Chapter 3

Do International Migrants Increase Their Happiness and That of Their Families by Migrating?

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The considerable happiness differences between countries suggest that migrating to another country provides for many people a major opportunity to obtain a happier life. However, negative migrant experiences are common, including exploitation, social exclusion, homesickness, and unsuccessful socioeconomic assimilation.[1] This raises important questions in our globalizing world, where more than 700 million people currently say they would like to move permanently to another country if they had the opportunity,[2] and where the international migrant population is expected to increase from the current 250 million to an estimated 400 million people in 2050.[3] Do migrants generally gain happiness from moving to another country? In what specific migration flows do migrants gain happiness from moving abroad? Do the short-term and long-term impacts of migration on migrants' happiness differ? What is the impact of migration on the happiness of families left behind?

We assess these questions in a global context using Gallup World Poll (GWP) data including more than 36,000 first-generation migrants from over 150 countries and territories. By addressing these questions empirically, this chapter is intended to develop globally comparable information about how migration affects the happiness of migrants and their families. The outcomes in both the affective and cognitive dimensions of happiness will be considered. The affective dimension refers to the frequency of experiencing pleasant moods and emotions as opposed to unpleasant ones, whereas the cognitive dimension refers to a person's contentment and satisfaction with life.[4]

Approximately 10% of international migrants are considered refugees who were forced to migrate by external circumstances such as war, persecution, or natural disasters.[5] The other 90% of international migrants are believed to move largely voluntarily. Voluntary migrants mention a variety of motives for migration, including economic gain, career or study opportunities, living closer to family, or a more livable or suitable environment (e.g., more religious or political freedom). On the most general level, however, these concrete motives are different ways migrants attempt to improve their own or their families' lives.[6] Empirical research shows that, when making important decisions such as migration decisions, most people tend to choose the option they think will make them or their families happiest.[7] This suggests that migrants move particularly to improve their own or their families' lives in terms of happiness, with the exception of refugees who move primarily to secure their lives. Conceptually, then, happiness, which is often used synonymously with subjective well-being, provides valuable information about migrant well-being.

The above considerations imply that voluntary migrants anticipate that migration will lead to improved well-being for themselves and/or their families. Many migrants will surely experience considerable happiness gains, particularly those who meet basic subsistence needs by migrating, as basic needs such as economic security and safety are vital conditions for happiness.[8] Migrants moving to more developed countries may also experience major gains in other important well-being domains, such as freedom, education, and economic welfare.[9]

It should come as no surprise, however, to find that some migrants have not become happier following migration. Migration is associated with severe costs in other critical well-being domains, particularly those relating to social and esteem needs. Separation from friends and family, social exclusion in the host country (e.g., discrimination), and decreased social participation due to linguistic and cultural barriers are typical social costs of migration that frequently result in experiences of social isolation, loneliness, and impaired social support among migrants.[10] Migration also often entails a lower position in the social hierarchy, a sense of dislocation, and acculturative stress (cultural clashes and identity issues).[11] Additionally, happiness gains may falter over time because people tend to adapt more to the typical benefits of migration, such as improvements in economic welfare, than to migration's typical costs, such as leaving behind one's social and cultural environment.[12]

Migration decisions are complicated by major information constraints. Most prospective migrants have never been in their intended destination country. They necessarily resort to information from the media or their personal social network. However, these sources tend to provide limited and positively biased information; for example, migrants tend to be hesitant about

revealing their disappointing migration outcomes to people in their home country.[13] In essence, prospective migrants must make one of the most important and difficult decisions of their lives based on limited knowledge of its consequences. Imperfect decisions may also follow from inaccurately weighing the importance of the anticipated advantages and disadvantages of migrating. Placing disproportionate weight on certain aspects of the outcome may be common, since human susceptibility to deviations from a standard of rationality is well-documented in the social sciences.[14] Specifically, people are believed to put excessive weight on satisfying salient desires, most notably economic gain, at a cost to more basic needs such as social needs.[15] These beliefs are inspired by the weak correlation between economic welfare and happiness for people who have sufficient money to make ends meet.[16] Migration may thus be a misguided endeavour for some migrants who move in search of a better life,[17] which signals the need to evaluate whether migrants are truly better off after migration.

Evaluating the outcomes of migration is complicated, however, by the rarity of experimental studies and panel studies tracking international migrants across international borders. Existing work evaluating migrants' happiness outcomes is mostly limited to comparing the happiness of migrants with that of demographically similar people living in a migrant's home country (matched stayers).[18] The happiness of matched stayers reflects what the migrant's happiness would have been like had they not migrated, which implies that migrants benefit from migration if they report higher happiness levels than matched stayers.[19] This methodology has limited leverage in estimating the causal impact of migration because the non-random selection of people into migration is not fully captured by the comparison of demographically similar migrants and stayers. For example, compared with stayers, migrants tend to be less risk-averse, to have a higher achievement motivation and lower affiliation motivation, and to differ in terms of pre-migration skills and wealth.[20] Moreover, people who are relatively unhappy given their socio-economic conditions are more willing to migrate.[21] Such unobserved pre-migration differences between migrants and stayers may bias the estimated impact of migration when using simple comparisons of migrants and stayers.

The current literature generally reports happiness gains for migrants moving to more developed countries, whereas non-positive happiness outcomes are observed particularly among migrants moving to less developed countries.[22] However, there are notable exceptions to this general pattern. Convincing evidence comes from the only experimental data available, which concerns a migration lottery among Tongan residents hoping to move to New Zealand.[23] Four years after migration, the 'lucky' Tongans who were allowed to migrate were less happy than the 'unlucky' Tongans who were forced to stay, even though the voluntary migrants enjoyed substantially better objective well-being, such as nearly triple their pre-migration income. Non-positive happiness outcomes are also reported among other migration flows to more developed countries, such as for Polish people moving to Western Europe[24] and in the context of internal migration, rural-urban migrants in China.[25] The strong dependence of migration outcomes on where migrants come from and where they go highlights the unique characteristics of each migration flow and the importance of information on the well-being outcomes of migrants in specific migration flows.

One possible reason for non-positive outcomes among some migrants is that they have not yet fully reaped the benefits of migration. Most migrants perceive migration as an investment in their future; they typically expect their well-being to gradually improve over time after overcoming initial hurdles, such as learning the language and finding a job. Conversely, as mentioned above, the initial effect of migration is weakened by migrants' adaptation to their lives in the host country that may follow from a shifting frame-of-reference.[26] The migrant's length of stay may thus be important to consider when evaluating the well-being consequences of migration.

Another possible reason that some migrants may not become happier from migration is that they sacrifice some of their own happiness to support, via remittances, the well-being of family members and/or others who remain in the country of origin. The vast scope of worldwide bilateral remittance flows—exceeding an estimated $600 billion in 2015 alone[27]–illustrates that moving abroad to improve the welfare of people back home is an established reason for migration, particularly among migrants moving from

developing to developed countries, and highlights that migration is often a family decision rather than an individual one.[28] The receipt of remittances often results in significant economic gains and poverty alleviation for families left behind and thereby enables access to better health care, education for one's children, and other consumption opportunities that benefit happiness.[29] However, family separation also has various negative consequences for family members who remain in the country of origin, such as impaired emotional support, psychological disconnection from the migrant, and a greater burden of responsibility for household chores and child nurturing.[30] Do the advantages of having a family member abroad outweigh the disadvantages? Although the receipt of remittances is associated with greater happiness,[31] having a household member abroad was not positively associated with life satisfaction among left-behind adult household members in an Ecuadorian community.[32] Similarly, household members left behind in small Mexican and Bolivian communities do not evaluate their family happiness as having improved more than non-migrant households.[33] In contrast, in a comprehensive set of Latin American countries, adult household members with relatives or friends abroad who they can count on evaluate their lives more positively than adults without such relatives or friends abroad.[34] Causal evidence for emotional well-being and mental health is also mixed. For example, the emigration of a family member did not affect the emotional well-being of left-behind families in Tonga and the elderly in Moldova but did negatively affect various aspects of emotional well-being among left-behind Mexican women and caregivers in Southeast Asia.[35] Hence, the happiness consequences of migration for those staying behind appear to be strongly context-dependent. Given that the current literature has predominantly focused on specific countries or communities, a global picture is missing of how migration affects the happiness of those staying behind.

