HAPPINESS, HEALTH AND GOOD JOBS

Average satisfaction with life has risen further relative to 2016 across the EBRD regions. That increase probably reflects rising incomes, favourable developments in labour markets (including a shift towards more pleasant and higher-skilled jobs) and improvements in health. Notably, people's assessments of their own health have improved significantly over time, with such assessments including not only physical aspects, but also mental health. Survey results show that mental distress is associated with lower satisfaction and tends to be more prevalent in poorer countries and among individuals who are financially insecure.

Introduction

Recent decades have seen enormous growth in research into subjective measures of well-being.[1] How do countries in the EBRD regions perform in that regard, and how are happiness trends affected by changes to labour markets and health outcomes? This chapter addresses those questions and presents a number of new findings.

The good news is that many of the post-communist countries of central, eastern and south-eastern Europe and the former Soviet Union have experienced steady increases in their happiness levels, having been clustered near the bottom of global league tables earlier in the transition process. This trend has continued even in the post-Covid period: for example, in the *World Happiness Report 2023*, the average "life evaluation" score for central and eastern Europe stood at 6.1 (on a scale of 0 to 10), up from 5.6 in 2021.[2] In that report, 12 post-communist economies were in the top 50 countries globally, compared with just three in the 2016 report. Thus, for many people in the EBRD regions, it seems that the transition process is increasing overall satisfaction with life.[3]

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[1] See, for example, Clark et al. (2018) and Layard (2020) for an overview of the available literature.
[2] See Helliwell et al. (2023).
[3] This chapter uses the terms "life satisfaction" and "happiness" interchangeably.

Previous editions of the *Transition Report* (and other special reports produced by the EBRD) have examined subjective well-being and its cross-country variation in the EBRD regions using the Life in Transition Survey (LiTS) conducted by the EBRD and the World Bank. Early waves of the LiTS showed a severe happiness deficit in the EBRD regions, as did other research using data from the World Values Survey.[4] However, an important finding emerged in the third survey round (LiTS III) in 2016: the happiness gap between post-communist countries in the EBRD regions and their comparators had closed at last.[5] In other words, once differences in gross domestic product (GDP) per capita had been controlled for, people in transition countries were, on average, no longer less satisfied with their lives than people in Germany and Italy (the two western European comparator countries included in LiTS III). Indeed, they were in fact more satisfied than people in Cyprus, Greece and Türkiye. Research using the annual Gallup World Poll and a broader range of comparator countries suggests that the gap closed around 2012.[6]

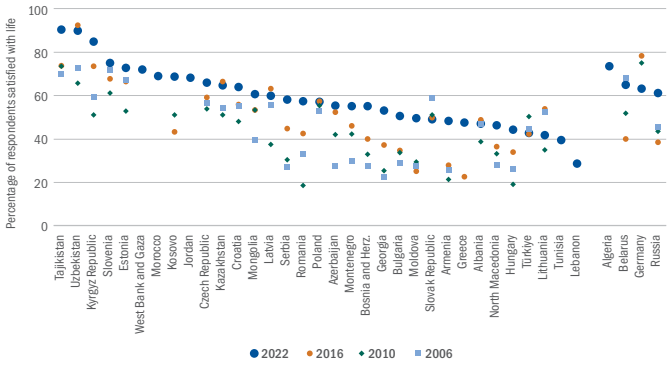
This chapter revisits the topic of satisfaction with life in the EBRD regions using early data from the fourth round of the Life in Transition Survey (LiTS IV), which is in the process of being conducted across the EBRD regions and in selected comparator countries. The analysis includes preliminary data for all economies where at least 250 interviews have been completed (out of a total of 1,000). That survey round started in October 2022 and is expected to conclude later in 2023.

Average life satisfaction levels have risen further relative to 2016 in almost all countries. Certain countries in Central Asia continue (as in previous rounds) to score very highly, notwithstanding their relatively low levels of GDP per capita, while south-eastern Europe (SEE) and eastern Europe and the Caucasus (EEC) have seen notable increases in life satisfaction. Importantly, the increase in life satisfaction is broadly based overall, covering all age cohorts, both males and females, and people in both urban and rural areas.

Why are the EBRD regions doing so well in terms of satisfaction with life? One possibility is that people's answers have been influenced by growing prosperity. LiTS IV was launched at a time when most economic aggregates were moving in a favourable direction, with supply chains reopening and household demand bouncing back following the relaxation of Covid restrictions. However, two other issues are probably also influencing the results: improvements in the health of the population and favourable developments in labour markets (including a shift towards more pleasant and higher-skilled jobs).

A comparison of different rounds of the LiTS shows that people's assessments of their own health have also improved significantly over time. Those improvements are broadly based across all age groups, but the decline in health as respondents age is still steeper in the EBRD regions than it is in the G7 countries

CHART 1.1. Levels of life satisfaction have risen over time



Source: LiTS and authors' calculations.
Note: This chart shows the percentage of respondents who either agree or strongly agree that, overall, they are satisfied with their life.

(Canada, France, Germany, Italy, Japan, the United Kingdom and the United States of America), particularly for older women. The prevalence of some specific health problems – particularly vision loss and anaemia – is also higher in the EBRD regions than in the G7.[7]

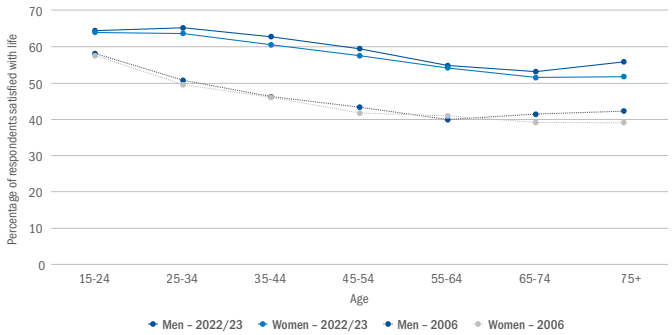
Importantly, self-assessed health includes not only physical aspects, but also mental health, which is itself closely linked to satisfaction with life. The World Health Organization (WHO) estimates that 12 billion working days are lost globally each year because of depression and anxiety,[8] with many economists arguing strongly that increased resources need to be devoted to improving mental health.[9]

This chapter uses data from LiTS IV to construct a new index of mental distress, and the results show that poor mental health is not only associated with lower satisfaction with life, but also tends to be more prevalent in poorer countries and among individuals who are financially insecure. Partly for these reasons, mental distress is particularly prevalent in the southern and eastern Mediterranean (SEMED) region. It is also more common among women than men – a finding that can be seen in all countries in the EBRD regions.

Lastly, there has been an important shift in the labour markets of some EBRD economies since 2019: more men and women now have high-skilled jobs, with correspondingly fewer having medium and low-skilled occupations. Furthermore, there have also been changes to working practices and a reduction in the average time spent commuting to work.

[4] See Sanfey and Teksoz (2007) and Guriev and Zhuravskaya (2009).
[5] See EBRD (2016).
[6] See Guriev and Melnikov (2018).
[7] See Institute for Health Metrics and Evaluation (2020).
[8] See WHO (2022).
[9] See, for example, Layard (2020).

CHART 1.2. Life satisfaction has increased for both men and women across all age cohorts



Source: LiTS and authors' calculations.
Note: This chart shows the percentage of respondents who are satisfied with their life by age cohort.

Happiness

All rounds of the LiTS contain a question on happiness, which is measured in terms of self-reported satisfaction with life. Respondents are asked about the extent to which they agree or disagree with a series of statements, one of which is the following: "All things considered, I am satisfied with my life now." Five options are available, ranging from "strongly disagree" to "strongly agree". The analysis below divides respondents into two groups: (i) those who say that they agree or strongly agree with the statement and are therefore satisfied with their life; and (ii) those who disagree, strongly disagree, or say that they neither agree nor disagree.

Trends in terms of satisfaction with life

Satisfaction scores have risen over time in most economies (see Chart 1.1). As in previous rounds of the LiTS, high scores can be found in three Central Asian countries – the Kyrgyz Republic, Tajikistan and Uzbekistan – a perennially surprising result, given that GDP per capita is usually positively correlated with happiness in cross-country regressions and these three countries are still among the poorest in the EBRD regions.[10] One region that has made substantial progress since 2016 is south-eastern Europe (which includes both (i) European Union (EU) member states Bulgaria and Romania, and (ii) the Western Balkans), with nearly all countries recording significant increases in satisfaction (the sole exception being Albania, where that score has remained more or less unchanged). Meanwhile, the percentage of satisfied people in Greece has doubled since 2016, reflecting dramatic improvements in the country's economic situation over the past six or seven years.

At the same time, there is substantial variation in the level of life satisfaction across the economies of the SEMED region. Barely one in four people in Lebanon say that they are satisfied, the lowest percentage of any country covered by the survey, reflecting the prolonged socio-economic crisis seen in that country in recent years. In contrast, Jordan, Morocco and the West Bank and Gaza all show happiness levels comparable to some of the best performers in central Europe and the Baltic states (CEB).

The rise in happiness over time is broadly based, rather than being concentrated in certain groups. Across all age groups, levels of life satisfaction are, on average, significantly higher than they were in 2006 (see Chart 1.2), as well as being higher than in 2010 and 2016. For both genders, happiness drops steadily as age increases, before rising slightly in later years. Thus, the data conform to the U-shaped pattern, which is found in most of the literature on happiness, although the turning point comes a bit later than usual in the EBRD regions. Levels of life satisfaction have also risen steadily in both urban and rural areas.

[10] For more on the link between happiness and GDP per capita, see, for example, Helliwell et al. (2023).

