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This shallow cause area report explores the impact of immigration on subjective wellbeing (SWB). It was completed in two weeks. In this report, we start by reviewing the literature and modelling the impact of immigration on wellbeing. Then, we conduct back of the envelope calculations (BOTECs) of the cost-effectiveness of various interventions to increase immigration.

The effect of immigration has been studied extensively. However, most of the studies we find are correlational and do not provide causal evidence. Additionally, most of the studies use life satisfaction as a measure of SWB, so it's unclear whether immigration impacts life satisfaction and affective happiness (e.g. positive emotions on a daily basis) differently.

Despite these limitations, we attempt to estimate the effect of immigration on wellbeing. We find that immigrating to countries with higher average SWB levels might produce large benefits to wellbeing, but we are very uncertain about the exact size of the effect. According to our model, when people move to a country with higher SWB, they will gain 77% of the SWB gap between the origin and destination country. We assume this benefit will be immediate and permanent, as there is little evidence to model how this benefit evolves over time, and existing evidence doesn't suggest large deviations from this assumption.

There are open questions about the spillover effects of immigration on the immigrant's household as well as their original and destination communities. Immigrating likely benefits the whole family if they move together, but the impact on household members that stay behind is less clear, as the economic benefits of remittances are countered by the negative effects of separation. On balance, we estimate a small, non-significant benefit for households that stay behind when a member immigrates (+0.01 WELLBY per household member). We did not include spillovers on the origin community due to scarce evidence (only one study) that suggested small, null effects. For destination communities, we estimate that increasing the proportion of immigrants by 1% is associated with a small, non-significant, negative spillover for natives (-0.01 WELLBYs per native), although this is likely moderated by attitudes towards immigrants.

We then conducted BOTECs of possible interventions to increase immigration. The most promising is policy advocacy, which we estimate is 11 times more cost-effective than GiveDirectly cash transfers. The other interventions we investigated are 2 to 6 times better than cash transfers. However, all of our BOTECs are speculative and exploratory in nature. These estimates are also limited because we're unsure how to model the potential for immigration increasing interventions to foster anti-immigrant sentiment in the future. Plus, there might be non-trivial risks that a big push for immigration or other polarising topics by Effective Altruists could burn goodwill that might be used on other issues (e.g., biosecurity). Accordingly, we're inclined towards treating these

as upper-bound estimates and we expect that once these costs are taken into account immigration policy advocacy would no longer be promising.

We recommend that future research assesses the costs, chances of success, and risk of backlash for potential policy-based interventions to increase immigration.

#### Notes

- 1. This report focuses on the impact of immigration in terms of WELLBYs. One WELLBY is a 1 life satisfaction point change for one year (or any equivalent combination of change in life satisfaction and time). In some cases, we convert results in standard deviations of life satisfaction to WELLBYs using a 2 point standard deviation on 0-10 life satisfaction scales (i.e., 1 SD change is the equivalent of 2 point changes on a 0-10 life satisfaction scale). This naive conversion is based on estimates from large scale data sets like the World Happiness Reports. See our post on the WELLBY method for more details.
- 2. Our calculations and data extraction can be found in this <u>Google Spreadsheet</u> and this <u>GitHub repository</u>.
- 3. The shallowness of this investigation means (1) we include more guesses and uncertainty in our models, (2) we couldn't always conduct the most detailed or complex analyses, (3) we might have missed some data, and (4) we take some findings at face value.

### **Outline**

In **Section 1** we introduce the issue, define key terms we use throughout this report and explain the mechanisms for how immigration increases subjective wellbeing.

In **Section 2** we model the effects of immigration on subjective wellbeing.

In **Section 3** we discuss the limitations of our analysis and some of the unique risks and considerations that come with increasing immigration.

In **Section 4** we estimate the cost-effectiveness of several interventions that aim to increase subjective wellbeing by facilitating immigration.

In **Section 5** we summarise our main uncertainties.

In **Section 6** we discuss the most important questions that future research should answer.

In **Section** 7 we conclude with the key takeaways from the report.



