)*(Secondary education)	0.035 (0.141)	-0.013 (0.025)	0.025 (0.022)	-0.046** (0.022)	0.061*** (0.019)	0.012 (0.022)	-0.001 (0.029)	0.005 (0.019)	0.006 (0.024)	0.022 (0.031)	0.032 (0.025)	-0.045* (0.023)	-0.010 (0.026)
Observations	43,436	38,301	37,446	41,238	33,190	31,447	32,890	37,993	33,359	36,914	36,098	34,845	24,878
R-squared	0.151	0.087	0.093	0.132	0.124	0.096	0.070	0.079	0.072	0.113	0.190	0.082	0.122

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on a OLS regression for the 2010-2018 period. Additional controls for age, marital status, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Table 8b – Male respondents, by employment status and education group, resource-rich countries

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Evaluative well-being	Negative affect	Positive affect	Food and shelter index	Personal Health	Community basics	Community attachment	Civic engagement	Social life	Youth development	Financial life	Job climate	Economic confidence
OLF	-0.149** (0.065)	-0.022* (0.013)	-0.022** (0.010)	-0.013 (0.013)	0.010 (0.009)	-0.002 (0.011)	-0.019 (0.014)	-0.042*** (0.013)	-0.006 (0.012)	-0.008 (0.011)	0.018 (0.012)	-0.011 (0.017)	-0.010 (0.017)
Employed PT	0.112 (0.107)	-0.053*** (0.016)	0.004 (0.016)	0.007 (0.020)	-0.025 (0.017)	-0.002 (0.017)	0.034* (0.019)	-0.005 (0.020)	0.020 (0.017)	-0.006 (0.015)	0.076*** (0.027)	0.082*** (0.027)	-0.034 (0.030)
Self-employed	0.072 (0.069)	0.038** (0.015)	-0.021* (0.011)	-0.019 (0.014)	-0.008 (0.012)	-0.025** (0.011)	-0.031* (0.016)	0.024 (0.015)	-0.011 (0.013)	-0.048*** (0.013)	-0.008 (0.013)	-0.029 (0.020)	-0.054*** (0.020)
Employed PT, wants FT	-0.240*** (0.091)	0.033* (0.018)	-0.001 (0.013)	-0.055*** (0.018)	-0.017 (0.014)	-0.019 (0.014)	-0.013 (0.018)	0.017 (0.016)	0.026* (0.014)	-0.032* (0.018)	-0.038* (0.020)	-0.032 (0.023)	-0.038 (0.024)
Unemployed	-0.664*** (0.109)	0.085*** (0.020)	-0.065*** (0.016)	-0.107*** (0.020)	-0.030* (0.017)	-0.026* (0.016)	-0.080*** (0.020)	-0.037** (0.019)	-0.069*** (0.019)	-0.037** (0.018)	-0.141*** (0.021)	-0.077*** (0.023)	-0.011 (0.023)
Elementary education (<= 8 years)	-0.610*** (0.066)	0.045*** (0.012)	-0.057*** (0.010)	-0.143*** (0.012)	-0.101*** (0.010)	0.040*** (0.010)	-0.016 (0.012)	-0.052*** (0.011)	-0.040*** (0.011)	0.015 (0.011)	-0.090*** (0.015)	0.087*** (0.016)	0.076*** (0.018)
Secondary education (9-15 years)	-0.339*** (0.035)	0.007 (0.005)	-0.014*** (0.005)	-0.082*** (0.007)	-0.035*** (0.006)	0.030*** (0.005)	0.002 (0.007)	-0.027*** (0.007)	-0.006 (0.006)	-0.002 (0.005)	-0.029*** (0.007)	0.072*** (0.010)	0.044*** (0.009)
(OLF)*(Elementary education (<= 8 years))	-0.163 (0.101)	0.028 (0.019)	-0.018 (0.016)	0.049*** (0.018)	-0.036** (0.016)	0.008 (0.017)	0.060*** (0.020)	-0.013 (0.018)	-0.014 (0.018)	-0.006 (0.018)	-0.052** (0.022)	-0.075*** (0.026)	-0.039 (0.028)
(OLF)*(Secondary education (9-15 years))	0.131* (0.075)	-0.003 (0.015)	0.018 (0.012)	0.049*** (0.014)	0.016 (0.011)	0.022* (0.012)	0.049*** (0.016)	-0.023 (0.015)	-0.001 (0.014)	0.006 (0.013)	-0.000 (0.015)	-0.015 (0.020)	0.003 (0.020)