TABLE 1.1. Cross-sectional analysis of life satisfaction between 2010 and 2022/23

	(1)	(2)	(3)	(4)
	LiTS II	LiTS III	LiTS IV	LiTS IV
Post-communist	-0.217*** (0.074)	0.024 (0.149)	0.042 (0.064)	0.028 (0.044)
Household income (log)	0.035*** (0.011)	0.013 (0.015)	0.075*** (0.015)	0.066*** (0.013)
GDP per capita (US$ at PPP; log)	-0.063 (0.039)	-0.027 (0.048)	-0.102** (0.043)	-0.117*** (0.039)
Age	-0.010*** (0.001)	-0.009*** (0.002)	-0.008*** (0.003)	-0.008*** (0.002)
Age squared (divided by 100)	0.011*** (0.001)	0.010*** (0.002)	0.009*** (0.002)	0.009*** (0.002)
Own assessment of health: good or very good	0.118*** (0.012)	0.133*** (0.012)	0.110*** (0.015)	0.075*** (0.014)
Mental distress				-0.066*** (0.006)
Secondary education	0.100*** (0.017)	0.132*** (0.024)	0.085** (0.034)	0.068** (0.032)
Tertiary education	0.179*** (0.021)	0.213*** (0.023)	0.136*** (0.038)	0.120*** (0.033)
Female	0.021** (0.009)	0.035*** (0.006)	0.009 (0.008)	0.019** (0.008)
Urban area	-0.035*** (0.009)	-0.045*** (0.015)	-0.061*** (0.012)	-0.058*** (0.012)
Unemployed and looking for work	-0.105*** (0.016)	-0.170*** (0.018)	-0.096*** (0.021)	-0.087*** (0.020)
Out of labour force	0.005 (0.010)	-0.030** (0.012)	-0.014 (0.012)	-0.010 (0.013)
People can be trusted	0.118*** (0.013)	0.099*** (0.012)	0.099*** (0.014)	0.093*** (0.013)
Number of children under 18 at home	0.003 (0.006)	0.015** (0.006)	0.012* (0.006)	0.010 (0.006)
Married	0.008 (0.013)	0.021 (0.015)	0.058*** (0.014)	0.057*** (0.014)
Widowed	-0.053*** (0.018)	-0.053*** (0.018)	0.008 (0.017)	0.014 (0.017)
Divorced or separated	-0.072*** (0.018)	-0.067*** (0.016)	0.008 (0.012)	0.007 (0.011)
R^2 Number of observations	0.105 23,225	0.099 34,341	0.090 22,057	0.107 21,788

Source: LiTS, World Economic Outlook Database and authors' calculations.

Note: This table reports the results of a linear probability model where a life satisfaction dummy is regressed on a dummy indicating whether a country is post-communist in nature, the log of GDP per capita in US dollars at purchasing power parity (PPP), and individual and household-level characteristics (including religion dummies). Standard errors in parentheses are clustered at the country level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. LiTS II does not include self-reported data on household incomes, so spending on key goods and services and savings is used instead as a proxy. The results in column 4 control for mental distress. All specifications include the same 20 post communist countries, plus Germany and Türkiye.

Correlates of life satisfaction

Are people in post-communist economies still as happy as those elsewhere once differences in income have been controlled for? Regression analysis can be used to answer this question and examine a range of other socio-economic variables related to satisfaction with life, linking the binary measure of satisfaction to correlates of happiness such as gender, age, income, education, labour-market status, health, religious beliefs, trust, marital status and numbers of children. The analysis covers a group of 20 post-communist countries that have been involved in each of the last three rounds of the LiTS (2010, 2016 and 2022/23), plus two comparators: Germany and Türkiye.

The results confirm that a negative and statistically significant happiness gap was present in post-communist countries in 2010, and that this gap had been eliminated by 2016 (with the relevant coefficient turning positive, without being statistically significant; see Table 1.1). In LiTS IV, the coefficient on the post-communist dummy variable is again positive (and slightly larger than in 2016) but still not significant at conventional levels.

Thus, people in former communist countries are, on average, just as happy as those in Germany and Türkiye, taking into account differences in income and other variables. Similar results can be obtained using an ordered probit model for various degrees of satisfaction with life or using an unbalanced panel of countries.

We can also see that happiness is positively correlated with better levels of education and higher household income. The coefficient on national income is negative when included together with individual income, perhaps suggesting that higher income relative to the national average is a particularly strong correlate of satisfaction with life.

The familiar U-shaped relationship with age can also be observed, with a turning point reached at the age of 49 – somewhat later than is typically found by other researchers. This finding of a U-shape also holds when using age group dummy variables rather than controlling for age and age squared. Women tend to be happier than men, although the differences are not always statistically significant. People living in a rural area, married individuals and people who trust others also tend to report greater satisfaction with life. The finding regarding trust echoes one of the core points of the *World Happiness Report:* average levels of happiness are higher when governments and businesses can generally be trusted to be free from corruption.[11]

Happiness is also strongly linked to good physical and mental health. On average, people with a self-reported health status of "good" or "very good" (as opposed to "fair", "bad" or "very bad") are more than 10 percentage points more likely to be satisfied with life. LiTS IV data allow us, for the first time, to explore the issue of mental health and its impact on well-being, and it is noticeable that an index of mental distress derived from various answers to the survey is negatively correlated with satisfaction. The next section of this chapter contains an in-depth assessment of health trends and disabilities across the EBRD regions.

A strongly negative correlation between being unemployed and happiness is one of the most robust findings in the literature on happiness. Many countries in the EBRD regions have seen high levels of job creation in recent years, along with a shift towards higher-skilled jobs and, in the post-Covid era, greater flexibility and less commuting. These trends and their implications for well-being are explored in depth in the last section.

Since including variables for health and labour-market status increases the share of total variation in life satisfaction that is explained by the econometric model by around 15 per cent, the next two sections take a detailed look at trends in those areas.

[11] See Helliwell et al. (2023).

Health

Happiness and prosperity in the EBRD regions are both dependent on health. Healthy workers are both happier and more productive, with good health supporting longer working lives (which are particularly valuable in rapidly ageing populations). Against that background, this section looks at self-assessed health, disability and mental distress in the EBRD regions.

Self-assessed health

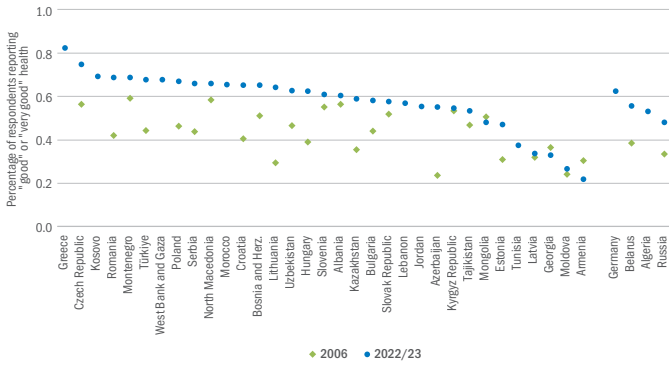
In almost all economies in the EBRD regions, the percentage of people reporting that their health is "good" or "very good" (as opposed to "medium", "bad" or "very bad") has increased since 2006 (see Chart 1.3). In some economies (such as Azerbaijan, Lithuania and Romania) the increase has been quite dramatic, while in others (particularly in the EEC and SEMED regions) the results are less encouraging. While such self-assessments are clearly imperfect, measures of self-reported health have been widely found to give a good approximation of objective health outcomes, including physical and mental health and demand for healthcare.[12]

In LiTS IV, the highest level of self-assessed health can be found in Greece. Meanwhile, in most other EBRD economies in the EU and the Western Balkans, levels of self-assessed health are comparable to – or even higher than – the level observed in Germany. Eurostat data paint a similar picture. While higher-income economies tend to be healthier overall, at a certain level additional GDP per capita no longer consistently translates into better health. Middle-income countries can achieve gains through public health infrastructure, proper sanitation and water supply, and access to nutritious foods, while richer countries may struggle to overcome health inequality.

People's assessment of their own health tends to decline steadily as they age. However, the improvement seen in self-assessed health since 2006 encompasses all age groups. The LiTS data also show that there has been further progress since 2016, suggesting that the Covid-19 pandemic has not halted the steady improvement in health outcomes over time. These trends are further corroborated by the European Social Survey (with some countries being surveyed in the same year that they were covered in the LiTS).

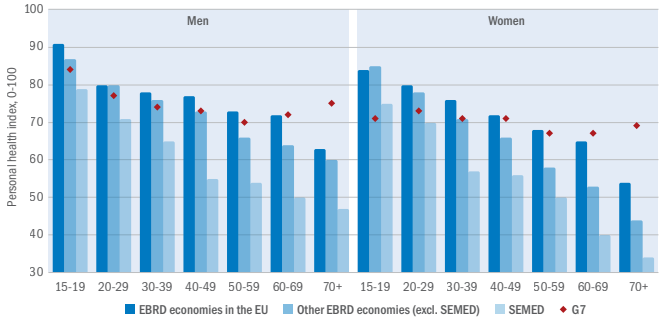
Self-assessed health can also be tracked using the Gallup World Poll – a representative household survey with a strong focus on satisfaction with life and well-being. That annual survey includes a variety of questions about physical and mental health, five of which have been aggregated here to construct an index of overall health. Those five questions ascertain whether respondents feel healthy, well-rested, in physical pain, worried or sad (see Chart 1.4).

CHART 1.3. Self-assessed health in the EBRD regions has improved since 2006



Source: LiTS and authors' calculations.
Note: This chart shows the percentage of respondents who reported "good" or "very good" health.

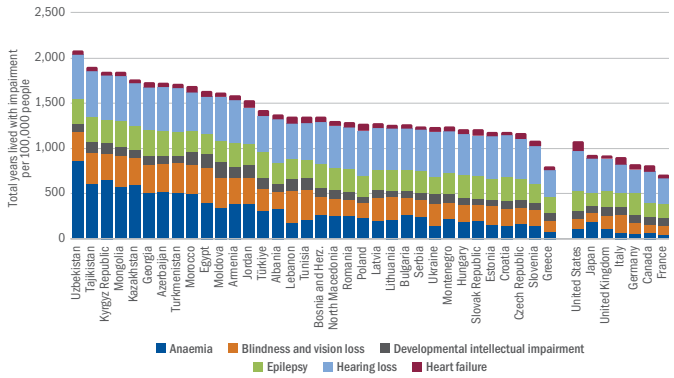
CHART 1.4. Self-assessed health in EBRD economies in the EU has mostly caught up with the G7, with the exception of the oldest age groups



Source: Gallup World Poll (2022 or latest available year) and authors' calculations.
Note: This chart shows average personal health index scores taken from the Gallup World Poll, broken down by age group and gender. Sampling weights are used. The index is based on the following five questions on physical and mental health: (i) "Do you have any health problems that prevent you from doing any of the things people your age normally can do?"; (ii) "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?"; (iii) "Did you experience the following feelings during a lot of the day yesterday? ... How about physical pain?"; (iv) "... How about worry?"; and (v) "... How about sadness?"