This chapter contributes to existing knowledge in three main ways. First, it covers the happiness outcomes of migrants in previously unexplored migration flows between world regions (e.g., from South Asia to Southeast Asia), within world regions (e.g., within sub-Saharan Africa), and between specific countries (e.g., Russians to Israel) using a methodology that allows for more accurate estimates of the happiness consequences of migration than is typically used in the literature. Second, while previous work predominantly evaluated migrants' cognitive happiness outcomes (life evaluations), this chapter explores migrants' happiness outcomes more comprehensively by additionally considering the impact of migration on the affective dimension of happiness (moods and emotions).[36] Third, this chapter provides a global overview of the relationship between migration and the happiness of families left behind and examines the impact of migration on families left behind in various previously unexplored migration flows.

The Happiness Outcomes of International Migrants

To determine the impact of migration, we aim to compare the happiness of migrants to what their happiness would have been had they not migrated. The latter is unobserved. In the absence of large-scale experimental or panel data tracking migrants across international borders, we use pooled annual cross-sectional GWP data across more than 150 countries and territories spanning the period 2009-2016 to make this comparison. The adult sample contains more than 36,000 first-generation migrants.[37] To mitigate the above discussed self-selection and reverse causality issues in the best possible way given our cross-sectional data, we use a more rigorous approach than a simple comparison of migrants and matched stayers, as has been typically done in the literature.[38] We first matched migrants to demographically similar people in their country of origin who desire to move permanently to another country, i.e., potential migrants. Given that emigration aspirations are found to be good predictors of subsequent migration behaviour,[39] potential migrants can be assumed to have similar unobserved characteristics (e.g., similar risk preferences and pre-migration wealth) as migrants had before they migrated. By using the happiness of potential migrants as a proxy for migrants' pre-migration happiness, we created a synthetic panel that allows us to estimate migrants' pre-versus post-migration change in happiness. The comparison of migrants and potential migrants captures a migrant's change in happiness but not how the happiness of migrants would

have developed had they not migrated. We included a control group to capture this counter-factual. Specifically, we matched migrants with demographically similar stayers who expressed no desire to migrate (reflecting the happiness of stayers in the post-migration period) and we additionally matched potential migrants with demographically similar stayers who expressed no desire to migrate (reflecting the happiness of stayers in the pre-migration period). In the end, we have four groups: migrants after migration (group 1), migrants before migration (group 2), stayers in the post-migration period (group 3), and stayers in the pre-migration period (group 4). We calculated the impact of migration by comparing migrants' average pre-versus post-migration period change in happiness to that of stayers (i.e., difference-in-differences). Our empirical strategy is described in more detail in Technical Box 3.1.

We ensured that our immigrant sample is as representative as possible for the true immigrant stock size of each country by virtue of a weighting variable using UN DESA (2015) data on each country's immigrant stock. In some analyses, the immigrant population is divided into newcomers and long-timers based on whether the immigrant has lived for more or fewer than five years in their country of residence to compare the short- and long-term impacts of migration. We consider three happiness indicators that together cover the cognitive and affective dimension of happiness:

1. Life evaluation—as measured by the Cantril ladder-of-life question that asks people to make a cognitive assessment of the quality of their lives on an 11-point ladder scale, with the bottom rung of the ladder (0) being the worst possible life for them and the top rung (10) being the best possible life.[40]
2. Positive affect—as measured before 2012 by a three-item index asking respondents whether they frequently experienced (1) enjoyment, (2) laughter, and (3) happiness on the day before the interview. For the 2013-2016 period, a two-item index comprising the first two items was used because the latter item was not available for this period.
3. Negative affect—as measured by a three-item index asking respondents whether they frequently experienced (1) worry, (2) sadness, and (3) anger on the day before the interview.[41]

We conduct separate analyses for each happiness indicator because, while positively correlated, outcomes can differ considerably between these dimensions.[42]

The average happiness gains of the global immigrant population are presented in Figure 3.1. Immigrants across the globe evaluate their lives on average 0.47 points higher (on a 0-10 scale) after migration, which implies that migrants report approximately 9% higher life evaluations following migration.[43] Migrants also experience 5% more positive affect (0.33 points on a 0-10 scale) and 7% less negative affect (0.23 points on a 0-10 scale) due to migration.[44]

The increased life evaluations of "newcomers", and to a lesser extent their increased positive affect experiences,[45] show that immigrants already achieve happiness gains during their first five years after migration. The happiness gains of long-timers are very similar to those of newcomers. This finding suggests that the happiness of immigrants does not improve much with their length of stay in the destination country,[46] which is in line with previous research findings.[47]

Technical Box 3.1: Estimation Strategy

We first matched each migrant to observably similar potential migrants and two groups of observably similar stayers who have no desire to migrate using an exact matching procedure. In the end, a synthetic panel is created with the following four groups:

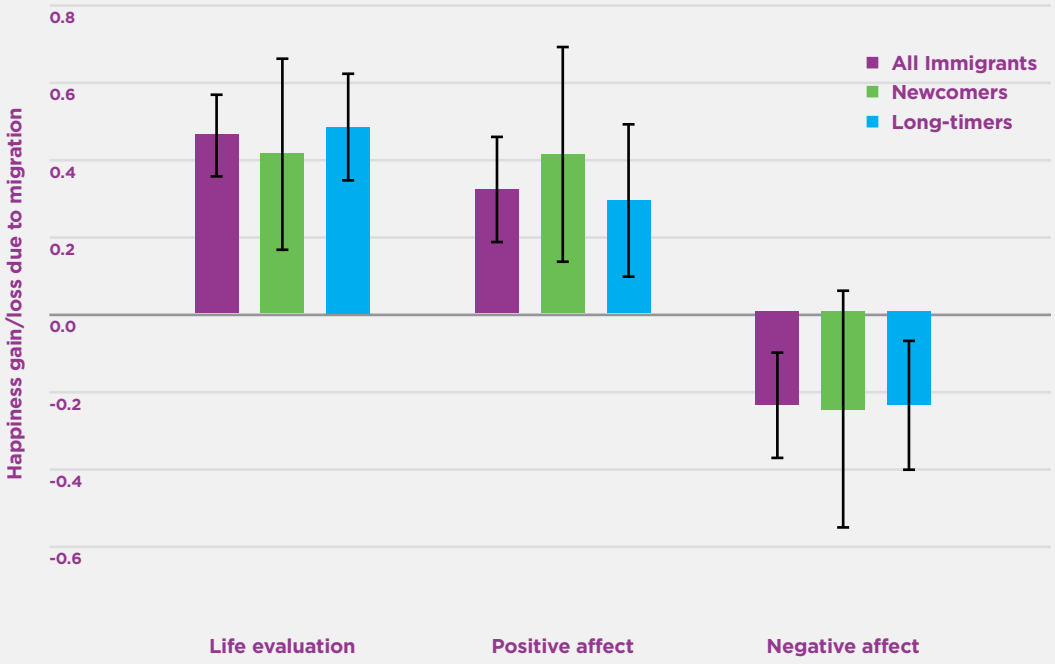
1. Migrants after moving to another country.
2. Potential migrants before moving to another country.[48] This group is obtained by exactly matching migrants in the first group with one or more respondents who expressed a desire to permanently move to another country using country of origin, gender, and education level as matching variables.[49] To make realistic comparisons, potential migrants had to be younger than the migrant they were matched with.
3. Stayers that are matched with Group 1. This group consists of those expressing no desire to permanently move abroad, and who were identified by matching the migrants from the first group with one or more stayers based on country of origin, gender, education level, age group (maximum age difference of 5 years), and year of interview.
4. Stayers that are matched with Group 2. This group consists of those expressing no desire to permanently move abroad, and who were identified by matching the potential migrants from the second group with one or more stayers based on country of origin, gender, education level, age group (maximum age difference of 5 years), and year of interview.