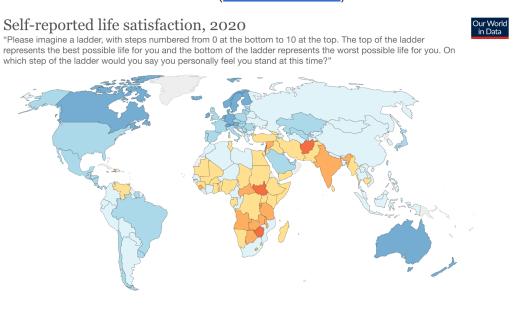
# 1. International immigration and subjective wellbeing

In this report, we focus on the effects of immigration, that is moving to another country, on individuals' subjective wellbeing (SWB): people's self-reports of how they think and feel their life is going<sup>2</sup>.

Immigrants tend to move to countries that are happier (Lovo, 2014; Helliwell et al., 2018) and more developed (UNDP, 2018) and their subjective wellbeing benefits from doing so (The World Happiness Report; 2018). As we can see in Figure 1, countries differ considerably in their average level of life satisfaction. In 2020, 3.6% (280.6 million) of people in the world were international migrants (MPI, 2020), and an additional 26.4 million were refugees (0.3% of the population; IOM, 2022). These numbers indicate that most people live in the country they were born in. If immigrants become as satisfied with their lives as the residents of the country they move to, this implies that we can dramatically improve global wellbeing by increasing immigration from unsatisfied to satisfied countries.

Figure 1: Worldwide life satisfaction levels (Our World In Data)

No data



Source: World Happiness Report (2022) OurWorldInData.org/happiness-and-life-satisfaction/ • CC BY Note: The value shown in a given year is the average of that year, the previous year and the following year.

<sup>2</sup> SWB is a useful measure because it could capture and integrate the overall benefit to the individual from all the instrumental goods that result from immigration (e.g., income, health, better institutions). Using SWB means we avoid relying on decision maker's potentially biased, intuitive assessments about how good immigration will be for others. Instead, we can directly infer this via the self-reports of affected individuals.

So, how does immigration improve wellbeing? Immigrants likely seek and benefit from the institutions and opportunities that correlate with higher SWB levels in destination countries. The average SWB of countries is significantly associated with higher GDP per capita<sup>3</sup>, greater healthy life expectancy at birth, reported generosity, perceptions of better social support, more freedom to make life choices, and lower corruption (World Happiness Report, 2022). Typically, these countries also have better state welfare systems (O'Connor, 2017) and lower crime levels (Baranyi et al., 2021). Additionally, refugees may become free from the threats and persecution they faced in their country of origin. But immigration is not entirely positive. Immigrants wellbeing can be negatively impacted by perceived discrimination (Jasinskaja-Lahti et al., 2006), language barriers (Lee et al., 2022), downward social mobility<sup>4</sup> (Das-Munshi et al., 2012), to name a few possible challenges. Taken together, these findings suggest there are both positive and negative aspects of immigrating that may ultimately impact overall subjective wellbeing.

# 2. Modelling the effects of immigration on subjective wellbeing

In this section, we present a simple model to estimate the relationship between immigration and subjective wellbeing. We start by estimating how much SWB is gained by immigrants after they move (Section 2.1). Then, we discuss how the effects of immigration can 'spill over' to influence the immigrant's family, their origin community, and their new destination community (Section 2.2).

### 2.1 SWB wellbeing benefits for immigrants

We model that immigrants' gains in SWB due to moving to a country with higher average SWB levels will be a proportion of the gap in SWB between the origin and destination country. Imagine that a person moves from country X, with an average SWB level  $X_{SWB}$ , to country Y, with SWB level  $Y_{SWB}$ . Then the gap in SWB between the countries is  $(Y_{SWB} - X_{SWB})$ . We assume that the immigrant will gain a share of that gap by moving. To calculate the percentage of the gap gained, we extract data from five sources (four correlational studies and one quasi-experiment). This led to a total of 310,658 observations. Our search<sup>5</sup> was not exhaustive, and we think there are more studies that could be used. Ideally, we would have liked to use natural experiments, but these seem rare and underpowered. A lower quality but more cost-effective and feasible study would use longitudinal