[12] See Smith and Goldman (2011).

CHART 1.5. Anaemia and vision loss are more prevalent in the EBRD regions than in the G7



Source: Institute for Health Metrics and Evaluation (2020) and authors' calculations.
Note: This chart shows estimated total years lived with each impairment per 100,000 people, adjusted for countries' age structures. Estimates do not include use of or access to corrective devices such as hearing aids.

Data from the Gallup World Poll indicate that perceived health in the relatively rich EBRD economies in the EU is generally comparable to that seen in the industrial nations of the G7. This is true for both genders up to the age of 70, at which point the EBRD economies start to fall behind the G7, especially in the case of women. In other EBRD economies (excluding the SEMED region), perceived health falls significantly short of G7 levels after the age of 50 for men and after the age of 40 for women. The low level of self-reported health among 15 to 19 year-old women in the G7 reflects low self-assessments of both physical and mental health, particularly in the United States and Canada. In SEMED economies, perceived health declines sharply from an early age.

Debilitating conditions

People's assessments of their own health are often influenced by whether or not they are affected by debilitating conditions. A debilitating condition or impairment is defined as a situation where a person's body structure or function differs from the norm. Some occur with age (such as loss of mobility or vision), while others may be linked to nutrition, lifestyle and healthcare (such as anaemia and heart failure). Efforts to address such impairments may be particularly beneficial when it comes to the development of human capital.

Some debilitating conditions are more prevalent in the EBRD regions than in the G7, but others are not (see Chart 1.5). Across all countries, the impairments with the highest prevalence are anaemia and hearing loss. Vision loss and anaemia are more common in the EBRD regions than in the G7 and are especially prevalent among women. Globally, anaemia is typically associated with nutritional deficiencies (and that is true even in middle-income EBRD economies).[13] Anaemia particularly affects people in lower socio-economic groups, as well as menstruating adolescent women, pregnant women and those who have recently given birth. Symptoms include fatigue, impaired concentration and weakness, among others. It is also associated with reduced productivity and lower household incomes.[14] Meanwhile, men are more likely to suffer heart failure and hearing loss. In the absence of a hearing aid, hearing loss can lead to increased fatigue, the need to take sick leave more often and earlier retirement.[15] Hearing loss is more common among men across all age groups, but that is particularly true of men over the age of 45.

VISION LOSS AND ANAEMIA ARE MORE COMMON IN THE EBRD REGIONS THAN IN THE G7 AND ARE ESPECIALLY PREVALENT AMONG WOMEN

[13] See Safiri (2021).
[14] See Niemesh (2015).
[15] See Nachtegaal et al. (2012) and Helvik et al. (2013).

Mental health

Good mental health increases the amount of time that people are able to work, their productivity when they do so, and, ultimately, their income and wealth.[16] Strong mental health also goes hand in hand with greater satisfaction with life, as shown earlier in this chapter. Mental disorders such as depression, anxiety and personality disorders are in the top 10 leading causes of disability-adjusted life years globally, with depression and anxiety being the most prevalent.[17]

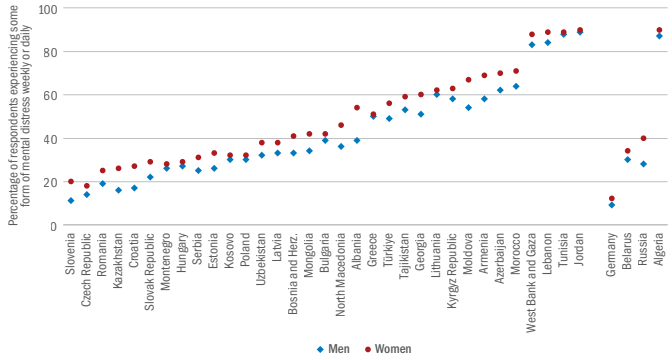
Against that background, LiTS IV asks respondents whether and how often they experience sadness, depression, anxiety and apathy. Those answers have been aggregated here to construct an index of self-assessed mental distress.

Levels of mental distress vary considerably, both across economies and by gender (see Chart 1.6). In Slovenia, mental distress is almost as infrequent as it is in Germany, whereas in Algeria, Jordan and Tunisia, around 90 per cent of respondents report feeling some form of mental distress at least once a week. The average incidence of distress is higher for women than for men in all countries. This difference is statistically significant in most cases and holds across age cohorts, consistent with global trends as reported in the annual Global Burden of Disease Study. Other signs of mental distress that are not covered by the survey, such as substance abuse and lack of impulse control, are typically more common among men. At the same time, men may under-report symptoms that could indicate weakness, such as low mood or illness, especially if they adhere more strongly to traditional norms regarding masculinity.[18]

Mental distress differs from disabilities and overall health assessments in that the prevalence tends to be broadly similar across different age groups (see Chart 1.7). The percentage of LiTS IV respondents reporting that they experience some form of mental distress at least weekly stands at around 40 per cent for the young, the middle-aged and the elderly alike. Globally, the severity and prevalence of mental illness are estimated to peak in people's mid-thirties and remain high in their prime working and child-rearing years.[19]

In LiTS IV, respondents also reported their ability to perform sensory-related, mobility-related and cognitive tasks. Physical disabilities include problems seeing, hearing and walking/climbing steps, while cognitive ability is about being able to remember things and concentrate and communicate well. Not surprisingly, the percentages of respondents reporting a disability (or describing their health as "bad" or "very bad") increase with age. Just over 20 per cent of people aged 35 or younger report being limited by a disability, compared with 80 per cent of respondents over the age of 65.

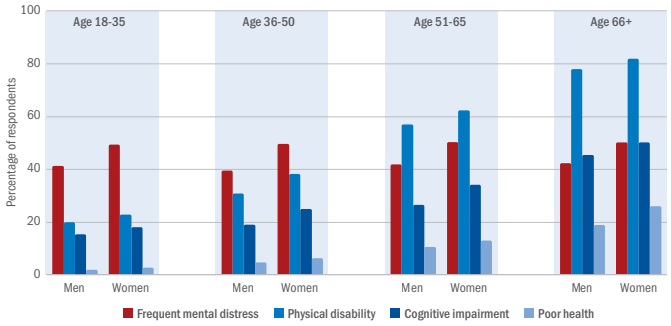
CHART 1.6. The percentage of the population experiencing mental distress at least weekly ranges from 10 per cent in Germany to 90 per cent in Algeria, Jordan and Tunisia



Source: LiTS IV and authors' calculations.
Note: This chart shows the percentage of respondents who report experiencing at least one of depression, sadness, anxiety and apathy weekly or daily.

[16] See, for instance, Ridley et al. (2020).
[17] See Institute for Health Metrics and Evaluation (2020).
[18] See, for instance, Cavanagh et al. (2017).
[19] See GBD 2019 Mental Disorders Collaborators (2022).

CHART 1.7. Physical and cognitive impairment increase rapidly with age, while the frequency of mental distress is broadly constant across age groups



Source: LiTS IV and authors' calculations.
Note: This chart shows the percentage of respondents who report having some form of health problem. "Physical disability" includes problems seeing, hearing and walking/climbing steps, while "cognitive impairment" includes problems remembering, concentrating and communicating. "Frequent mental distress" indicates the percentage of respondents who report feeling at least one of anxiety, sadness, depression and apathy at least weekly. "Poor health" indicates the percentage of respondents who report that their health is "bad" or "very bad".

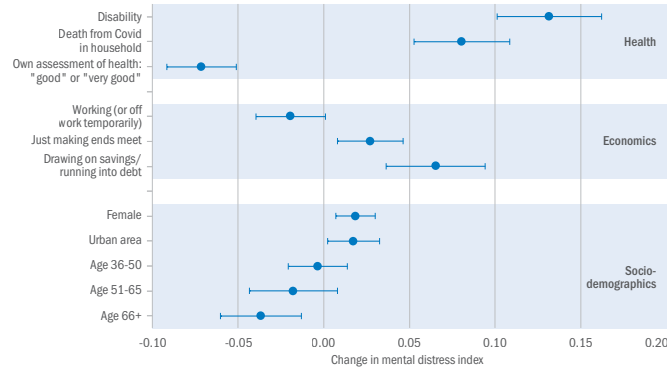
ACROSS ALL AGE GROUPS, PEOPLE WITH A DISABILITY ARE

11

PERCENTAGE POINTS

LESS LIKELY TO REPORT THAT THEY WORK THAN THOSE WITH NO DISABILITY

CHART 1.8. Disabilities, financial fragility, being female and living in an urban area are all strongly correlated with mental distress in the EBRD regions



Source: LiTS IV and authors' calculations.
Note: This chart shows the coefficients that are derived from a linear probability model regressing mental distress (defined as feeling at least one of sadness, depression or anxiety or taking little pleasure in doing things at least weekly) on various measures of health and other characteristics. A respondent is classified as having a limiting disability if they struggle with or are completely unable to do any of the following: (i) seeing, (ii) hearing, (iii) climbing steps, (iv) remembering or concentrating, (v) communicating and (vi) exercising self-care. Control variables include employment status, the ability to save (whereby the base category is "able to save"), measures of the economic impact of the Covid-19 crisis, age, marital status, children in the household, living in an urban area, education and living alone. Additional controls include adherence to traditional gender norms, satisfaction, religious beliefs, trust in society and country fixed effects. The 95 per cent confidence intervals shown are based on standard errors clustered at the country level.

Differences between men and women in terms of the prevalence of health problems mostly arise in middle age (30-54), with only minimal gender differences in disability and poor health among those aged 18-29. In the EBRD regions, however, there is also a gender difference in mental distress among the young.

Countries with lower GDP per capita tend to have higher levels of mental distress. However, other factors are also relevant. Regression analysis can be used to link mental distress as reported in LiTS IV to a number of other self-reported measures of health, as well as other individual characteristics such as labour-market status (see Chart 1.8).