By construction, potential migrants (group 2) and stayers in the pre-migration period (group 4) are on average younger than migrants (group 1) and stayers in the post-migration period (group 3). Descriptive statistics of the four matched groups are provided in Table A1 of the Online Appendix. A counterfactual (groups 3 and 4) is typically included in panel studies to mitigate the effect of time-varying extraneous factors, but the counterfactual has a slightly different purpose in our repeated cross-sectional design. In the context of this study, the counterfactual mainly mitigates possible differences between migrants and potential migrants that are due to a confounding age trend. This correction allows us to better account for how migrants' happiness would have developed had they not migrated. After the creation of our synthetic panel, a parametric difference-in-difference estimator was used to estimate the effect of migration on happiness:

$$(H_{GROUP1} - H_{GROUP2}) - (H_{GROUP3} - H_{GROUP4}) \quad (1)$$

where H is the happiness indicator (life evaluation, positive affect, or negative affect). In case of a (potential) migrant matched with more than one non-migrant, the average life evaluation, positive affect, and negative affect of the matched non-migrants was taken. The difference-in-differences estimates are based on OLS regressions using robust standard errors and including age and age squared as covariates.

Figure 3.1: The Happiness Outcomes of the Global Immigrant Population



Source: GWP 2009-2016.

Note: All measures have a 0-10 scale. 95% confidence interval bars shown. The sample contains 36,574 immigrants, including 6,499 newcomers and 30,075 long-timers. See Table A2 for unweighted descriptive statistics of the various migrant groups and Table A3 for the weighted sample composition.

Happiness Outcomes by Migration Flow

Table 3.1 shows the happiness outcomes in some of the largest migration flows within or between ten world regions: Latin America and the Caribbean (LAC), sub-Saharan Africa (SSA), the Middle East and North Africa (MENA), South Asia, Southeast Asia, East Asia, the Commonwealth of Independent States (CIS), Central and Eastern Europe (CEE), Western Europe, and Northern America combined with Australia and New Zealand (NA & ANZ).[50] We highlight the most important results.

Migrants in almost all reported migration flows evaluate their lives more positively after migration, including migrants moving within world regions (e.g., migrants within CIS), migrants moving to more developed world regions (e.g., from CEE to Western Europe), and migrants moving between similarly developed world regions (e.g., from Western Europe to Northern America & ANZ). At the same time, migrants do not experience less negative affect following migration in the majority of considered migration flows. Increased positive affect following migration is more common than reduced negative affect but less common than life evaluation gains. Taken together, improved contentment is more prevalent than improved affective experiences. Accordingly, migration positively impacts all three aspects of happiness (life evaluations, positive affect, and negative affect) in only four out of the 20 considered migration flows. These four migration flows include migrants within the Commonwealth of Independent States, the Middle East and North Africa, Western Europe, and Central & Eastern

Table 3.1: Migrants' Happiness Outcomes by Regional Migration Flow

Migration flow	Life evaluation	Positive affect	Negative affect	Size of migrant stock[a]	N of migrants
Within regions					
Commonwealth of Independent States	+0.39** [0.28 - 0.49]	+0.43** [0.23 - 0.63]	-0.51** [-0.64 - -0.37]	22,092,847	4,176
Sub-Saharan Africa	+0.21** [0.06 - 0.35]	NS	NS	15,952,589	4,184
Middle East and North Africa	+0.44** [0.21 - 0.66]	+0.57** [0.18 - 0.96]	-0.95** [-1.36 - -0.54]	14,273,111	2,563
Western Europe	+0.45** [0.31 - 0.60]	+0.36** [0.12 - 0.60]	-0.31** [-0.53 - -0.09]	11,525,545	4,123
South Asia	NS	NS	NS	9,653,943	524
Southeast Asia	+1.08* [0.13 - 2.03]	NS	NS	7,044,470	607
Latin America & the Caribbean	+0.45** [0.24 - 0.66]	NS	NS	5,918,332	1,846
East Asia	+0.54** [0.23 - 0.84]	+0.85** [0.46 - 1.24]	NS	5,204,219	1,062
Central & Eastern Europe	+0.39** [0.26 - 0.52]	+0.51** [0.27 - 0.75]	-0.49** [-0.67 - -0.31]	3,064,126	3,517
Northern America & ANZ	NS	NS	NS	2,245,399	455
Between regions					
CEE → Western Europe	+0.78** [0.58 - 0.97]	+0.50** [0.15 – 0.85]	NS	11,296,274	1,609
MENA → Western Europe	+0.90** [0.64 - 1.17]	+0.86** [0.37 - 1.35]	NS	9,239,336	655
Western Europe → NA&ANZ	+0.84** [0.53 - 1.14]	+0.73* [0.14 - 1.32]	NS	6,785,656	1,627
LAC → Western Europe	+0.36** [0.15 - 0.56]	-0.37* [-0.70 - -0.04]	NS	4,627,262	734
SSA → Western Europe	+1.44** [1.03 - 1.86]	+0.87** [0.16 - 1.58]	NS	4,111,872	375
CIS → Western Europe	+0.59** [0.22 – 0.96]	NS	NS	4,053,523	396
CIS → CEE	+0.57** [0.26 - 0.88]	+0.69* [0.10 – 1.28]	NS	1,481,054	1,975
South Asia → Southeast Asia	+0.80* [0.08 - 1.51]	NS	-0.93* [-1.64 - -0.22]	1,219,086	308
Western Europe → CEE	NS	NS	NS	768,172	653
CIS → MENA	+1.11** [0.66 - 1.66]	NS	+0.57** [0.14 - 1.00]	461,174	908

Sources: GWP 2009-2016. [a] UN DESA (2015).[51]

Notes: 95% confidence intervals in parentheses.* p<0.05, ** p<0.01, NS = not significant at the 5% level. Migration flows with fewer than 300 migrant-stayer matches are not reported. The composition of regional migration flows is presented in Table A5.

Europe. Non-positive outcomes for all three happiness indicators are experienced by migrants who left Western European countries to live in Central or Eastern Europe, migrants within South Asia, and migrants within Northern America & ANZ. These findings highlight that migrants typically experience divergent outcomes in life evaluations, positive affect, and negative affect. Nevertheless, negative outcomes at the level of regional migration flows are uncommon; only migrants from CIS to MENA and migrants from Latin America to Western Europe report increased negative affect and decreased positive affect, respectively. Finally, the results show that there is no strong relationship between the size of the migration flow and the size of migrants' happiness gains.

It should be noted that the happiness outcomes of migrants from a given source region to the various destination regions are not directly comparable. For example, the slightly higher happiness gains among migrants within LAC compared with Latin American migrants moving to Western Europe does not imply that those who moved to Western Europe would have been better off had they moved within LAC. One reason is that the considered migration flows differ in the distribution of source countries. For example, compared with Argentinians, relatively more Nicaraguans move within Latin America than to Western Europe. Another reason is that migrants in different migration flows may have different characteristics. For example, many migrants moving within regions do not have the financial resources to move to another world region and certain types of migrants (e.g., humanitarian migrants) are admitted in some countries/regions but not in others. Moreover, the achieved happiness gains are not indicative of the maximum possible happiness gain of a certain migration flow. For instance, most Latin American migrants in Western Europe live in Spain and Portugal, but they may have been happier had they moved to another Western European country.