(Employed PT)*(Elementary education)	-0.115 (0.163)	0.019 (0.028)	0.002 (0.024)	0.061** (0.028)	0.019 (0.026)	0.050** (0.025)	-0.000 (0.030)	-0.002 (0.027)	-0.010 (0.027)	0.028 (0.032)	-0.013 (0.031)	-0.081** (0.041)	0.039 (0.046)
(Employed PT)*(Secondary education)	0.074 (0.127)	0.032 (0.023)	-0.011 (0.019)	0.040* (0.023)	0.027 (0.020)	0.015 (0.020)	-0.020 (0.023)	0.043* (0.024)	-0.001 (0.020)	0.010 (0.024)	-0.032 (0.020)	-0.084** (0.033)	-0.007 (0.036)
(Self-employed)*(Elementary education)	-0.069 (0.119)	-0.020 (0.022)	-0.009 (0.018)	0.080*** (0.021)	0.008 (0.018)	0.068*** (0.023)	0.080*** (0.023)	-0.015 (0.021)	0.011 (0.020)	0.065*** (0.022)	0.065*** (0.023)	0.003 (0.029)	0.048 (0.031)
(Self-employed)*(Secondary education)	-0.108 (0.087)	-0.011 (0.018)	-0.006 (0.014)	0.039** (0.017)	-0.014 (0.014)	0.013 (0.014)	0.041** (0.019)	-0.004 (0.017)	-0.003 (0.016)	0.034** (0.017)	0.016 (0.016)	-0.027 (0.023)	-0.005 (0.024)
(Employed PT, wants FT)*(Elementary education)	-0.138 (0.149)	0.003 (0.027)	-0.005 (0.022)	-0.004 (0.028)	0.018 (0.023)	0.064*** (0.024)	0.028 (0.028)	0.006 (0.024)	-0.035 (0.026)	0.087*** (0.029)	-0.052 (0.033)	-0.033 (0.038)	0.027 (0.042)
(Employed PT, wants FT)*(Secondary education)	-0.054 (0.114)	0.006 (0.021)	-0.020 (0.016)	0.007 (0.022)	0.004 (0.017)	-0.006 (0.017)	0.019 (0.022)	-0.003 (0.019)	-0.028 (0.017)	-0.004 (0.022)	-0.006 (0.024)	-0.010 (0.028)	-0.012 (0.030)
(Unemployed)*(Elementary education)	-0.123 (0.149)	0.019 (0.027)	-0.060*** (0.023)	0.072*** (0.027)	0.029 (0.024)	-0.042* (0.023)	0.042 (0.029)	-0.006 (0.024)	-0.004 (0.026)	-0.053* (0.028)	-0.050 (0.031)	-0.106*** (0.032)	-0.101*** (0.034)
(Unemployed)*(Secondary education)	0.084 (0.126)	-0.013 (0.024)	-0.006 (0.019)	0.044* (0.023)	0.014 (0.019)	0.005 (0.018)	0.058** (0.024)	-0.009 (0.021)	0.037* (0.021)	0.014 (0.021)	-0.016 (0.025)	-0.026 (0.028)	-0.038 (0.028)
Observations	42,742	36,478	34,675	41,604	34,759	28,453	23,821	31,544	33,481	31,503	26,804	25,945	22,011
R-squared	0.227	0.097	0.121	0.125	0.122	0.263	0.094	0.106	0.068	0.293	0.193	0.153	0.271

Robust standard errors in parenthesis

*** p<0.01; ** p<0.05; * p<0.1

Note: Results are based on an OLS regression for the 2010-2018 period. Additional controls for age, marital status, living in a rural area, being native-born, importance of religion, log of household income, and household size are included in every specification. Respondents in the top percentile of household income for each country-year pair are excluded.

Conclusions

Our analysis in this paper deepens the scope of our earlier comparative work across regions by looking across employment groups, education, age, and gender, in detail in MENA. Our specific focus on MENA confirms some expected results, but also yields findings that run counter to dominant narratives, as well as to what might be expected given the developments in the last few decades in the region.