<sup>&</sup>lt;sup>3</sup> Moving to richer countries indeed enriches immigrants; (<u>Clemens, 2013</u>; <u>Stillman et al., 2015</u>; <u>Maheshwor et al., 2019</u>)

<sup>&</sup>lt;sup>4</sup> Downward social mobility refers to the loss of prestige or relative social position, even when economic conditions have improved in absolute terms, e.g., a lawyer in Iraq becoming a taxi driver in Canada.

<sup>&</sup>lt;sup>5</sup> This involved going through references in the World Happiness Report (2018) and Hendriks and Burger (2021) as well as an exploratory search on Google Scholar.

data about matched<sup>6</sup> leavers from the country of origin, stayers in the country of origin, and natives of the destination country before and after immigration. Unfortunately, we could not find such a study. Instead, we looked for studies that compare leavers to stayers. We calculated the percentage of the gap gained as:

$$percentage of the gap gained = \frac{gap between leavers and stayers}{gap between stayers and natives}$$

We often had to impute some of these numbers (often the SWB of the stayers and almost always for the SWB of the destination country). Generally, we did this by obtaining the average SWB of a country from the Gallup World Poll which asks thousands of respondents, from most countries in the world, a life satisfaction question known as Cantril's ladder (Kilpatrick & Cantril, 1960). The results of this annual survey are accessible on Our World in Data. Naturally, these studies could suffer from problems with self-selection, that aren't necessarily distillable to observable characteristics<sup>7</sup>. We present the sources of data we relied on in Table 1.

**Table 1:** Source of data for immigration gap model

Source	Origin country or region	Destination country or region	Data type	% gap gained <sup>8</sup>	Total sample
Hendriks et al. (2018)	Many	Many	Correlational	88%	148,164
Helliwell et al. (2018)	Many	Canada or UK	Correlational	135%	73,033
Lönnqvist et al. (2015)	Russia	Finland	Correlational	113%	464
Bălţătescu (2007)	Central & Eastern Europe	Western Europe	Correlational	52%	88,040
Stillman et al., 2009; Stillman et al., 2015; Gibson et al., 2018 <sup>9</sup>	Tonga	New Zealand	Quasi- experimental	60%	957

<sup>&</sup>lt;sup>6</sup> By matched, social scientists mean that respondents are matched with other respondents of similar characteristics (e.g., age, gender, socio-economics) in order to control for potential differences due to these characteristics.

<sup>&</sup>lt;sup>7</sup> Hendriks and Burger (2021), in their review, concluded that aspiring immigrants tend to be wealthier and better educated - but less satisfied with their life - than those who don't intend to move.

<sup>&</sup>lt;sup>8</sup> Weighted by sample size when there are multiple data points.

<sup>&</sup>lt;sup>9</sup> Stillman and colleagues' work is the only study of a quasi-experimental study of immigration and its relationship with SWB that we know of. However, this study is sometimes misinterpreted as evidence that immigration decreases SWB. The only measure of SWB wellbeing used is a measure of mental health with the MHI-5. Stillman et al. (2015) compared the effects of immigrating on the one question about happiness in the MHI-5 to the four remaining questions. They find that immigrating reduces the happiness scores but increases scores on the other items. When all these scores are combined, immigration increases affective mental health.

We take an average of the reported percentages of gaps gained (see our <u>data</u> and <u>analysis</u>) - weighted by sample size - and find that, **on average, when moving to a country with higher SWB levels<sup>10</sup>, 88% of the gap in SWB between countries is gained by immigrants (range: 27% to 146%).** Hence, this suggests that immigrants' SWB levels will increase in direction of the SWB level of the destination country.