In Table 3.2, we present migrants' happiness outcomes in selected flows between specific nations. One general pattern that emerges is the positive outcomes among United Kingdom (UK) emigrants who moved to other Anglo-Saxon countries. Another general pattern is the non-positive outcomes of Russian-born people

Table 3.2: Migrants' Happiness Outcomes in Migration Flows Between Specific Nations

Migration flow	Life evaluation	Positive affect	Negative affect	N of migrants
United Kingdom → Ireland	+0.65** [0.48 - 0.81]	+0.72** [0.43 - 1.01]	-0.54** [-0.83 - -0.25]	478
United Kingdom → Australia	+0.94** [0.76 - 1.11]	NS	-0.64** [-0.91 - -0.37]	528
United Kingdom → New Zealand	+1.11** [0.95 - 1.26]	+0.83** [0.58 - 1.08]	-0.97** [-1.22 - -0.72]	519
Russia → Estonia	-0.28** [-0.45 - -0.12]	-0.91** [-1.26 - -0.56]	NS	691
Russia → Latvia	NS	NS	NS	416
Russia → Belarus	+0.45** [0.25 - 0.65]	NS	-0.33* [-0.64 - -0.01]	385
Russia → Kazakhstan	+0.28* [0.05 - 0.52]	+0.57* [0.10 - 1.04]	-0.71** [-1.04 - -0.37]	338
Russia → Israel	+1.55** [1.40 - 1.71]	NS	+1.42** [1.15 - 1.69]	580
China → Hong Kong	+0.16* [0.01 - 0.31]	-0.43** [-0.70 - 0.16]	+0.24* [0.02 - 0.46]	829
Palestinian Territories → Jordan	+1.63** [1.42 - 1.84]	+1.03** [0.64 - 1.42]	-2.09** [-2.42 - -1.76]	626
Nicaragua → Costa Rica	+1.48** [1.24 - 1.72]	+0.60** [0.31 - 0.89]	-0.79** [-1.12 - -0.46]	459
France → Luxembourg	+0.83** [0.66 - 1.00]	+0.67** [0.30 - 1.04]	-1.02** [-1.35 - -0.69]	361
Portugal → Luxembourg	+1.43** [1.23 - 1.63]	+0.49** [0.08 - 0.90]	-1.05** [-1.42 - -0.68]	352
Albania → Greece	NS	NS	NS	355
Serbia → Montenegro	+0.48** [0.19 - 0.77]	+0.79** [0.29 - 1.27]	NS	309
Ivory Coast → Burkina Faso	NS	-0.90** [-1.37 - -0.43]	NS	310

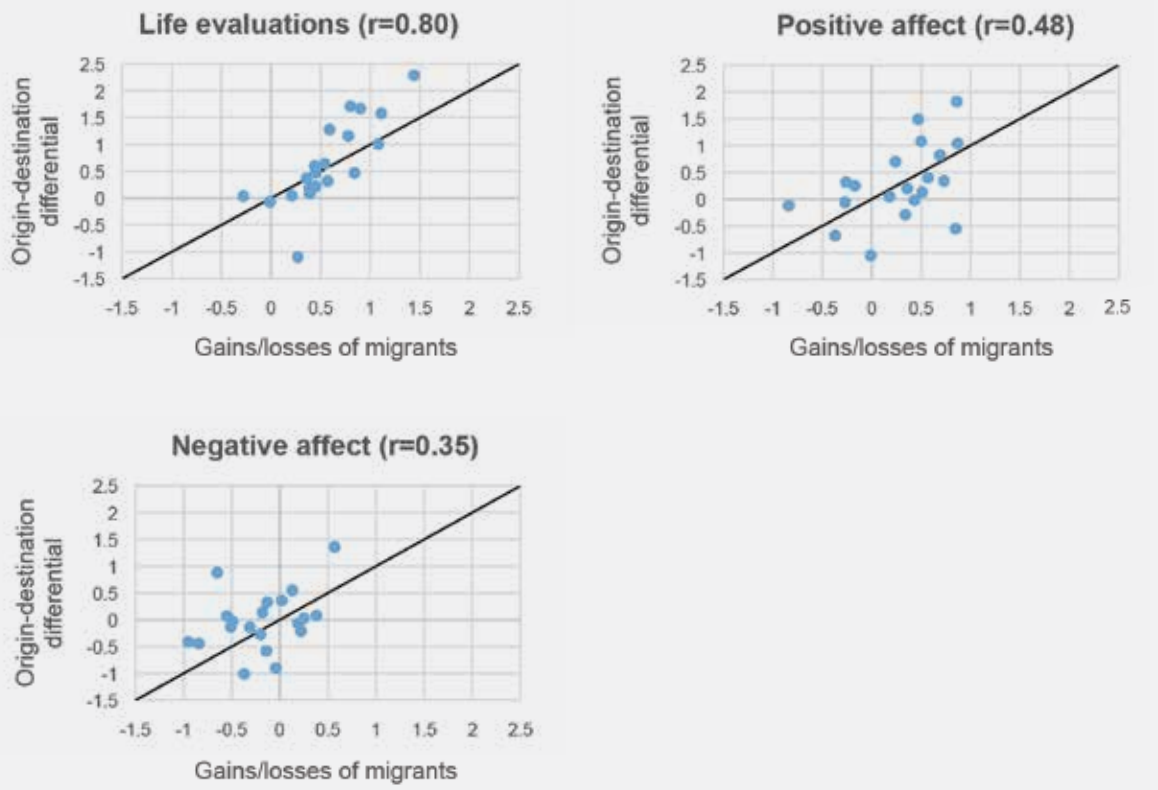
Source: GWP 2009-2016.

Notes: 95% confidence intervals in parentheses. * p<0.05, ** p<0.01, NS = not significant at the 5% level. Migration flows with fewer than 300 migrant-stayer matches are not reported.

who moved to the Baltic states, whereas Russian-born migrants in some other former Soviet republics did gain happiness from migration. A noteworthy finding is that Russian-born migrants in Israel evaluate their lives much more positively after migration but simultaneously experience adverse outcomes in terms of affect. These results are in line with the relatively high life evaluations but relatively low emotional well-being of Israel's native population (Israel ranks 14th out of 156 countries on the Cantril ladder but 107th out of 156 countries on net affect in the period 2005-2011).[52] The happiness outcomes of Russian-born migrants in Israel mainly drive the results reported in Table 3.1 for migrants from CIS to MENA.

In Chapter 2 of this World Happiness Report, it was shown that the happiness of immigrants does not differ much from that of the native-born population. This finding suggests that the happiness of immigrants depends first and foremost on their conditions in the host country and relatively less on their former lives in their countries of origin or innate cultural differences in happiness. We further test to what extent the happiness levels of migrants converge towards the average happiness level in the destination

Figure 3.2: The Relationship Between Migrants' Happiness Gains and the Corresponding Origin-Destination Happiness Differential



Source: GWP 2009-2016.