We find the unemployed to be systematically the group with the lowest well-being within any gender, age, or education group. However, male unemployed youth exhibit higher levels of well-being than the unemployed belonging to other age groups. This runs counter to the narrative that the frustration of youth in particular was a likely catalyst for the 2011 uprisings.

The gender heterogeneities we found were also surprising. Within youth respondents, both full-time employed and unemployed women report higher well-being than their male counterparts under the same labor market situation – a possible partial explanation could be the lower stigma associated with female unemployment. When considering the prime age subsample, those gender differences are also present, but the starkest heterogeneity comes from those who are OLF, with women reporting higher well-being than OLF men across many dimensions. This seems to confirm that the reasons for dropping out of the labor force are dramatically different across gender. The gender heterogeneity results, however, require a particularly careful interpretation, given the prior evidence on gender differences in response scales, which are particularly pronounced in places with gender discrimination, and how those could potentially overturn these gaps.

When focusing on the male subsample, we find that prime age OLF men report much lower well-being than young male OLF respondents. The latter group – presumably largely in college – report higher well-being across nearly every dimension, which could be interpreted as consistent with their labor market absence being related to accumulating human capital and investing in their future.

While we find that, within each labor market status, well-being increases steeply with education, we also find that the unemployed seem equally unhappy or dissatisfied regardless of their educational level. This would appear to counter narratives pointing to highly educated groups who are shut out of formal labor markets as the most frustrated and/or those driving political protest or dissatisfaction.

We reported many other nuanced findings in the discussion above. What stands out is the complexity and at times unexpected manner with which people of different ages, gender, and education navigate labor markets in this complex and at times troubled region. Those in the non-resource rich countries, for example, seem less bothered by informal or part-time employment than those in the resource rich countries, perhaps due to lower expectations as well as a greater need to make ends meet in places with less government subsidies. Youth across all the countries report higher levels of optimism and life satisfaction than the common narrative suggests, while prime age males in unstable work or in unemployment display much lower levels of well-being. While it is difficult to draw any clear policy conclusions at this juncture, our exploration suggests a

remarkable amount of complexity – and ability to adapt – among populations in challenging and changing labor market conditions.

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Appendix 1 – Questionnaire for dependent variables

Dependent variables:

(i) Evaluative well-being

Life satisfaction

This is a variable on a 0-10 integer scale indicating life satisfaction from worst to best. The question for current life satisfaction used by GWP is the following *“Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?”*

Expected life satisfaction in 5 years

This is a variable on a 0-10 integer scale indicating expected life satisfaction or optimism about the future from worst to best. This question comes immediately after the current life satisfaction question, and the GWP wording is: *“Just your best guess, on which step do you think you will stand in the future, say about five years from now?”*

(ii) Hedonic well-being: negative

Worry/stress/anger/sadness

Binary variables that capture how individuals felt the day before. GWP used the following wording: *“Did you experience the following feelings during a lot of the day yesterday? How about worry/stress/anger/sadness?”*.

(iii) Hedonic well-being: positive

Enjoyment/smile/respect/
well-rested/learned

Binary variables that capture how individuals felt the day before. Gallup used the following wording: *“Did you experience the following feelings during a lot of the day yesterday? How about enjoyment?”*; *“Did you smile or laugh a lot yesterday?”*; *“Were you treated with respect all day yesterday?”*; *“Now, please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt. Did you feel well-rested yesterday?”*; *“Did you learn or do something interesting yesterday?”*.

(iv) Food and shelter

Lack money for food/
Lack money for shelter

Binary variables that capture individual’s abilities to meet basic needs. GWP used the following wording: *“Have there been times in the past 12 months when you did not have enough money to buy food that you or your family needed?”*; *“Have there been times in the past 12 months when you did not have enough money to provide adequate shelter or housing for you and your family?”*.