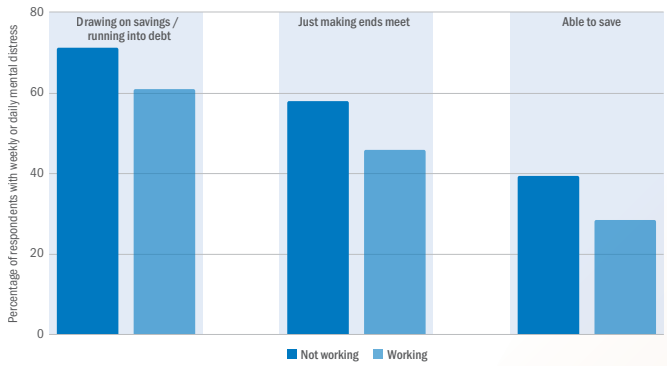
First, all other things being equal, people who have disabling impairments such as problems with their memory, vision or hearing are the most likely to experience frequent mental distress. This probably reflects the psychological challenge of living with impairments in social and work settings that do not allow for full participation in normal activities. People with a disabling impairment are also likely to have fewer opportunities to work, perhaps as a result of unsuitable workspaces and inflexible processes. Across all age groups, people with a disability are 11 percentage points less likely to report that they work than those with no disability. Meanwhile, the percentage of people with a disability who are not in the labour force is about 12 percentage points higher than the equivalent figure for people without a disability.

Second, there is a clear association between mental distress and having a household member who died from Covid-19. This is a poignant reminder of the lingering and lasting impact of the pandemic.

Third, financial fragility is clearly associated with mental distress (see Chart 1.9). Approximately 65 per cent of those who are unable to save experience distress at least weekly, compared with about 35 per cent for those who are able to save. This echoes the results of recent studies, which have found that economic crises have a negative effect on mental health through the impact of sudden unemployment and the associated decline in living conditions.[20]

Furthermore, being in work seems to have a positive impact. Looking only at individuals who are drawing on savings/ running into debt, the percentage of people in work who report experiencing frequent mental distress is about 10 percentage points lower than the equivalent figure for people who are not in work, with the same differential being observed among individuals who are able to save and among individuals who are just making ends meet. These differentials are statistically significant at the 1 per cent level.

CHART 1.9. Working partially alleviates mental distress caused by an inability to save



Source: LiTS IV and authors' calculations.
Note: This chart shows the percentage of respondents who report having weekly or daily mental distress, broken down by employment status and the ability to save.

Adapting to changing labour markets

For many people, being employed is a crucial aspect of their self-worth and well-being.[21] With that in mind, this section looks at the changing nature of work during and after the Covid-19 pandemic and the links between new working practices, such as hybrid working, and satisfaction with life.

Shifting skill requirements in the job market

Over the past two decades, the typical skill-set of employees in the EBRD regions has changed substantially, with medium-skilled roles (such as clerks, craft workers and machine operators) experiencing a substantial decline.[22]

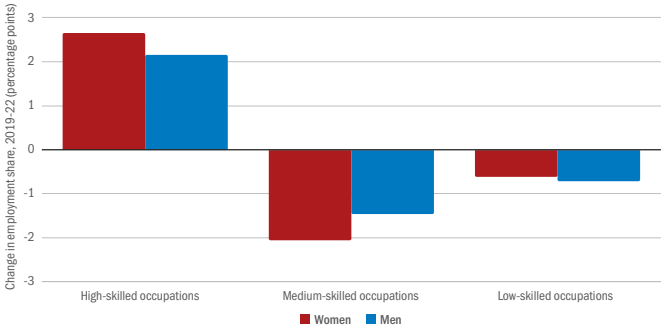
This trend continued between 2019 and 2022 (see Chart 1.10, which is based on data for 16 countries). At the same time, economies with large primary sectors (defined as agriculture, forestry, fishing and mining) have seen continued declines in the employment shares of low-skilled occupations, such as unskilled agricultural or construction work (with the largest falls being observed in agriculture). This trend has been particularly pronounced in Azerbaijan, Moldova and Mongolia, where agriculture, mining and utilities still account for more than 30 per cent of total employment. Meanwhile, high-skilled jobs in sectors such as law or information technology (IT) have increased as a percentage of total employment. These occupations are also more likely to be conducive to teleworking.

APPROXIMATELY
65%
OF THOSE WHO ARE UNABLE TO SAVE EXPERIENCE MENTAL DISTRESS AT LEAST WEEKLY

[20] See Cutler and Sportiche (2022).

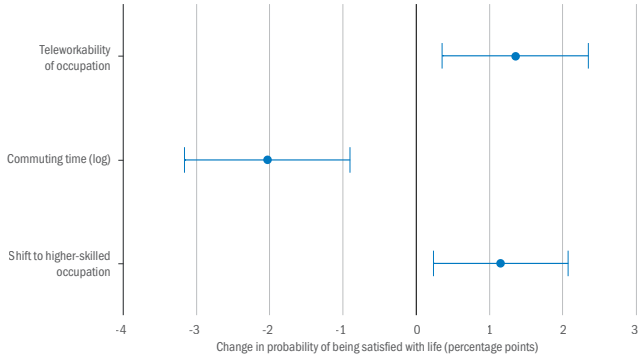
[21] See Theodossiou (1998) and EBRD (2016).
[22] See EBRD (2018).

CHART 1.10. A greater percentage of the labour force now have high-skilled jobs



Source: International Labour Organization (ILO) and authors' calculations.
Note: Occupations are categorised on the basis of ILO data. "High-skilled occupations" comprise the following ISCO-88 major groups: legislators, senior officials and managers (group 1), professionals (group 2), and technicians and associate professionals (group 3). "Medium-skilled occupations" comprise clerks (group 4), service workers, and shop and market sales workers (group 5), skilled agricultural workers (group 6), craft and related trades workers (group 7), and plant and machine operators and assemblers (group 8). "Low-skilled occupations" comprise elementary occupations (group 9). This chart shows data for Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Moldova, North Macedonia, Poland, Romania, the Slovak Republic and Slovenia, weighted by population.

CHART 1.11. Job characteristics are important predictors of happiness



Source: LiTS IV, Dingel and Neiman (2020) and authors' calculations.
Note: This chart shows standardised coefficients derived from a linear model regressing satisfaction with life on age and age squared, being female, marital status dummies, having children in the household, access to the internet, being able to afford the consumption of meat, fish or an equivalent, being able to afford a holiday once a year, living in an urban area, industry fixed effects and country fixed effects. Satisfaction with life is a dummy variable that is equal to 1 if the person responds "strongly agree" or "agree" to the statement "All things considered, I am satisfied with my life now" and is 0 otherwise. The sample is restricted to employed respondents. The 95 per cent confidence intervals shown are based on standard errors clustered at the country level.

Job characteristics and happiness

Job satisfaction and the quality of a job are important factors influencing overall satisfaction with life.[23] At the same time, the quality of employment also makes a significant contribution to both physical and mental well-being.[24] In order to investigate this further, regression analysis can be used to explore the relationship between satisfaction with life in the latest round of the LiTS and three aspects of respondents' jobs: (i) the extent to which a job can be done remotely ("teleworkability"); (ii) the average commuting time; and (iii) whether the respondent has transitioned to a more skilled occupation following their previous job. As before, regressions take into account income, education and other characteristics of the respondents.

The results show that employees do indeed tend to value the possibility of working from home at least part of the time: a 1 standard deviation increase in teleworkability (equivalent to the difference between teachers and production managers) corresponds to a 1.3 percentage point increase in the probability of being satisfied with life today (see Chart 1.11). This equates to roughly 9 per cent of the gap between the satisfaction of employed and unemployed respondents. Similarly, reduced commuting time and a shift to a higher-skilled job are also associated with higher levels of satisfaction. The link between moving to a higher-skilled occupation and happiness also holds when focusing specifically on workers who have shifted to a higher-skilled job more recently (that is to say, since 2000).

Recent trends in remote work

The sudden closure of workplaces during the Covid-19 pandemic marked the onset of a new era of working arrangements, affecting employees around the world and catalysing a substantial shift in attitudes and expectations surrounding remote work. No other episode in modern history has involved such a pronounced and widespread shift in working practices in such a short space of time.

The pandemic is now over, but the shift to working from home will probably endure.[25] In the light of this development, several questions arise: How prevalent is remote work across EBRD countries? What are the main working arrangements at present? And what are the primary benefits of hybrid work?

In order to answer those questions, the analysis in this section draws on the results of a comprehensive recent survey conducted in 34 countries (including six economies in the EBRD regions: the Czech Republic, Greece, Hungary, Poland, Romania and Türkiye) in April and May 2023. The survey, which was conducted online, covered full-time workers between the ages of 20 and 64 with a secondary, tertiary or postgraduate education. The samples used were broadly representative with respect to age, gender and education; however, the results largely reflect trends among workers who are able to use smartphones, computers or tablets and are therefore able to take part in online surveys (rather than being applicable to the population as a whole).

[23] See EBRD (2016).
[24] See, for instance, Llena-Nozal et al. (2019).
[25] See Barrero et al. (2021) and Aksoy et al. (2022).

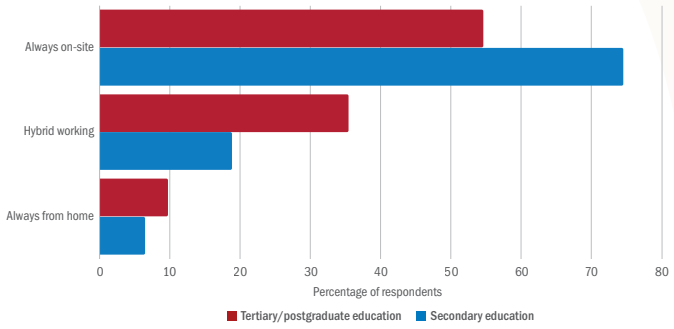
A new normal? Changes to working practices in the EBRD regions

People with a tertiary education or a postgraduate qualification are more likely to telework than those with only a secondary education (see Chart 1.12). While around 55 per cent of full-time employees with at least a tertiary education always work on-site at their employer's premises, a further 35 per cent now have hybrid working arrangements in which they split the working week between their home and their employer's premises, and the remaining 10 per cent work entirely from home. Among people with just a secondary education, only about a quarter report having the option of working remotely.

People greatly value the opportunity to work from home. To elicit information on people's willingness to pay for the option of working from home, the survey first asked: "How would you feel about working from home two or three days a week?" If the response was "neutral", the willingness to pay was coded as 0. Those who answered positively ("I would view it as a benefit or extra pay") were asked: "How much of a pay rise (as a percentage of your current pay) would you value as much as the option to work from home two or three days a week?"