Notes: The interpretation of these graphs can be exemplified using the upper right data point in the "life evaluations" panel. This data point represents migrants from sub-Saharan Africa to Western Europe, and shows that these migrants evaluate their lives 1.44 higher due to migration (as presented on the X-axis) while the corresponding difference in life evaluations between the native populations of their host- and origin countries is 2.29 (as presented on the Y-axis). The origin-destination differential is weighted by the size of bilateral migration flows within these world regions to ensure accurate comparisons. Detailed information is presented in Table A6.

country by comparing a migrant's happiness gain with the happiness differential between the migrant's origin and destination country. This origin-destination happiness differential is calculated by subtracting the average happiness level in the country of origin from that of the destination country's native-born population. Figure 3.2 shows three scatter plots—one for each happiness indicator—of migrants' happiness gains/losses due to migration (as presented on the X-axis) and the corresponding origin-destination happiness differentials (as presented on the Y-axis). The data points represent the 20 regional migration flows considered in Table 3.1. Migrants' happiness levels tend to become more similar to those of people in their destination country when there is a high positive correlation between migrants' happiness gains and the destination-origin happiness differential, i.e., when the points are closer to the 45-degree lines in each panel. Indeed, we find a strong positive correlation between the life evaluation gains of migrants and the life evaluation differentials between their origin and destination countries (r=0.80). The correlations for positive affect (r=0.48) and negative affect (r=0.35) are also positive but more moderate. These results provide further evidence that the happiness of migrants converges substantially — though not entirely — towards the average happiness level in the host country, particularly in terms of life evaluations. Migrant happiness thus strongly depends on the host country environment.

The refugee population requires special attention because refugees are exceptionally vulnerable and are the only migrant group for which migration is largely involuntary. An analysis focusing on the happiness of refugees is presented in Box 3.2.

Box 3.2: Refugee Happiness

As refugees cannot be identified in the GWP, we use migrant data from the German Socio-Economic Panel (SOEP) to empirically assess how the happiness of refugees develops with their length of stay in Germany and how happy refugees are relative to "voluntary" immigrants in Germany (job-seekers, expats with job offers, co-moving family members, etc.). We focus here on the cognitive dimension of happiness using a life satisfaction question.[53] Our sample contains 607 refugees and 4,607 voluntary migrants. Column 1 of Table 3.3 shows that refugees are significantly less satisfied with life than voluntary migrants and that the general immigrant population experiences decreasing life satisfaction with their length of stay in Germany. Column 2 shows that the non-positive relationship between life satisfaction and the time since migration holds both for refugees and voluntary immigrants in Germany.[54] These findings concur with the previously shown global pattern that immigrants in general do not become happier with their length of stay in the host country. Taken together, refugees are unable to close the happiness gap with other immigrants (and natives), at least in Germany. However, refugees' non-improving happiness with their length of stay does not necessarily imply that they do not become happier by migrating; refugees may obtain a substantial immediate happiness gain upon arrival in Germany due to their improved safety, freedom, and so forth. A more detailed analysis, reported in Table A8, shows that refugees are significantly less happy than all specific subgroups of voluntary immigrants (job-seekers, co-moving family members, and so forth).

Table 3.3: OLS Regression: Life Satisfaction of Refugees and Voluntary Migrants by Length of Stay

Dependent variable: Life satisfaction	(1)	(2)
Type of migrant		
Refugees	Ref.	Ref.
Voluntary migrants	0.39**	0.48**
	(0.08)	(0.16)
Years since migration	-0.01**	-0.00
	(0.00)	(0.01)
Years since migration*type of migrant		
Refugees		Ref.
Voluntary migrants		-0.01
		(0.01)
Age	-0.02*	-0.02*
	(0.01)	(0.01)
$Age^2/100$	0.01	0.01
	(0.01)	(0.01)
Female	0.04	0.04
	(0.05)	(0.05)
Observations	5,214	5,214
R^2	0.02	0.02

Sources: IAB-SOEP Migration samples M1 (2013-2015) and M2 (2015).

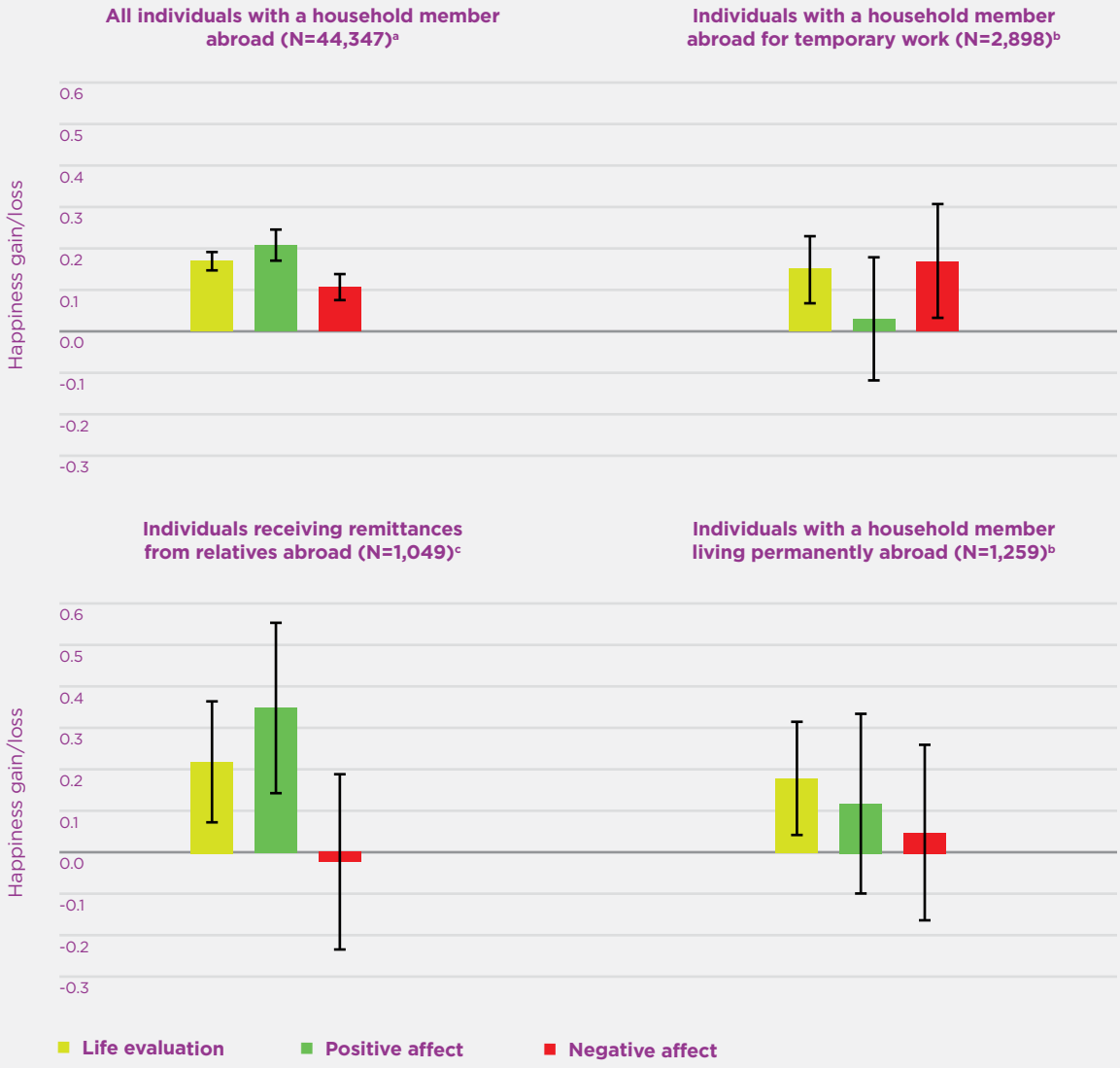
Notes: Regression coefficients are displayed with robust standard errors in parentheses. * p<0.05, ** p<0.01. Refugees moved to Germany on average 13 years ago; 48% of these refugees come from MENA (primarily Iraq, Syria, Afghanistan, and Turkey), 26% from the former Yugoslavia, 14% from the former Soviet Union, and 12% from other world regions. See Table A7 for detailed sample descriptives. For the M1 sample, the average life satisfaction over the years 2013–2015 was taken.