Of course, it might take time for immigrants to become happier, and the gains might accrue gradually. The data we use covers immigrants that have been in their destination country between 1 and 30 years. However, there is limited evidence about how the effect changes over time. For more discussion about moderation over time, see Appendix A.1. For modelling purposes, we assume this average happiness benefit happens immediately, stays constant over time, and is experienced every year spent in the destination country. Hence, our model in equation form is:

SWB gain \* years spent in destination country

Which can be broken down into:

(gap \* % of gap gained) \* years spent in the destination country

We briefly discuss some potential limitations of our model and how we might address them:

- (1) One concern we have is that there might be bias in the data we use since it's primarily correlational in nature. We think that the studies we found are unlikely to have surveyed the most vulnerable immigrants or those who are not in the best position to increase their SWB by immigrating such as undocumented migrants, those who can't speak the language of the survey, and children (Helliwell et al., 2018; Hendriks et al. 2018). If true, our estimation would be biased towards positive findings by missing the experience of those who have not benefited as much. We make a guess that surveys miss 20% of the immigrant population and that those missed only gain 33% of the gap. By combining these in a weighted average, we discount the percentage of the gap gained from 88% to 77%<sup>11</sup>. With more research into the SWB of hard-to-reach immigrants, this adjustment could be empirically estimated.
- (2) Another source of bias could be that the 'matching' of movers and stayers might miss important characteristics in determining who can and wants to move. We do not address this at this time. Future work with more causal paradigms could address this.

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<sup>&</sup>lt;sup>10</sup> It is unclear if moving to a country with lower SWB levels decreases the immigrant's SWB. Hendriks et al. (2018) found that migrants from western Europe to central and eastern Europe gained 0.27 life satisfaction points despite those destinations being, on average, 1.1 points lower. Conversely, Bartram (2015) found that migrants from western and northern Europe to southern Europe experienced a decrease in SWB. However, our focus is to evaluate people moving to countries with higher levels of SWB.

 $<sup>^{11} 0.8 * 88\% + 0.2 * 33\% = 77\%</sup>$ 

- (3) We did not include potential moderators of how much SWB is gained by immigrating (e.g., characteristics of the immigrant or the destination country) in our model. We discuss those and why we find that, on average, immigrants do not gain 100% of the gap in Appendix A.2.
- (4) Some might argue that the SWB gained from immigrating is not a true change in SWB but a change in scale use. In Appendix A.3. we discuss why we think that these are true changes in SWB.

### 2.2 Spillovers

When modelling the effect of immigration, we also want to consider the effects on the household, the origin community, and the destination community. In brief, households benefit from immigration if they can move as well. If they are left behind, the evidence is more mixed as there is a tension between the economic gains of remittances being sent home and the pains of separation. We estimate from seven studies that having a member of the household who has immigrated increases SWB (non-significantly) by 0.005 SDs (or 0.01 WELLBYs) per household member. There is little evidence for the SWB effect on the community left behind (only one study), so we treat the effect as zero (although it is plausible that the effect be non-zero). We discuss the potential spillovers of immigration on natives at some length, because it's an area we were very uncertain about. From 11 studies we estimate that a 1% increase in immigrants as a share of the population is associated with a (non-significant) decrease of -0.004 SDs of SWB (or -0.008 WELLBYs) for the native population. However, this likely is moderated by attitudes towards immigration. These spillovers are small and don't discernibly affect our estimates, but we wouldn't be surprised if further work found larger spillovers. We elaborate on these calculations in Appendix B.

### 3. Counterfactuals and risks

In Section 2, we presented a model of how immigration improves the SWB of someone moving to a happier country. However, to estimate the total effect we also need to consider how long immigrants spend in the destination country and if they would have migrated later anyways without the intervention (Section 3.1), as well as the risks of backlash from increased immigration (Section 3.2).