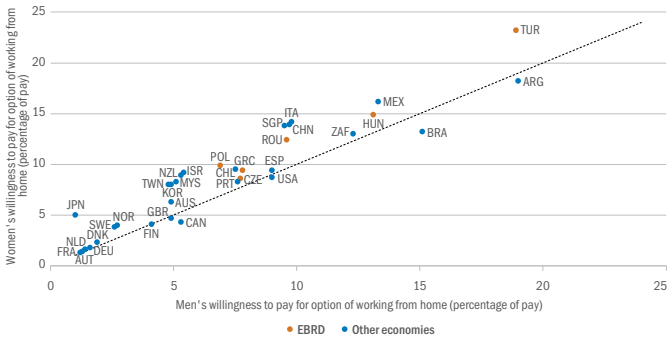
On average, the option of working from home two or three days a week was deemed to be worth 8 per cent of earnings (see Chart 1.13), ranging from 1 per cent of pay in Austria and France to about 10 per cent of pay in Greece, Poland and Romania, and nearly 20 per cent in Türkiye. The results also show that, in most economies, women value the option of working from home more highly than men. This is true even when taking

CHART 1.12. People with a tertiary education or a postgraduate qualification are more likely to telework



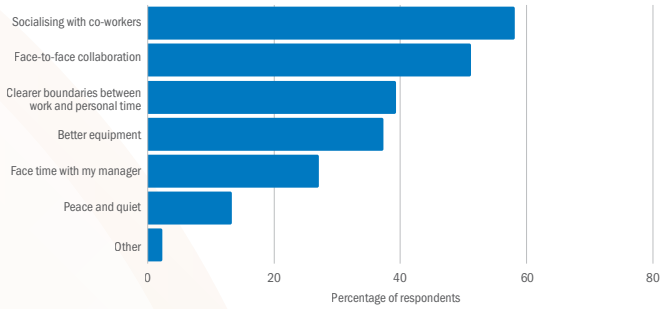
Source: Global Survey of Working Arrangements (April and May 2023) and authors' calculations.
Note: People who worked four or more days during the reference week for the survey were asked: "For each day last week, did you work six or more hours, and if so where?" The sample comprises workers in the Czech Republic, Greece, Hungary, Poland, Romania and Türkiye.

CHART 1.13. Women value the option of working from home more highly



Source: Global Survey of Working Arrangements (April and May 2023) and authors' calculations.
Note: Workers who worked four or more days during the reference week for the survey were asked: "How much of a pay rise (as a percentage of your current pay) would you value as much as the option to work from home two or three days a week?" The sample comprises workers in 34 economies.

CHART 1.14. The main perceived benefit of working on-site is the opportunity to socialise



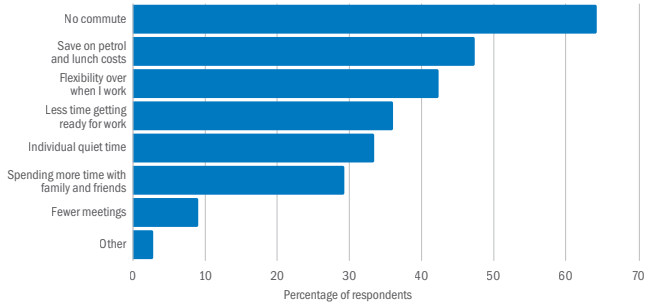
Source: Global Survey of Working Arrangements (April and May 2023) and authors' calculations.
Note: This chart shows responses to the question: "What are the top benefits of working on your employer's business premises? Please choose up to three." The sample comprises workers in the Czech Republic, Greece, Hungary, Poland, Romania and Türkiye.

ON AVERAGE, THE OPTION OF WORKING FROM HOME TWO OR THREE DAYS A WEEK IS DEEMED TO BE WORTH

8%

OF EARNINGS

CHART 1.15. The main perceived benefit of working from home is the lack of commute



Source: Global Survey of Working Arrangements (April and May 2023) and authors' calculations.
Note: This chart shows responses to the question: "What are the top benefits of working from home? Please choose up to three." The sample comprises workers in the Czech Republic, Greece, Hungary, Poland, Romania and Türkiye.

into account the presence of children and other observable demographic characteristics. Indeed, this gender difference is also observed among single persons without children, suggesting that the result is not fully driven by childcare responsibilities. It may be that women are also more likely to take on other care-giving and household responsibilities, leading them to place greater value on the flexibility and time savings offered by the option of working from home (see also Box 1.1 for a discussion of the role that gender and gender norms play in labour force participation decisions).

Main benefits of working on-site and from home

Socialising with co-workers was viewed as the main benefit of working in the office (being cited by 58 per cent of respondents), followed by face-to-face collaboration (51 per cent) and clearer boundaries between work and personal time (39 per cent; see Chart 1.14). When it came to the main benefits of working from home, 64 per cent of respondents mentioned the absence of a commute, followed by savings on petrol and lunch costs (47 per cent) and flexibility with respect to working time (42 per cent; see Chart 1.15).

In conclusion, high-skilled roles, which have increased in number in the EBRD regions, can often be performed remotely. The ability to work from home is, in turn, associated with greater satisfaction, particularly because of the reduction in average commuting time.

Conclusion

This chapter has identified a number of encouraging interrelated trends across economies in the EBRD regions. Happiness and health levels are increasing, and employed people are more likely to have high-skilled and flexible jobs. Flexible working and the ability to work from home at least some of the time are increasingly common and valued by employees. Moreover, improvements in health will not only help people to enjoy life more and become more productive, but also allow them to remain in the labour force for longer.

At the same time, however, there is no room for complacency. The data show major variation in many of these trends across the EBRD regions, with some economies and individuals lagging significantly behind. And even in the most advanced countries in the EBRD regions, policy changes are still needed to catch up with standards in richer parts of the world.

This chapter has looked at disabilities and mental health, building on the new questions in the most recent LiTS and identifying several areas where urgent policy action is needed. One of the main findings is the existence of a gender gap as regards mental health and limiting disabilities. Policies to address this should include improvements to women's health services, as well as legislative action. Women and girls should have regular access to specialists in menstrual health, who can properly diagnose impairments and support school attendance and labour force participation. Meanwhile, legislation requiring processed foods to be iron-fortified can be an effective way of addressing impairments resulting from anaemia.[26]

At the same time, further investment in health infrastructure and the training of healthcare workers is also needed. This includes integrating mental health services into universal healthcare, reducing waiting times for doctors' appointments and providing community-based cancer screening clinics. Efforts to vaccinate children and educate parents will remain indispensable when it comes to controlling the spread of communicable diseases.

Firms can also do more to support workers' well-being. A first step for many firms would be to offer paid leave for physical and mental health needs, while firms that provide private health insurance could expand their coverage of mental health. Firms can also make their processes more flexible and their workplaces more accommodating (for example, by making specialist equipment available for hearing or visually impaired people) in order to improve economic opportunities for workers with disabilities. Governments can support firms in their efforts to make workplaces more accommodating by introducing tax breaks, as well as by adopting legislation penalising discrimination based on disability.

As regards job flexibility and working from home, a total of 17 economies have introduced permanent teleworking regulations since March 2020. Many of these have increased the cost of remote working for employers. For example, legislation enacted in Slovenia and Türkiye in March 2021 requires employers to reimburse additional expenses related to remote working, while as of 2022 employers in Mexico are required to check, among other things, that their employees have adequate ventilation, ergonomic conditions and safety when working from home.[27] When evaluating such policies, it is important to take into account the fact that increasing the cost of remote work limits markets' capacity to satisfy people's preferences, especially in economies with fluid labour markets.

In light of the shift towards high-skilled jobs, governments should invest in robust digital infrastructure in order to ensure the consistent facilitation of remote working. By taking this step, they can actively encourage activities aimed at extending internet connectivity to underprivileged regions, thus fostering equal opportunities to work.[28] Furthermore, labour-market policies that actively help people to obtain green or digital skills can facilitate employment security, and thus mental health, as economies become greener and more service based.

Healthy lifestyles can be supported by planning urban developments with overall well-being in mind – from ensuring access to clean water and sanitation to helping urban vendors to stock fresh fruit and vegetables, and developing public spaces that encourage exercise and socialising. (Chapter 4, for instance, documents the scarcity and uneven distribution of green spaces in urban agglomerations across the EBRD regions.) Meanwhile, school curriculums can be amended with a view to de-stigmatising mental health issues and promoting well-being.

Such policies will have a particularly important role to play when it comes to alleviating mental and physical distress in a post-war context. Against that background, Box 1.2 looks at Ukrainian refugees and their intentions to return home, while Box 1.3 assesses the impact that the war has had on Ukraine's human capital.

[26] See Niemesh (2015).

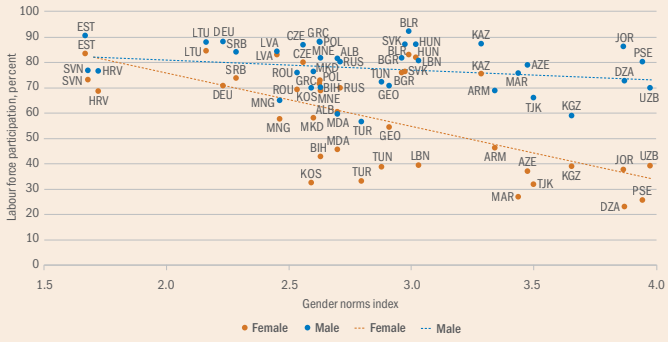
[27] See Lockton (2022).
[28] See OECD (2022).

BOX 1.1.

Gender norms and occupational segregation in the EBRD regions

People differ across countries in terms of what they consider to be appropriate social and economic roles for men and women.[29] This box uses LiTS IV data to construct a country index showing the extent to which people assign different socio-economic responsibilities to men and women. Survey respondents were asked whether they agreed or disagreed with the following eight statements: (i) "Women are as competent as men to be business executives"; (ii) "On the whole, men make better political leaders than women do"; (iii) "A woman should do most of the household chores, even if the husband is not working"; (iv) "Men should take as much responsibility as women for the home and the children"; (v) "Both the man and woman should contribute to household income"; (vi) "If a man and a woman have dinner together in a restaurant, the man should always pay the full bill"; (vii) "Men are as competent as women to be nurses"; and (viii) "It is better for everyone involved if the man earns the money and the woman takes care of the home and children". The index counts how often a respondent agrees or disagrees with these statements, assigning a 1 to less gender-equal views. For example, a 1 is assigned if the respondent indicates that they "disagree" or "strongly disagree" with the statement "Women are as competent as men to be business executives". Thus, each individual respondent has a score ranging from 0 to 8, with lower scores indicating more gender-equal views.