The Happiness Outcomes of Families Left Behind

We estimate the happiness consequences of having a household member abroad by comparing the happiness of individuals with and without a household member abroad. For this purpose, we use global GWP data spanning the period 2007-2011. To account for the non-random selection of households into migration, we employ exact matching and compare only individuals with the same gender and education level, who are from the same country of residence and age group (maximum age difference of 5 years), and who live in a similar type of location (rural vs. urban).[55]

In a first model, we estimate how having one or multiple household members living abroad for under five years affects the happiness of left-behind household members across 144 countries. We do not have information on the exact relationship between the migrant and left-behind household member and the migrant's motive for migration. However, it is conceivable that one of the most common reasons for moving abroad without other household members is to improve the household's living standard by working abroad and sending back remittances. This group of migrant workers is characterized by great diversity, ranging from female nurses from the Philippines to male construction workers from Latin America. The household member abroad can, however, also be another family member (e.g., a child or sibling) or move for different reasons (e.g., for study purposes). Household members left behind are likely to be

Figure 3.3: The Impact of Migration on the Happiness of Household Members Left Behind



Sources: [a] Worldwide GWP 2007-2011 data. [b] GWP 2009 data covering all countries of the former Soviet Union, most Latin American countries, and some Caribbean countries. [c] GWP 2007 data covering most Latin American countries and the Dominican Republic.

Note: 95% confidence interval bars shown.

the migrant's spouse, children, parents, siblings, or other extended family members. The results, presented in the upper left panel of Figure 3.3, show that individuals with a household member abroad typically evaluate their lives more positively and experience more positive affect than their counterparts without a relative abroad. However, they also experience more negative affect. A plausible explanation for these mixed happiness outcomes is that the family's often significant economic gain from migration is more strongly related to cognitive assessments of quality of life (life evaluations) than affective experiences,[56] and those left behind may

often suffer emotionally because they may experience increased sadness from being separated from the migrated household member and increased worry from communicating infrequently with the family member and being unable to share responsibilities such as child nurturing.[57]

The two right panels of Figure 3.3 present the outcomes of household members left behind by household members who specifically moved abroad for temporary work or permanent residence, respectively. The analysis sample is limited to countries in Latin America and the Caribbean and countries of the former Soviet Union. Household members left behind by migrants moving for temporary work or to permanently live abroad evaluate their lives more positively than their counterparts without a household member abroad. However, they do not benefit from migration in terms of emotional well-being; most notably, individuals with a household member abroad for temporary work experience increased negative affect following migration. Similarly, as shown in the lower left panel, Latin Americans who receive remittances from relatives abroad evaluate their lives more positively and experience more positive affect but they do not experience less negative affect compared with non-migrant households.

Taken together, the results reported in Figure 3.3 suggest that migration generally improves the perceived quality of life of household members back home but not necessarily their emotional well-being. Particularly interesting is that having a household member abroad generally does not reduce—and often even increases—negative affect experiences among the family back home. Hence, migration often requires trade-offs between different aspects of happiness for people staying behind.

In Table 3.4, we present the impact of migration on left-behind household members for selected migration flows within or between world regions. The analysis sample contains all individuals with a household member abroad, i.e., the sample as in the upper left panel of Figure 3.3. There is considerable heterogeneity in outcomes between migration flows. The benefits in terms of life evaluations and positive affect are particularly large for individuals in the developing world who have a household member living in Western Europe, Northern America, Australia, or New Zealand. It is plausible that benefits are largest in these migration flows given that the large wage gaps between these origin and destination regions allow for high remittances. However, in some cases, benefits are also present among families left behind in other types of migration flows, such as migrants moving within the Commonwealth of Independent States. In 6 out of 21 migration flows, non-positive outcomes are experienced for all three aspects of happiness. For example, household members left behind by migrants within MENA experience increased negative affect and no improvements in life evaluations or positive affect. Interestingly, there are no migration flows in which migration reduced negative affect experiences among families back home, which highlights the prevalence of a non-positive impact of migration on the negative affect experiences of those staying behind. Outcomes between bilateral migration flows are presented in Table 3.5.

Robustness Checks and Limitations

Some possible validity threats cannot be fully addressed in our cross-sectional study, which is typical of empirical literature estimating the impact of migration on migrants and families left behind.[58] A first concern relates to migrant selectivity. In our analysis of migrant outcomes, we mitigated possible selection bias in terms of demographics, skills, ability, personality, and other characteristics to the extent possible by introducing potential migrants as a comparison group and by comparing migrants only to demographically similar stayers. Nevertheless, unobserved migrant-stayer differences in personal characteristics that affect happiness could remain present and may bias our results to some extent. To alleviate this concern, we conducted a robustness check in which potential migrants were replaced by a smaller sample of migrants with concrete plans to migrate within a year. The pre-migration characteristics of our migrant sample may be more similar to those of people with concrete migration plans than to those of people expressing only a willingness to migrate. A potential limitation of using migrants with concrete migration plans as a comparison group is that their anticipated migration may have affected their happiness. The results using this

alternative comparison group are reported in Figure A1 and are consistent with our main finding that migrants are generally better off after migration on all three happiness indicators. However, compared with our main results, migration has a somewhat weaker impact on positive affect and a stronger impact on negative affect.

Second, temporary migrants live for a shorter period in the host country compared with permanent migrants and thus have a smaller chance of being sampled in the host country. Therefore, temporary migrants are likely to be under-represented in our sample. This may bias the results if returnees achieve relatively better or worse happiness outcomes in the host country than permanent migrants. However, return migration is in many cases not primarily driven by the success of the migration experience (e.g., for refugees returning home), whereas in other cases return migration resulting from a disappointing migration experience is to some extent counterbalanced by return migration resulting from having successfully achieved one's migration goals.[59] Nevertheless, non-causal evidence shows that returnees tend to be less happy than stayers in the home country and non-returned migrants, which may be either because return migrants were already relatively unhappy before moving abroad or because migrants with disappointing migration outcomes are more inclined to return home.[60] Based on the current evidence, we cannot provide a reliable estimate of the extent and direction of the bias resulting from the underrepresentation of temporary migrants.

Third, our migrant sample excludes some migrant groups. Migrants in Gulf Cooperation Council countries and sparsely populated countries and island states are excluded, representing altogether less than 8% of the world's migrant population.[61] Aside from the exclusion of these groups, the analysis sample was made representative, to the extent possible, of each destination country's immigrant stock size by virtue of a weighting adjustment. By contrast, the sample is not fully representative of the migrant populations *within* host countries, since the GWP is not specifically designed to study migrants. The analysis sample may particularly under-represent undocumented migrants and excludes migrants in refugee camps, migrant children, and migrants who do not speak the host country's most common languages. The latter two groups are excluded because GWP respondents are aged 15+ and interviews are only held in each country's most common languages, respectively. Initial evidence suggests that proficiency in the host country language may improve immigrant happiness,[62] whereas there is no specific research available on the happiness gains of the other excluded immigrant groups.[63] The exclusion of these groups must be taken into account when interpreting the results.

Fourth, interviews are conducted over the phone in developed countries, including Western Europe, Northern America & ANZ, and some East-Asian countries, but face-to-face in most of the developing world, including CIS, sub-Saharan Africa, South Asia, and much of Latin America, Southeast Asia, and MENA (see Table A11). Approximately 25% of the face-to-face interviews in our migrant sample were computer-assisted (CAPI). The lack of within-country variance in survey mode in a given year constrained us from statistically correcting for possible survey mode bias in our main analysis. In Table A12, we show that life evaluations and self-reported negative and positive affect are not significantly affected by survey mode (phone, face-to-face *without* CAPI, or face-to-face *with* CAPI), with one exception. A person interviewed by phone reports 0.60 points higher negative affect on a 0-10 scale than if s/he had been interviewed face-to-face without CAPI.[64] Particularly for negative affect, then, survey mode differences may somewhat bias outcome estimations for migration flows between developing and developed regions. Nevertheless, this bias will have a negligible impact on the average global happiness outcome from migration because migration flows in opposite directions counterbalance this bias to some extent, and many migrants move between countries with the same survey mode.