### 3.1 The counterfactual effects of the intervention

In Section 3, we modelled that a person moving from one country to another will benefit according to:

(gap \* % of gap gained) \* years spent in the destination country

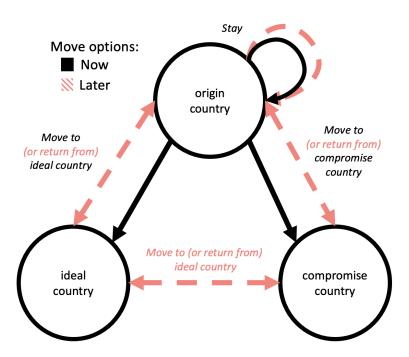
When we apply this model to an intervention, "years spent in the destination country" should (1) include the duration of their stay, which need not be permanent and (2) adjust for the counterfactual impact. If an intervention helps someone move to a country with higher SWB levels when they would have never moved otherwise, that will create a larger benefit than an intervention

The counterfactual choice of an immigrant may not be binary (e.g., "move to the USA or stay in Afghanistan"). Instead it may be more fluid: "Ideally move to the USA, if that fails, move to Pakistan." Adding multiple options of countries an immigrant may consider seems more realistic, but quickly becomes complex. See Figure 2 for a representation of immigration choice in two periods for three countries.

We simplify - for lack of time and data - this model to "likelihood of return" and "likelihood they would immigrate later" from the origin to the ideal country and apply this to the model by discounting the *years immigrants spend in the destination country*. To estimate this model we would need studies that follow immigrants across their life and travels.

Figure 2: Model of immigration choice in two periods

that helped someone move only a year sooner.



Let's consider the counterfactual (i.e., "likelihood they would immigrate later"). For example, if the probability that a successful migrant would have moved to a similar country, later on, is 50% across their lifespan, then we would cut the years spent in a country attributable to immigration by half.

Immigrants can return to their country of origin, and unsurprisingly, they do so when they are less happy (Shamsuddin & Katsaiti, 2020). When an immigrant returns to their origin country, we assume the SWB benefits will cease. This is a simplification as it is unclear what happens to the SWB of returners<sup>12</sup>.

#### 3.2 Risk of backlash effects

We already saw in Section 2.2 that increased immigration rates can affect the SWB of natives. But advocating to increase immigration (whether it succeeds or fails) may come with further risks either because increases in immigration lead to more anti-immigration efforts in the future or because advocacy on this issue could burn political goodwill for future altruistic causes. This is our biggest concern and uncertainty in our modelling. Depending on the size of this risk, it could nullify the benefits we estimate or even cause harm.

A sense that immigration is increasing seems to feed nationalist political parties that flirt with anti-democratic practices. There is a chance that increasing immigration, or attempting to do so, could foment political backlash that reduces the overall amount of immigration over time. This could happen by changing attitudes towards immigrants and giving more political support to anti-immigration politicians.

Whether increased immigration or increased proximity with immigrants changes attitudes and political intentions related to immigration is unclear. A full review is beyond the scope of this report, but we will share some of the evidence we've come across. Polls of public attitudes from Sweden and Germany suggest attitudes towards immigration worsened after the refugee crisis concurrent with the Syrian civil war. But the academic literature is more mixed on the causal effects of immigration on attitudes.

Schaub et al. (2020) found that the presence of immigrants has an overall null causal effect on attitudes or voting behaviour, but this conceals a convergence in attitudes where left-leaning individuals became less positive about immigration and right-leaning individuals became less negative. Similarly, Sola (2018) does not find that increasing concerns about immigration lead to support for far-right political parties in Germany. In Deiss-Helbig and Remer (2022), the causal effects are slightly more mixed: "It is only when the number of asylum seekers in one's own direct neighbourhood suddenly increases that attitudes toward asylum seekers deteriorate". Other studies have also found that increased contact with refugees and/or migrants has been associated with more support for anti-immigrant politics (Apaydin, 2020; Dinas et al., 2019). On the other hand,

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<sup>&</sup>lt;sup>12</sup> Returners' SWB might converge back to the SWB level of their origin country (<u>Bartram, 2012</u>) or they might keep some elevated levels of SWB (<u>Baykara-Krumme & Platt, 2016</u>). Returners might bring home benefits from having migrated, such as having saved some money or acquired new skills.

proximity to, and positive contact with, immigrants and/or refugees might improve attitudes towards them (Allport, 1954; De Coninck & Meuleman, 2022; Pettigrew, 1998) whilst distance could *increase* support for anti-immigration policies (e.g., Trump's U.S.-Mexico wall; Cortina, 2019). Achard et al. (2021) found that those living close to refugees became less likely to support anti-immigrant parties. This mixed literature means that we can't discard the possibility of a backlash from increases in immigration, but we think that if there are strong negative effects the literature would be more clear. More work is needed to quantify the risk and conditions of such backlashes.