CHART 1.1.1. Unequal gender norms are associated with lower female labour force participation



Source: LiTS IV and authors' calculations.
Note: This chart is a scatter plot mapping the gender norms index (horizontal axis) against labour force participation (vertical axis). The latter is calculated on the basis of working-age respondents between 18 and 64 years of age.

Across the EBRD regions, the average score is 2.8. Economies in central Europe tend to have relatively gender-equal norms (especially Estonia, Slovenia and Croatia), while economies in Central Asia and the SEMED region have more gender-stereotypical views (especially Uzbekistan, the West Bank and Gaza, and Jordan). Within countries, men and people living in rural locations tend to have more gender-stereotypical views than women and people living in urban centres (with these differences being statistically significant at the 1 per cent level).

Cross-country analysis shows that less equal gender norms are associated with lower levels of female labour force participation across the EBRD regions (see Chart 1.1.1).[30] Moreover, even *within* economies, people with conservative gender norms are less likely to be in the labour force themselves. Strikingly, this effect is driven entirely by women – even when controlling for other individual characteristics such as age, age squared, marital status, an indicator for children in the household and an urban dummy, as well as country of residence fixed effects. A 1 point increase in the gender norms index is associated with a 3 percentage point reduction in the probability of a woman being in the labour force. This equates to 5 per cent of the total female labour force participation rate.

Gender norms may also influence the ways in which individuals sort into occupations. As part of LiTS IV, respondents were asked whether they believed that certain occupations – nine in total – were suitable for (i) men, (ii) women or (iii) both. Across all EBRD regions, people regarded "engineer" and "surgeon" as relatively male occupations, while regarding "nurse" and "primary school teacher" as stereotypically female occupations. For each respondent, one can count the number of times that they indicate that an occupation is "definitely/somewhat more suitable for men" or "definitely/somewhat more suitable for women". The absolute occupational skewness is then a simple count of the number of occupations for which there is perceived unequal suitability.

The gender views that individuals hold correlate strongly with how much they perceive occupations as gendered (see Chart 1.1.2). Similarly, a regression framework that controls for country fixed effects and individual characteristics shows that a 1 point increase in the extent to which someone's gender norms are unequal is associated with an increase of 0.56 in absolute occupational skewness. This amounts to 16 per cent of the mean extent to which occupations are seen to be gender-specific. This suggests that conforming to stereotypical gender norms may influence the ways in which men and women sort into occupations.[31]

[29] See Alesina et al. (2013) and Giuliano (2018).

[30] See also Fortin (2005), Verick (2014) and Jayachandran (2021).

[31] See also Baranov et al. (2023).

BOX 1.1.

Gender norms and occupational segregation in the EBRD regions

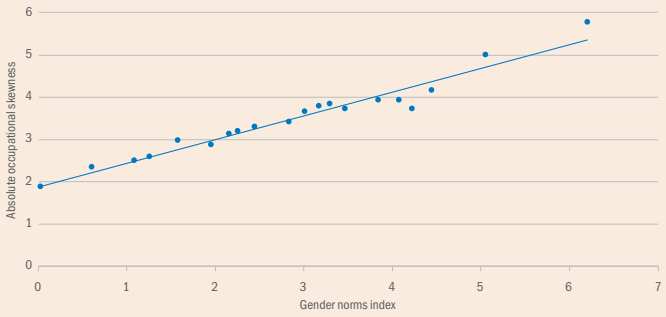
(Continued)

Individual occupations (defined at the two-digit level using ISCO codes) can be classified as (i) STEM (science, technology, engineering and mathematics) occupations; (ii) HEAL (health, education, administration and literacy) occupations;[32] or (iii) neutral occupations. In contrast to STEM occupations, HEAL occupations tend to be more people-focused than technology-oriented and tend to require literacy skills rather than numeracy.

As Chart 1.1.3 shows, there is considerable variation across economies in the importance of HEAL and STEM occupations, with men tending to have more of the STEM jobs and women tending to have more of the HEAL jobs. Strikingly, across the EBRD regions as a whole, the percentage of women who report having HEAL jobs is 11 percentage points higher than the equivalent figure for men, whereas the percentage of female respondents with STEM jobs is only 2 percentage points lower than the figure for men. A similar pattern can be observed for a sub-sample of countries covered by European Labour Force Surveys.

The EBRD Just Transition Initiative is one example of the ways in which the Bank helps countries to harness the capacity of their workforce, paving the way for more women to join STEM sectors. In Tunisia, the EBRD helped the national electricity and gas utility company to improve women's access to technical and STEM roles by strengthening its equal opportunity policies and practices (see also Box 3.3).

CHART 1.1.2. Absolute occupational skewness increases as gender norms become less equal

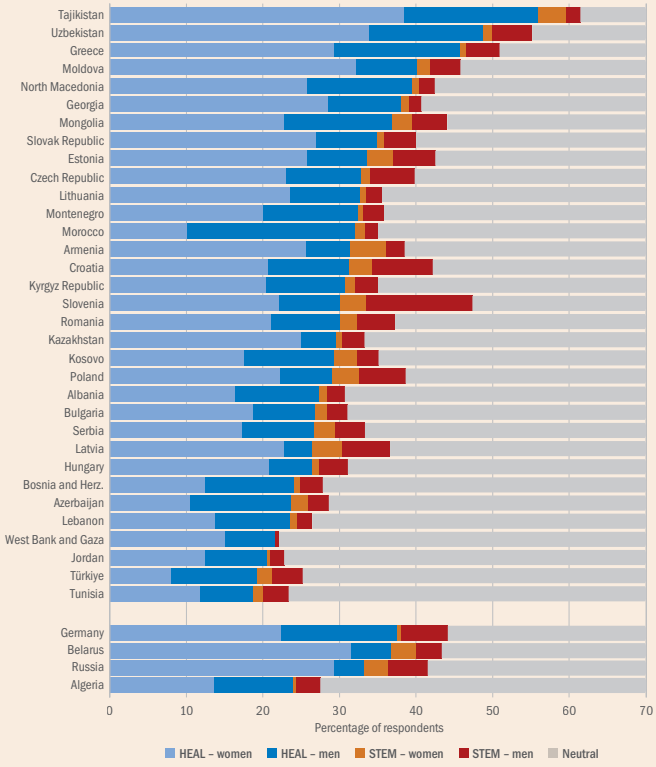


Source: LiTS IV and authors' calculations.
Note: This chart is a bin-scatter plot mapping absolute occupational skewness (vertical axis) against the gender norms index (horizontal axis). First, the residuals derived from regressing the vertical and horizontal axis variables on country dummies are identified. Second, the sample means are added back to those residuals, so that magnitudes are comparable to the original indices. Lastly, the gender norms index is grouped into 20 bins of equal size, and the mean gender norms score and the absolute occupational skewness are computed and plotted for each bin. The sample spans 33 EBRD economies.

One reason for encouraging men to take up HEAL jobs is to tackle labour shortages, particularly when it comes to healthcare. The WHO estimates that countries need at least 4.5 healthcare professionals per 1,000 people in order to provide universal healthcare and achieve health-related Sustainable Development Goals. In the EBRD regions, Egypt, Morocco and Tunisia are not expected to meet that criterion by the end of 2023.[33]

Strong gender norms – and, consequently, strong views about occupations that are only suitable for men or women – may contribute to a misallocation of human capital.[34] In particular, they may prevent men from applying for jobs in HEAL professions, such as nursing, thus making it more difficult for countries to achieve health-related development goals.

CHART 1.1.3. Men tend to have more STEM jobs, while women sort into HEAL jobs



Source: LiTS IV and authors' calculations.
Note: This chart shows, for each economy, the percentages of respondents who report having HEAL and STEM occupations, broken down by gender, and the percentage that have neutral occupations.

[32] See Reeves (2022).

[33] Data and projections are based mainly on pre-Covid trends, in line with Scheffler et al. (2016).
[34] See Hsieh et al. (2019).

BOX 1.2.

The return intentions of Ukrainian refugees

Russia's invasion of Ukraine has triggered Europe's largest refugee crisis since the Second World War. Russian military forces are increasingly targeting residential areas and vital civilian infrastructure.[35] Approximately 8 million people – including those forcibly relocated to Russia – have been displaced as a result.[36] In addition, there are several million internally displaced persons within Ukraine itself.[37]

Even before the invasion, Ukraine's population was experiencing a rapid decline owing to low fertility rates. There is concern that if a significant number of Ukrainian refugees choose to remain abroad, this could hinder post-war reconstruction efforts and make Ukraine more vulnerable to future military aggression. Against that background, this box investigates Ukrainian refugees' future intentions using Kantar's online "Voice of Ukraine" panel surveys, which cover Ukrainian refugees across Europe. In the first wave of the survey, respondents were recruited primarily through Facebook ads. They were then invited by email to take part in follow-up waves. The survey asks individuals about their plans as regards returning to Ukraine, with the possible answers being: "I intend to go back very soon"; "I intend to go back at some point later when I feel it is safe to return"; "I do not intend to go back and plan to settle outside Ukraine"; "I don't know"; and "I prefer not to answer".