We ask readers to take these limitations into account when interpreting our results.

Table 3.4: The Impact of Migration on Left-Behind Household Members by Regional Migration Flow

Migration flow	Life evaluation	Positive affect	Negative affect	N
Within regions:				
Commonwealth of Independent States	+0.13** [0.06 - 0.20]	+0.29** [0.13 - 0.45]	NS	3,356
Sub-Saharan Africa	+0.12** [0.05 - 0.20]	+0.23** [0.06 - 0.39]	+0.23** [0.08 - 0.37]	3,354
Latin America & the Caribbean	NS	NS	+0.37** [0.18 - 0.56]	1,776
Middle East and North Africa	NS	NS	+0.34** [0.11 - 0.57]	1,552
Western Europe	NS	NS	NS	1,074
Central & Eastern Europe	NS	NS	NS	550
Southeast Asia	NS	NS	NS	309
East Asia	+0.26* [0.05 - 0.47]	NS	NS	304
Between regions:				
LAC → NA & ANZ	+0.24** [0.16 - 0.33]	+0.29** [0.19 - 0.40]	NS	3,360
CEE → Western Europe	+0.12** [0.04 - 0.21]	NS	NS	3,311
SSA → Western Europe	+0.29** [0.21 - 0.37]	+0.34** [0.16 - 0.52]	NS	3,202
LAC → Western Europe	+0.28** [0.17 - 0.40]	+0.19* [0.02 - 0.36]	NS	1,806
SSA → NA & ANZ	+0.16** [0.04 - 0.28]	+0.54** [0.30 - 0.78]	NS	1,575
South Asia → MENA	+0.29** [0.15 - 0.42]	NS	NS	1,024
MENA → Western Europe	+0.22* [0.06 - 0.38]	NS	+0.32* [0.02 - 0.62]	834
SSA → MENA	NS	+0.42* [0.03 - 0.82]	NS	717
Southeast Asia → NA & ANZ	+0.21** [0.06 - 0.35]	+0.52** [0.20 - 0.84]	NS	705
CEE → NA & ANZ	+0.28** [0.07 - 0.49]	+0.47* [0.12 - 0.82]	NS	695
East Asia → NA & ANZ	NS	NS	NS	637
CIS → Western Europe	+0.51** [0.31 - 0.70]	+0.50** [0.13 - 0.86]	NS	604
Western Europe → NA & ANZ	+0.21* [0.00 - 0.42]	NS	NS	463

Source: GWP 2007-2011.

Notes: 95% confidence intervals in parentheses. * p<0.05, ** p<0.01. NS = not significant at the 5% level. Migration flows with fewer than 300 homestayer matches are not reported. See Table A10 for the composition of regional migration flows.

Table 3.5: The Impact of Migration on Left-Behind Household Members in Migration Flows Between Specific Nations

Migration flow	Life evaluation	Positive affect	Negative affect	N
Tajikistan → Russia	+0.22* [0.09 – 0.35]	NS	NS	918
Kyrgyzstan → Russia	NS	+0.61** [0.27 - 0.94]	NS	642
Armenia → Russia	+0.48** [0.27 - 0.68]	NS	NS	360
Moldova → Russia	NS	NS	NS	323
Honduras → United States	NS	NS	NS	493
El Salvador → United States	NS	NS	NS	466
Guatemala → United States	+0.23* [0.00 - 0.26]	NS	NS	361
Paraguay → Argentina	NS	-0.34* [-0.67 - -0.02]	+0.49** [0.12 - 0.84]	406
Zimbabwe → South Africa	NS	+0.65* [0.10 - 1.19]	NS	385
Bolivia → Spain	+0.34* [0.05 - 0.62]	+0.60** [0.23 - 0.97]	NS	324

Source: GWP 2007-2011.

Notes: 95% confidence intervals in parentheses * p<0.05, ** p<0.01, NS = not significant at the 5% level. Migration flows with fewer than 300 home stayer matches are not reported.

Conclusions and Implications

Using Gallup World Poll data, this chapter sheds light on the happiness consequences of migration for international migrants and families left behind across the globe. Three types of happiness outcomes were considered: life evaluations, positive affect (experiences of enjoyment, happiness, and laughter), and negative affect (experiences of worry, sadness, and anger).

By comparing migrants to matched potential migrants and stayers without migration plans, we estimate that migrants across the globe evaluate the quality of their lives on average 9% higher following migration. They also experience approximately 5% more positive affect and 7% less negative affect due to migration. Accordingly, the happiness levels of migrants converge substantially towards the average happiness level in the host country, particularly in terms of life evaluations. Most of these happiness gains are already experienced within the first five years after migration given that the happiness of international migrants generally does not further improve following those first five years.

A happiness gain in at least one of the three happiness indicators is not only the dominant outcome among migrants moving to more developed world regions (e.g., from Central and Eastern Europe to Western Europe) but also among migrants moving between similarly developed world regions (e.g., from Western Europe to Northern America & ANZ), or within world regions (e.g., migrants within Latin America and the Caribbean). Notable groups that have *not* become happier, in some or all aspects of happiness, by migrating include migrants within South Asia, migrants within Northern America & ANZ, Albanian migrants in Greece, migrants from the Ivory Coast in Burkina Faso, and Russian-born migrants in the Baltic states. These findings imply that despite the happiness gains achieved

by a majority of migrants, there is a considerable group of international migrants who do not become happier from migration.

Migration has a mixed impact on the happiness of possible household members who stay behind in the country of origin. Household members left behind generally evaluate their lives more positively after the migration of a household member. A plausible reason for this positive impact is the receipt of remittances. However, they also experience on average more—or at least no reduced—negative affect. This suggests that the disadvantages of migration, such as impaired emotional support, are more related to affect, while the benefits of migration, such as an increased living standard, are more related to life evaluations. Not surprisingly, the greatest benefits are experienced by families in the developing world who have a household member living in a developed country.

Our findings suggest that it is likely that a portion of migrants who did not gain happiness from migration sacrificed happiness for the benefit of their family back home. However, for many other migrants who are not happier after migration, this reason may not apply. For instance, in some migration flows in which non-positive outcomes are common, such as migration flows between developed countries, the entire household typically moves or the migrant does not specifically move to improve the lives of family members back home. One question that thus requires attention is why some migrants voluntarily move abroad if it benefited neither themselves nor their families back home. These non-positive happiness outcomes cannot be justified by the argument that one invests in one's own long-term happiness or the happiness of one's children because we do not find that happiness increases with the migrant's length of stay, while existing literature shows that the second generation is not happier than first-generation migrants.[65] Migrants may trade off happiness for other goals, such as economic security, freedom, safety, and health. However, in most cases, positive outcomes in these other domains go together with greater happiness. For example, greater happiness often accompanies greater health and safety. A more worrisome but oft-mentioned potential cause of negative outcomes is migrants' excessive expectations about their future happiness in the destination country, which originate from inaccurate perceptions about what determines their happiness and inaccurate or incomplete information about the destination country.[66]

The opposite question also requires attention: Considering the substantial happiness gains experienced by most international migrants, why don't more than the current 250 million people (3.3% of the world population) live in a country other than where they were born? It seems likely that more people could benefit from migration, given the large happiness differences between countries and the benefits for the current international migrant population. Several reasons may apply. First, many people are restricted from migration by personal constraints, such as financial, health, or family constraints. Second, many people cannot move to their preferred destination countries because of those countries' restrictive admission policies.[67] Third, many people are locally oriented and moving abroad is simply not a salient pathway in people's long-term orientation toward improving their lives. Finally, according to prospect theory, the human tendency for risk- and loss aversion may cause people to stay in their home countries given that many people face great uncertainty about the outcomes of migration as they have little knowledge about life abroad.[68]

In sum, international migration is, for many people, a powerful instrument to improve their lives given that the majority of migrants and families back home benefit considerably from migration. Nevertheless, not all migrants and families left behind gain happiness from migration, and the happiness of migrants does not increase over time as they acclimatize to their new country. Therefore, there is still much to be done, and much to be learned, to ensure lasting benefits for migrants and their families.