A further concern is that backing interventions to increase immigration (or any politically polarising issue) could reduce the cost-effectiveness of other interventions in important cause areas because it could make certain stakeholders less cooperative with philanthropists. Imagine that reducing the likelihood of an engineered pandemic is the most pressing policy priority, but a prominent philanthropist or their foundation had previously funded attempts to advocate for immigration reform. That track record might deter potential allies on biosecurity.

## 4. BOTECs of potential interventions

In this section, we present our back-of-the-envelope calculations (BOTECs) of potential interventions for improving global SWB through increased immigration. In every case, we are only considering helping people who want to move, not moving people who do not want to move.

**First, we should caveat our analysis.** We made these calculations quickly. These are often speculative interventions. Many of the elements in the models are based on limited evidence and regularly rely on guesses. Nevertheless, we think these BOTECs usefully present some initial modelling for different interventions that others can build on. We would not be surprised if further research or more detailed modelling considerably changed the results of these BOTECs.

To estimate the effect on immigrants we use the percentage of the gap gained, which we quantitatively estimated in Section 2.1. We combined this with some weakly informed assumptions about how long immigrants stay and whether they would immigrate later. We omit effects on the households and communities left behind, but we include negative spillovers on natives for policy-based interventions. Additionally, we only account for the risks of political backlash from increasing immigration (or attempting to do so) with subjective adjustments to our model. For these reasons, we may be overestimating the cost-effectiveness of the interventions we discuss. Several of our models relate to helping refugees move. We are unsure, and do not model, whether refugees (rather than immigrants) might benefit more from moving, nor if helping refugees affects backlash differently than helping immigrants.

Broadly, there are two types of interventions: those directly assisting with immigration (financially or by helping with the administrative process) or advocating for liberalising immigration restrictions.

We split our BOTECs according to how speculative they are. Section 4.1 focuses on more concrete interventions and less speculative interventions. Appendix C discusses interventions that are more speculative or where the intervention is more vague.

# 4.1 BOTECs of interventions to help people move: advocacy and direct assistance

Table 2 lists the advocacy interventions and the direct interventions that are less speculative presented in order of promise. Advocacy appears slightly more promising, but is much less certain, for reasons we will discuss. Before we present our BOTECS (Sections 4.1.1 to 4.1.4), it's worth mentioning that we think there are steep challenges with performing cost-effectiveness analyses of policy advocacy, which we describe in Appendix D. These BOTECs are considerably more speculative than ones involving direct interventions.

**Table 2**: Advocacy and less speculative interventions to increase SWB through immigration

Rank	Туре	Intervention	Cost-effectiveness in multiples of GiveDirectly	Note
1	Advocacy	Swiss Immigration Policy Advocacy	11x	Unclear how reasonable. Very uncertain about advocacy chances.
2	Advocacy	USA Federal Immigration Policy Advocacy	6x	Unclear how reasonable. Very uncertain about advocacy chances.
3	Advocacy	Advocate for sanctuary cities in Texas	2x	Unclear how reasonable. Uncertain about advocacy chances.
4	Direct	Sponsoring Afghan refugee to USA / CA	2x	Seems reasonable.

### 4.1.1 Influencing immigration policy in Switzerland

Switzerland seems like a promising country for policy advocacy in general, because of its direct democratic system (Swiss citizens vote 3-4 times a year on multiple referendums at a time). Considering how often the Swiss people have voted on referendums concerning immigration (some recent examples being the 2014 and 2020 votes), it is plausible to imagine they might accept to vote in new referendums about increasing immigration quotas.