Most Ukrainian refugees want to return to their home country

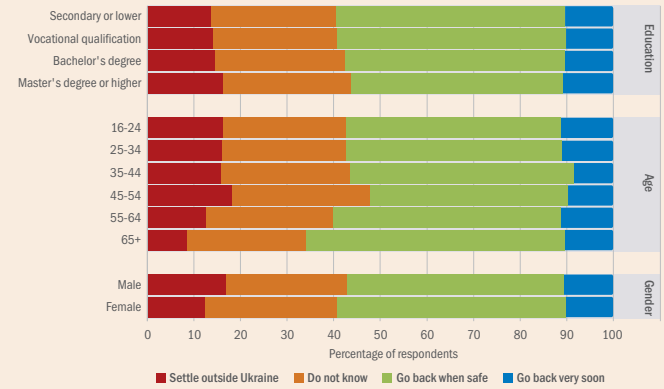
Only 8 per cent of respondents intend to settle outside Ukraine, with the vast majority planning to return very soon (8 per cent) or when it is safe (59 per cent). These percentages are broadly consistent across gender, age brackets and education levels (see Chart 1.2.1).[38]

Return intentions do not decline with time spent abroad

The longer Ukrainians spend in their various destination countries, the more likely they are to find employment (see Chart 1.2.2). After 200 days, their employment rate increases by about 20 percentage points. However, despite that strong labour-market integration over time, the percentage of individuals who plan to settle outside Ukraine does not increase significantly with time spent abroad.

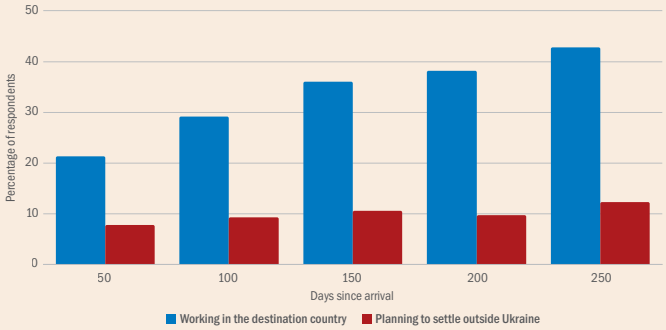
In conclusion, recent surveys indicate that the vast majority of Ukrainian refugees in Europe intend to return to Ukraine. This determination to return to their homeland contrasts with the strong desire to emigrate that tended to be expressed in surveys before the war. It may be that they now have a stronger national identity, which is acting as a powerful counterpoint to the push and pull factors that typically drive cross-border migration (such as differentials in per capita income or the quality of economic institutions). The actual level of return migration remains to be seen, and that return migration will play a pivotal role in future reconstruction efforts.

CHART 1.2.1. Ukrainian refugees' return intentions



Source: Kantar "Voice of Ukraine" survey and authors' calculations.
Note: The survey asks individuals about their plans as regards returning to Ukraine. The possible answers are: "I intend to go back very soon"; "I intend to go back at some point later when I feel it is safe to return"; "I do not intend to go back and plan to settle outside Ukraine"; "I don't know"; and "I prefer not to answer".

CHART 1.2.2. Ukrainian refugees' return intentions are not influenced by the amount of time spent in their destination country



Source: Kantar "Voice of Ukraine" survey and authors' calculations.
Note: Bars indicate bin-level averages for employment in the destination country and the intention to settle outside Ukraine net of controls. The analysis assigns all observations to five bins of equal size based on the number of days since arrival. Residuals are derived by regressing the outcome variable on gender, seven age brackets, partnership status, the presence of children under 18, living in an urban location, educational attainment, whether the respondent speaks English, whether the respondent answered the survey in Russian, the person's employment status in Ukraine prior to 22 February 2022 ("employed", "unemployed" or "student"), whether the respondent has continued their job in Ukraine remotely, whether the person left before 24 February 2022, and destination and day of leaving fixed effects.

[35] See Stepanenko et al. (2023).
[36] See UNHCR (2023).
[37] See EBRD (2022) and IOM Global Data Institute (2023).
[38] A 2023 report on Ukrainian migrants in Poland, published by Narodowy Bank Polski, found that 19 per cent of refugees indicated that they would stay permanently in Poland, while 56 per cent intended to return within three months of the war ending. See Narodowy Bank Polski (2023).

BOX 1.3.

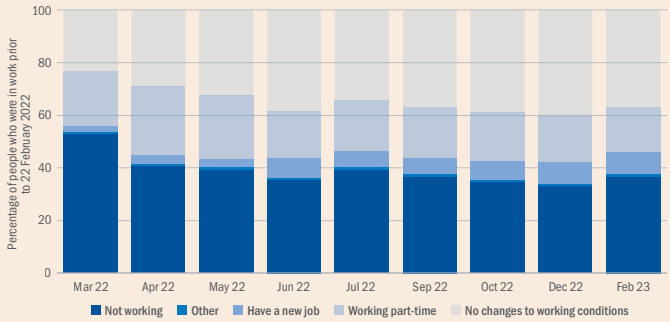
The impact that Russia's invasion has had on human capital in Ukraine

Russia's invasion of Ukraine has caused massive loss of life and major damage to the economy. While the many images of destroyed residential buildings, schools, hospitals and other physical infrastructure are an indication of the enormous suffering inflicted on the Ukrainian people, the cost of the war goes far beyond the ruins seen in Ukrainian cities, encompassing the destruction of both current and future human capital.[39] That destruction has the potential to scar Ukraine for many years to come.[40]

How significant has the loss of human capital been? The fog of war means that reliable data are hard to come by, but the numbers involved are certainly large.

First, human capital is directly reduced by the loss of human life, as well as debilitating physical or mental injuries. Tens of thousands of civilians have been killed, with 80 per cent of Ukrainians estimated to have at least one family member or close friend who has been killed or injured in the war.[41] At least 8 million have become refugees, seeking sanctuary across Europe and beyond, another 8 million have been displaced internally within Ukraine, and millions more are under Russian occupation.

CHART 1.3.1. Many Ukrainians who were in employment prior to the invasion are no longer working



Source: National Bank of Ukraine.
Note: This chart shows the employment status as at April 2023 of people who were in employment in Ukraine prior to the Russian invasion in February 2022. It is based on data in the National Bank of Ukraine's April 2023 *Inflation Report*.

Second, the education of many Ukrainian children continues to suffer severe disruption as a result of those children being displaced or stranded in war-torn regions, with access to schools limited. Indeed, more than 3,000 educational institutions have been destroyed or severely damaged.[42] Evidence from previous wars shows that such disruption to schooling reduces the productivity and future earnings of affected individuals. We know, for instance, that childhood exposure to war during the Second World War and the Vietnam War had long-lasting detrimental effects on education, health and labour-market outcomes that extended far beyond the conclusion of those conflicts.[43] Residents of Austria and Germany who were ten years old during the Second World War experienced reduced educational attainment and were still facing significant earnings gaps four decades after the war.[44]

Third, adults can lose human capital even without being directly affected by the war. For example, a year without work is estimated to reduce human capital by between 4 and 8 per cent.[45] This is a major concern, given that survey evidence suggests that 40 per cent of workers employed in Ukraine before the war were out of work in April 2023 (see Chart 1.3.1) and unemployment stood at approximately 30 per cent in 2022.

Recent surveys reveal that many reallocated workers have had to switch sectors and accept jobs for which they are over-qualified. For example, 20 per cent of the Ukrainian refugees living in Poland had pre-war jobs that required specialist skills, but only 3 per cent have found comparable high-skilled jobs in Poland.[46] At the same time, between 500,000 and 1,000,000 men and women are estimated to have been drafted into the armed forces.[47] In addition to the risk that such people could lose some of the skills required for their pre-war jobs, members of the armed forces also risk suffering physical or mental injuries, which could reduce their productivity.[48]

Thus, a substantial amount of resources will need to be committed to the rebuilding of human capital if Ukraine's post-war recovery is to be successful. It is vital, in that regard, that children have continuous access to education – both during and after the war. This can be achieved by offering classes for Ukrainian refugees, providing tutoring online or in person, and adapting curriculums to enhance learning, especially for refugee children. Universities and colleges should also facilitate the transfer of credits in order to foster continuity of education.

Further investment in the quality of education remains crucial. Ukraine's average scores in standardised international comparisons of students' ability (such as the Programme for International Student Assessment (PISA) run by the Organisation for Economic Co-operation and Development (OECD)) have been modest, despite relatively high levels of spending on education in relative terms (5.4 per cent of GDP in 2019, compared with 3.6 per cent of GDP in Greece, which enjoyed better PISA results).

[39] See Gorodnichenko et al. (2022).
[40] See Kóczán (2023).
[41] See Kyiv International Institute of Sociology (2023).
[42] See Kyiv School of Economics (2023).
[43] See Akbulut-Yuksel (2022).
[44] See Ichino and Winter-Ebmer (2004).
[45] See Blundell et al. (2016) and Dinerstein et al. (2020).
[46] See Centre for Economic Strategy (2023).
[47] See Zelensky (2022).

The war will exacerbate skill mismatches between labour demand and labour supply.[49] The post-war recovery will require new skills, as some jobs may disappear, while new ones will emerge. Construction, civil engineering, health, IT and agricultural export industries may all gain in importance. Identifying the skills that are needed in the post-war economy and establishing retraining centres for displaced workers will be essential. At the same time, retraining programmes can also support veterans' reintegration into civilian life after their military service.

Given the enormous negative effects that the war will inevitably have on health (including post-traumatic stress disorder), it is vital to develop disability-inclusive infrastructure and workplace policies that make it easier for people with disabilities to return to their previous roles and help to rebuild Ukraine. The Ukrainian Ministry of Veterans' Affairs estimates that the total number of war veterans in Ukraine could triple to about 3 million.

Lastly, the war can be expected to exacerbate Ukraine's demographic challenges, including its relatively low fertility rate. In this context, childcare could be made more affordable by establishing subsidy programmes, introducing targeted incentives to encourage private providers to enter the market, and having childcare facilities offer extended opening hours.

In summary, rebuilding human capital will be at the very heart of Ukraine's reconstruction efforts and will represent a huge challenge.

References

M. Akbulut-Yuksel (2022)
"Unaccounted Long-Term Health Cost of Wars on Wartime Children", VoxEU.org, 10 May.

C.G. Aksoy, J.M. Barrero, N. Bloom, S.J. Davis, M. Dolls and P. Zarate (2022)
"Working from Home Around the World", *Brookings Papers on Economic Activity*, Fall.

A. Alesina, P. Giuliano and N. Nunn (2013)
"On the Origins of Gender Roles: Women and the Plough", *The Quarterly Journal of Economics*, Vol. 128, No. 2, pp. 469-530.

G. Anastasia, T. Boeri, M. Kudlyak and O. Zholud (2022)
"The labour market in Ukraine: Rebuild better", in Y. Gorodnichenko, I. Sologoub and B. Weder di Mauro (eds.), *Rebuilding Ukraine: Principles and policies,* CEPR Press.