- (v) *Personal health*
Health problems/pain/well-rested
- Binary variables that capture the self-perception of the respondent's health. GWP used the following wording: *"Do you have any health problems that prevent you from doing any of the things people your age normally can do?"*; *"Did you experience the following feelings during a lot of the day yesterday? How about physical pain?"*; *"Now, please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt. Did you feel well-rested yesterday?"*.
- (vi) *Community basics*
Satisfaction (in their area of residence) with public transportation/roads and highways/air quality/water quality/affordable housing/educational system/quality healthcare
- Binary variables that evaluate life in a community across a range of areas. GWP used the following wording: *"In the city or area where you live, are you satisfied or dissatisfied with the public transportation systems / the roads and highways / the quality of air / the quality of water / the availability of good affordable housing / the educational system or the schools / the availability of quality health care?"*
- (vii) *Community attachment*
Satisfaction with area/likelihood to move/recommends city
- Binary variables that measure overall satisfactions with the area of residence, along with the likelihood of remaining there. GWP used the following wording: *"Are you satisfied or dissatisfied with the city or area where you live?"*; *"In the next 12 months, are you likely or unlikely to move away from the city or area where you live?"*; *"Would you recommend the city or area where you live to a friend or associate as a place to live, or not?"*.
- (viii) *Civic engagement*
Donated to charity/volunteered/helped a stranger
- Binary variables that capture individual's connections to their community of residence. GWP used the following wording: *"Have you done any of the following in the past month? How about donated money to a charity / How about volunteered your time to an organization / How about helped a stranger or someone you didn't know who needed help?"*.
- (ix) *Social life*
Friends or family help/Satisfaction with the opportunity to make friends in area of residence
- Binary variables that assessing respondents' social support structure. GWP used the following wording: *"If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?"*; *"In the city or area where you live, are you satisfied or dissatisfied with the opportunities to meet people and make friends?"*.
- (x) *Youth development*
Child dignity / Child growth
- Binary variables that measure the perceptions of the community's focus on children's welfare. GWP used the following wording: *"Do*

you believe that children in (country) are treated with respect and dignity, or not?"; "Do most children in (country) have the opportunity to learn and grow every day, or not?".

(xi) Financial life

Satisfied with std living / Std living getting better / difficult to get by on current income

Binary variables to capture respondents' perceptions of their own economic situations. GWP used the following wording: *"Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?"; "Right now, do you feel your standard of living is getting better or getting worse?"; "Which one of these phrases comes closest to your own feelings about your household's income these days: living comfortably on present income, getting by on present income, finding it difficult on present income, or finding it very difficult on present income?"*.

(xii) Job climate

Good time to find job / Local economy getting better

Binary variables to capture perceptions of local-level economic situation and opportunities. GWP used the following wording: *"Thinking about the job situation in the city or area where you live today, would you say that it is now a good time or a bad time to find a job?"; "Right now, do you think that economic conditions in the city or area where you live, as a whole, are getting better or getting worse?"*.

(xiii) Economic confidence

Country economy good or excellent / Country economy getting better

Binary variables to capture perceptions of the national-level economic situation. GWP used the following wording: *"How would you rate your economic conditions in this country today – as excellent, good, only fair, or poor?"; "Right now, do you think that economic conditions in this country, as a whole, are getting better or getting worse?"*.

Independent variables:

Labor market status

This variable was recoded into 6 binary variables, each representing a distinct status: employed full-time, employed part-time, self-employed, underemployed (employed part-time, but wants full-time), unemployed, and out of the labor force.

Age

Depending on the specification, the respondents' age was recoded into either i) 6 different age groups (15-24, 25-34, 35-44, 45-54, 55-64, and 65+) or (ii) 3 different age groups: youth (15-24), prime age (25-54), and older (55+). All of these are binary variables.

Educational level

This variable was recoded into 3 binary variables for the following categories: elementary education (0-8 years), secondary education (9-15 years), tertiary education (*"completed four years of*

education beyond “high school” and/or received a four-year college degree”).

Gender	Female and male, following the only two options included in GWP.
Log of household annual pretax income	Logarithmic transformation of the annual household income variable in international USD that GWP reports.
Marital status	This variable was recoded into 4 binary variables corresponding to the following groups: single, married or in a domestic partnership, divorced or separated, and widowed.
Native-born	This variable identifies if the respondents were born in the country where they reside at the time of interview. It includes a third category, to identify the cases where the answer is missing.
Religion’s importance	This variable identifies if the respondent considers that religion is an important part of their daily life. It includes a third category, to identify the cases where the answer to this question is missing.
Household size	Set of 11 binary variables identifying household size. The first 10 binary variables correspond to size 1 to size 10+. The 11 th binary variable identifies the cases where the answer to this question is missing.
Rural area	This binary variable was recoded based on the GWP question that asked in what kind of area the respondent lives and it identifies the cases where the respondent lives in either “A rural area or on a farm” or “In a small town or village”.