We assume that immigration would become liberalised - or the law reducing immigration will be rescinded - in 10 years. One motivation for that view is that we assume pressure will build to increase immigration in response to population declines and the resulting labour shortages (see for example, this article of Vox on demographic trends). Increasing immigration by 9,500 a year will create 95,000 immigrants in 10 years, which is about a 1% increase in a predicted future Swiss population of 9.5 million.

The life satisfaction of Switzerland is 7.5, and we assume the SWB of immigrants is 6.5<sup>13</sup>, hence a 1 point gap. Increasing immigration by 1% will create a gain of 2 million WELLBYs over ten years. However, it will also reduce the SWB of natives by 20,000 WELLBYs. We also attempt to account for political backlash. We guess that there's a 10% chance that this would reduce immigration by 200,000 over five years; namely, that backlash would cause 20,000 fewer immigrants in expectation. However, this only decreases the effect of immigration by 400,000 WELLBYs. Taking into account both of these factors decreases the total wellbeing effect of the initiative from 2 million to 1.58 million WELLBYs gained, which is a relatively small decrease. This is speculative and we wouldn't be surprised if there was a larger loss (or more complicated ramifications) due to backlash.

To know if such an advocacy intervention is cost-effective we need to know how much it would cost to put forward such a referendum and campaign for the policy sufficiently for it to gain enough votes to pass. We start with a cost of \$2.1 million to start a referendum by assuming it'll cost \$15 per signature collected, that advocates will want to collect 20,000 more signatures than the 50,000 necessary, and we assume overhead costs will be half the total variable cost. Next, we estimate how much of the vote is required to win the initiative. This depends on how people would vote without the advocacy campaign. Let's take the anti-immigration position in the 2014 referendum, which won by 0.67%, thereby, we assume we would need to close a gap of 1.5% of the vote share. Jaquet et al. (2021) analysed the relationship between spending on political advertising in newspapers<sup>14</sup> and vote shares in Swiss referendums. Jaquet et al. (2021) estimated that 1,000 Swiss Francs in political advertising for a referendum position is associated with an increase in the canton-level vote share of 0.05%. We make several adjustments to this figure. First, we assume that this corresponds to \$26,000 (Swiss Francs and the US dollar are around parity) at the federal level, \$1,000 for each of the 26 cantons in Switzerland. Second, we assume that for each increase in 0.05% of the vote share it will become 25% more expensive to win votes, which would result in a cost of \$17 million to close the 1.5% vote gap. This is a guess, but we think it's more reasonable than simple linear extrapolation, which would estimate it costs \$780,000 to close the vote gap. Note that

<sup>&</sup>lt;sup>13</sup> We could estimate this more precisely with more time, but assumed this in most cases from looking at <u>maps of regions we think the immigrants</u> would come from.

<sup>&</sup>lt;sup>14</sup> They report that newspapers are used by the Swiss to inform their political decision-making and correlates well with overall campaign spending, as campaign spending information is harder to collect in Switzerland.

we do not use the models presented in Jaquet et al. (2021) because they are Bayesian Beta regressions, which we do not know how to interpret<sup>15</sup>.

To put the \$17 million figure in perspective, the average Swiss initiative spends 1.5 million CHF on political advertising (1 million CHF on the pro-government side, 0.5 CHF against; <u>Jaquet et al.</u>, <u>2021</u>). In a failed 2016 referendum about expelling criminal non-residents, <u>around 3 million CHF was spent by advocates</u>, and 11 million CHF was spent in the 2009 initiative regarding keeping open borders with the EU (<u>Jaquet et al.</u>, <u>2021</u>).

Taking these numbers at face value, this implies that advocating for a modest Swiss referendum to increase immigration quotas by 1% would be 11 times as cost-effective as GiveDirectly. We don't know how reasonable these numbers are and we do not think they should be taken at face value.