Endnotes

1 See, e.g., IOM (2015) on migrant exploitation, Portes and Zhou (1993) on unsuccessful socio-economic assimilation, and Dreby (2010) on homesickness.

2 Esipova et al. (2017).

3 United Nations (2015).

4 Diener et al. (1999).

5 UNHCR (2017).

6 Ottonelli and Torresi (2013).

7 Benjamin et al. (2014).

8 For an overview of basic human needs, see Maslow's hierarchy of needs (1943).

9 Nikolova and Graham (2015), Zuccotti et al. (2017).

10 Morosanu (2013).

11 Berry (2006).

12 Frey and Stutzer (2014).

13 Mahler (1995), Sayad (2004), Mai (2005).

14 Schkade and Kahneman (1998), Gilbert (2006).

15 Frey and Stutzer (2014).

16 See particularly the "Easterlin paradox" (Easterlin 1974).

17 Bartram (2013a), Olgiati et al. (2013), Hendriks and Bartram (2016).

18 For exceptions, see Mähönen et al. (2013), Nikolova and Graham (2015), and Stillman et al. (2015).

19 See, e.g., IOM (2013).

20 Boneva and Frieze (2001), Jaeger et al. (2010), McKenzie et al. (2010).

21 Graham and Markowitz (2011), Cai et al. (2014).

22 See Hendriks (2015) for a review and Nikolova and Graham (2015) and IOM (2013) for studies using GWP data.

23 Stillman et al. (2015).

24 Bartram (2013a).

25 Knight and Gunatilaka (2010).

26 Hendriks et al. (2018).

27 Ratha et al. (2016).

28 Stark and Bloom (1985).

29 See Antman (2013) for a review of how migration affects various well-being outcomes of children, spouses, and parents who remain in the country of origin.

30 Dreby (2010), Abrego (2014).

31 Joarder et al. (2017).

32 Borraz et al. (2010).

33 Jones (2014; 2015).

34 Cárdenas et al. (2009).

35 Gibson et al. (2011), Böhme et al. (2015), Nobles et al. (2015).

36 See Stillman et al. (2015) for a rare study examining migrants' affective happiness outcomes.

37 First-generation immigrants are those who are not born in their country of residence. Because of data limitations, immigrants' native-born children (the second generation) and later generations are beyond the scope of this chapter. Our migrant sample differs from that of Chapter 2 of this World Happiness Report because an important variable for estimating the consequences of migration—country of birth—is not available before 2009. Migrants originating from countries that are not covered by the GWP—predominantly sparsely populated countries and island states—are excluded from analysis because they could not be matched to stayers. Immigrants in Gulf Cooperation Council (GCC) countries are excluded because these countries lack sufficiently representative immigrant samples.

38 Our empirical strategy builds on the work of IOM (2013) and Nikolova and Graham (2015) and is broadly in line with the empirical strategy used by Nikolova and Graham to explore the happiness consequences of migration for migrants from transition countries. For a more general discussion of this methodology, see Blundell and Costa Dias (2000).

39 Van Dalen and Henkens (2013), Creighton (2013), Docquier et al. (2014).

40 Cantril (1965).

41 To be consistent with the Cantril-ladder-of-life measure, both affect indexes were re-scaled to range from 0 to 10.

42 Kahneman and Deaton (2010).

43 The percentage of the happiness gain is calculated by first solving equation 1 (using the sample means of groups 2-4) to find the sample mean of group 1 for which the happiness gain would be zero and subsequently calculating the absolute happiness gain as a percentage of that sample mean.

44 Our results are very similar when we would only compare migrants to potential migrants (groups 1 and 2), i.e., when we would exclude the counterfactual (groups 3 and 4). Specifically, we find a life evaluation gain of 0.49 points, a positive affect gain of 0.37 points, and a decrease in negative affect of 0.29 for the total immigrant sample.

45 In the main analysis, the reported happiness gains for newcomers and long-timers are based on the same weighting criteria (the migrant stock by destination country) to ensure that our assessment of the short- and long-term impacts of migration is not driven by a different distribution of newcomers and long-timers over destination countries. We additionally calculated the happiness gains for "newcomers" using an alternative weighting variable that is more representative for countries' migration inflows in recent years. This self-created weighting variable is based on each country's migrant inflow in the period 2005-2010 as estimated by Abel and Sander (2014). When applying this alternative weighting variable, newcomers report 0.41 higher life evaluations after migration ($p<.01$), Newcomers also report 0.22 more positive affect and 0.08 less negative affect but these gains are not statistically significant.

46 Given our cross-sectional data, possible cohort effects may affect the relative happiness gains of newcomers versus long-timers. However, Hendriks et al. (2018) did not find evidence for cohort effects among immigrants in Western Europe, and Stillman et al. (2015) found no improvement in happiness in the first years after migration using panel data. Hence, it is unlikely that cohort effects drive migrants' non-improving happiness with their length of stay.

47 See e.g., Safi (2010).

48 The following question was used to identify potential migrants: "Ideally, if you had the opportunity, would you like to move permanently to another country, or would you prefer to continue living in this country?"

49 While education is not independent of migration, we included it to match migrants only to stayers with similar ability, intelligence, and skills.

50 See Table A4 for the regional classification of countries.

51 Underestimation of migration flows to non-developed regions (e.g., sub-Saharan Africa) is likely, as considerable migration flows may go unreported because of the more limited and less reliable collection of data in those regions.

52 Helliwell and Wang (2012).

53 The life satisfaction question is formulated as follows: "How satisfied are you with your life, all things considered?", with a numerical response scale ranging from 0 (completely dissatisfied) to 10 (completely satisfied).

54 We found no evidence of a non-linear relationship between length of stay and life satisfaction, i.e., the quadratic term for years since migration did not enter significantly into our models and is therefore excluded from our models.

55 Sample descriptives are reported in Table A9. While immigrants in GCC countries were excluded in previous analyses, the analysis samples in this section include families left behind by immigrants in GCC countries. The analyses in this section are based on unweighted data because there are no global data available on the number of left-behind migrant households by origin country or migration flow.

56 Kahneman and Deaton (2010).

57 Nobles et al. (2015), Abrego (2014).

58 For example, the literature on migrants' income gains from migration emphasizes that cross-sectional studies have limited leverage in estimating the benefits of migration because self-selection biases cannot be fully eliminated (e.g., Borjas 1987, McKenzie et al. 2010).

59 De Haas et al. (2015), Esipova and Pugliese (2012).

60 Bartram (2013b), Nikolova and Graham (2015).

61 UN DESA (2015).

62 Angelini et al. (2015).

63 Undocumented migrants and immigrants in refugee camps often face exploitation, discrimination, limited freedom and safety, and other negative circumstances. They may nevertheless have obtained considerable happiness gains because they move away from possibly even more deprived conditions in their home countries; many of these migrants were forced to move because they could not meet their basic subsistence needs back home.

64 Our results differ from Dolan and Kavetsos' (2016) finding that people report higher happiness over the phone than via CAPI. This may be because their study uses different happiness measures, a different sample (a UK sample), or a different interview procedure.

65 Safi (2010).

66 Schkade and Kahneman (1998), Knight and Gunatilaka (2010), Bartram (2013a), Olgiati et al. (2013).

67 Recent studies in Europe, however, show that if anything, immigrant influxes tend to slightly improve the happiness of the host countries' native populations, at least in Europe (Betz and Simpson 2013; Akay et al. 2014).

68 Morrison and Clark (2016).

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