V. Baranov, R. De Haas and P. Grosjean (2023)
"Men. Male-biased sex ratios and masculinity norms: evidence from Australia's colonial past", *Journal of Economic Growth,* Vol. 28, No. 3, pp. 339-396.

J.M. Barrero, N. Bloom and S.J. Davis (2021)
"Why Working from Home Will Stick", NBER Working Paper No. 28731.

R. Blundell, M. Costa Dias, C. Meghir and J. Shaw (2016)
"Female Labor Supply, Human Capital, and Welfare Reform", *Econometrica*, Vol. 84, No. 5, pp. 1705-1753.

A. Cavanagh, C. Wilson, D. Kavanagh and P. Caputi (2017)
"Differences in the Expression of Symptoms in Men Versus Women with Depression: A Systematic Review and Meta-analysis", *Harvard Review of Psychiatry*, Vol. 25, No. 1, pp. 29-38.

Centre for Economic Strategy (2023)
"Ukrainian refugees: who are they, where did they come from and how to return them". Available at: https://ces.org.ua/en/ukrainian-refugees-who-are-they-where-did-they-come-from-and-how-to-return-them (last accessed on 30 August 2023).

[48] According to a recent survey on migration, nearly half (46 per cent) of Ukrainian refugees working in Poland say they are employed in jobs for which they are overqualified. See Narodowy Bank Polski (2023).
[49] See Anastasia et al. (2022) and Kupets et al. (2023).

A.E. Clark, S. Flèche, R. Layard, N. Powdthavee and G. Ward (2018)
The Origins of Happiness: The Science of Well-Being over the Life Course, Princeton University Press.

D.M. Cutler and N. Sportiche (2022)
"Economic Crises and Mental Health: Effects of the Great Recession on Older Americans", NBER Working Paper No. 29817.

M. Dinerstein, R. Megalokonomou and C. Yannelis (2020)
"Human Capital Depreciation", CESifo Working Paper No. 8614.

J.I. Dingel and B. Neiman (2020)
"How many jobs can be done at home?", *Journal of Public Economics*, Vol. 189, Article 104235.

EBRD (2016)
Life in Transition: A Decade of Measuring Transition, London. Available at: www.ebrd.com/what-we-do/economic-research-and-data/data/lits.html (last accessed on 31 August 2023).

EBRD (2018)
Transition Report 2018-19 – Work in Transition, Chapter 2, London. Available at: https://2018.tr-ebrd.com/labourmarkets (last accessed on 31 August 2023).

EBRD (2022)
Transition Report 2022-23 – Business Unusual, Chapter 2, London. Available at: https://2022.tr-ebrd.com/war-conflict-and-migration (last accessed on 31 August 2023).

N.M. Fortin (2005)
"Gender role attitudes and the labour-market outcomes of women across OECD countries", *Oxford Review of Economic Policy*, Vol. 21, No. 3, pp. 416-438.

GBD 2019 Mental Disorders Collaborators (2022)
"Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019", *The Lancet Psychiatry*, Vol. 9, No. 2, pp. 137-150.

P. Giuliano (2018)
"Gender: A Historical Perspective", in S. Averett, L. Argys and S. Hoffman (eds.), *The Oxford Handbook of Women and the Economy*, Oxford University Press, pp. 645-672.

Y. Gorodnichenko, M. Kudlyak and A. Sahin (2022)
"The Effect of the War on Human Capital in Ukraine and the Path for Rebuilding", Policy Insight 117, CEPR, June.

S. Guriev and N. Melnikov (2018)
"Happiness convergence in transition countries", *Journal of Comparative Economics*, Vol. 46, No. 3, pp. 683-707.

S. Guriev and E. Zhuravskaya (2009)
"(Un)happiness in Transition", *Journal of Economic Perspectives*, Vol. 23, No. 2, pp. 143-168.

J.F. Helliwell, R. Layard, J.D. Sachs, L.B. Aknin, J.-E. De Neve and S. Wang (eds.) (2023)
World Happiness Report 2023, 11th edition, Sustainable Development Solutions Network.

A.-S. Helvik, S. Krokstad and K. Tambs (2013)
"Hearing loss and risk of early retirement. The HUNT study", *European Journal of Public Health*, Vol. 23, No. 4, pp. 617-622.

C.-T. Hsieh, E. Hurst, C.I. Jones and P.J. Klenow (2019)
"The Allocation of Talent and U.S. Economic Growth", *Econometrica*, Vol. 87, No. 5, pp. 1439-1474.

A. Ichino and R. Winter-Ebmer (2004)
"The Long-Run Educational Cost of World War II", *Journal of Labor Economics*, Vol. 22, No. 1, pp. 57-87.

Institute for Health Metrics and Evaluation (2020)
"Results of the 2019 Global Burden of Disease Study", University of Washington. Available at: https://vizhub.healthdata.org/gbd-results (last accessed on 4 August 2023).

IOM Global Data Institute (2023)
"Registered IDP area baseline assessment Ukraine – Round 23", Displacement Tracking Matrix, International Organization for Migration. Available at: https://dtm.iom.int/ukraine (last accessed on 31 August 2023).

S. Jayachandran (2021)
"Social norms as a barrier to women's employment in developing countries", *IMF Economic Review*, Vol. 69, No. 3, pp. 576-595.

Z. Kóczán (2023)
"Lasting scars: The long-term effects of school closures on earnings", EBRD Working Paper No. 278.

O. Kupets, O. Betliy and F. Postel-Vinay (2023)
"Ukraine's Labour Market: the Past, the Present and the Future", in Y. Gorodnichenko and S. Stepanchuk (eds.), *Ukraine's Road to Recovery*.

Kyiv International Institute of Sociology (2023)
"How many Ukrainians have close relatives and friends who were injured/killed by the Russian invasion: results of a telephone survey conducted on May 26 - June 5, 2023". Available at: www.kiis.com.a/?lang=eng&cat=reports&id=1254&page=1 (last accessed on 31 August 2023).

Kyiv School of Economics (2023)
"Report on Damages to Infrastructure Caused by Russia's War Against Ukraine One Year after the Start of the Full-Scale Invasion". Available at: https://kse.ua/wp-content/uploads/2023/03/ENG_FINAL_Damages-Report_.pdf (last accessed on 7 September 2023).

R. Layard (2020)
Can We Be Happier? Evidence and Ethics, Penguin Random House UK.

A. Llena-Nozal, N. Martin and F. Murtin (2019)
"The economy of well-being: Creating opportunities for people's well-being and economic growth", OECD Statistics Working Paper No. 2019/02.

Lockton (2022)
"New Remote Working Legislation Around the World", *Global Compliance News*.

J. Nachtegaal, J.M. Festen and S.E. Kramer (2012)
"Hearing Ability in Working Life and Its Relationship With Sick Leave and Self-Reported Work Productivity", *Ear and Hearing*, Vol. 33, No. 1, pp. 94-103.

Narodowy Bank Polski (2023)
The living and economic situation of Ukrainian migrants in Poland – the impact of the pandemic and the war on the nature of migration in Poland, Warsaw. Available at https://nbp.pl/wp-content/uploads/2023/05/Raport_Imigranci_EN.pdf (last accessed on 27 October 2023).

G.T. Niemesh (2015)
"Ironing Out Deficiencies: Evidence from the United States on the Economic Effects of Iron Deficiency", *The Journal of Human Resources*, Vol. 50, No. 4, pp. 910-958.

OECD (2022)
"Assessing Teleworking Strategies for Local Development: A Framework Proposal", Paris.

R. Reeves (2022)
Of Boys and Men. Why the Modern Male is Struggling, Why It Matters, and What To Do About It, Brookings Institution Press.

M. Ridley, G. Rao, F. Schilbach and V. Patel (2020)
"Poverty, depression, and anxiety: Causal evidence and mechanisms", *Science*, Vol. 370, No. 6522.

S. Safiri, A.-A. Kolahi, M. Noori, S.A. Nejadghaderi, N. Karamzad, N.L. Bragazzi, M.J.M. Sullman, M. Abdollahi, G.S. Collins, J.S. Kaufman and J.A. Grieger (2021)
"Burden of anemia and its underlying causes in 204 countries and territories, 1990-2019: results from the Global Burden of Disease Study 2019", *Journal of Hematology & Oncology*, Vol. 14, Article 185.

P. Sanfey and U. Teksoz (2007)
"Does transition make you happy?" *Economics of Transition*, Vol. 15, No. 4, pp. 707-731.

R.M. Scheffler, G. Cometto, K. Tulenko, T. Bruckner, J. Liu, E.L. Keuffel, A. Preker, B. Stilwell, J. Brasileiro and J. Campbell (2016)
"Health workforce requirements for universal health coverage and the Sustainable Development Goals", Background Paper No. 1 to the Global Strategy on Human Resources for Health, World Health Organization.

K.V. Smith and N. Goldman (2011)
"Measuring health status: self-, interviewer, and physician reports of overall health", *Journal of Aging and Health*, Vol. 23, No. 2, pp. 242-266.

K. Stepanenko, R. Bailey, A. Howard and M. Clark (2023)
"Russian offensive campaign assessment, January 14, 2023", Institute for the Study of War and Critical Threats Project. Available at: www.understandingwar.org/sites/default/files/Russian%20Operations%20Assessments%20January%2014%202023.pdf (last accessed on 7 September 2023).

I. Theodossiou (1998)
"The effects of low-pay and unemployment on psychological well-being: A logistic regression approach", *Journal of Health Economics*, Vol. 17, No. 1, pp. 85-104.

UNHCR (2023)
"Ukraine Situation – 2022 Final Report Regional Refugee Response Plan (March – December 2022)", Office of the United Nations High Commissioner for Refugees, Geneva. Available at: https://data2.unhcr.org/en/documents/details/99791 (last accessed on 7 September 2023).

S. Verick (2014)
"Female labor force participation in developing countries", *IZA World of Labor*, Article 87.

WHO (2022)
"Mental health", Geneva. Available at: www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response (last accessed on 30 August 2023).

V. Zelensky (2022)
Interview as part of the National Information Marathon. Available at: www.youtube.com/watch?v=POHTuSnRNP8&t=9s (last accessed on 30 August 2023).