### 4.1.2 Influencing immigration policy in the USA

The geographic and population size, wealth, moderately high SWB, and historical openness to mass migration makes the United States a clear candidate for considering immigration reform. We expected immigration to the USA to have decreased in the past decades, but it has risen continuously since the 1970s (see <a href="here">here</a> and <a href="here">here</a>). We imagine advocating for an immigration law like <a href="the one that failed in 2013">the one that failed in 2013</a> (despite strong bipartisan support in the Senate). This was <a href="projected to add 16 million more immigrants">projected to add 16 million more immigrants</a> (a 4.21% increase) over 20 years, after which we assume the law would have been passed anyway or revoked.

We think that there is some risk of backlash leading to restrictions on immigration. We guess that there is a 10% chance that successful passage of a new law would be reversed with restrictions that reduce the number of immigrants by 10 million over 20 years. This reduces the expected number of immigrants from 16 million to 13.5 million.

The USA's average life satisfaction is 7 out of 10 and we assume the average potential immigrant to the USA would have a life satisfaction level of 5.5. We estimated this by eyeballing the SWB of countries that most US immigrants come from (see <a href="here">here</a> and <a href="here">here</a>). The immigration of 13.5 million people to the USA would generate 528 million WELLBYs. However, we estimate it will reduce the SWB of natives by 90 million WELLBYs. On net, we estimate the successful passage of moderate immigration reform to increase SWB by 438 million WELLBYs.

The key uncertainty with this BOTEC is the financial cost of increasing the chance of successfully advocating reform. We choose to try and estimate how much it would cost to make reform 1% likelier. We use the cost per vote in presidential elections as a proxy for the cost of influencing

<sup>&</sup>lt;sup>15</sup> When we attempted to directly apply their model, it suggested that we'd need to spend around \$50 trillion to close the vote gap.

national policy. Sides et al. (2021) finds a cost per vote of \$365. This is higher than the figure of \$170 found in Spenkuch and Toniatti (2018). We combine these figures to arrive at a cost of \$250 per vote. We then imagine a fictional national referendum where the vote on immigration reform would be 45% in favour, 55% against. A recent state referendum relating to immigration in a politically median state had similar for / against vote shares. This implies that 8.5 million votes need to be won, which would cost ~ \$2 billion, or ~\$21 million to get 1% of the way there. Our second source of evidence is Kang (2016), which found that \$3 million of lobbying spending increases the likelihood of favourable legislation passing by 0.05% points. Similar to our assumption in the Swiss example, we guess that for every 0.05% increase in vote share, it costs 25% more to get the same increase in vote share. This implies it would cost \$208 million to increase the likelihood of successful reform by 1%. Averaging these two numbers gives us \$115 million to increase the likelihood of immigration reform by 1%.

If we take these numbers seriously, then advocacy for moderate immigration reform in the USA would be six times as cost-effective as GiveDirectly. We're especially uncertain about how reasonable our estimates are because we are new to investigating policy advocacy as an intervention.

### 4.1.3 Sanctuary cities to prevent deportation

In the USA, about 150,000 people are deported each year. Not only are these painful experiences for the people deported, they separate residents from the permanent benefit of living in the USA, which typically has higher SWB than the countries these immigrants came from.

At the state level, a process to prevent deportations would be to encourage the creation of sanctuary cities: municipal jurisdictions which limit the ability of the national government to enforce immigration law. According to Hausman (2020), passing sanctuary legislation in a city or state reduces deportations by 33%. Between 2008-2015 there were about 69,000 deportations in Texas (Hausman, 2020, Appendix Table S2). This appears strange to us as most cities in Texas lean Democrat, and Texas Democrats overwhelmingly express a rejection of deportation. So if legislation was passed in major cities across Texas, we estimate this could prevent 23,000 people from being deported over the next seven years.

However, we think there's a substantial chance for backlash that could lead the governor or state legislature to increase deportations. We think the mechanism for backlash would be by increasing the salience of illegal immigration and rallying the Texas Republican political base against sanctuary cities – this could build demand for stricter enforcement of existing laws in Texas. We guess that there's a 50% chance that an advocacy attempt would increase deportations by about 10,000 a year.

Assuming the people concerned mainly come from Central America and Mexico, and would have stayed 25 years, increasing the chance of sanctuary cities in major Texas cities by 1% would produce

2,920 WELLBYs. However, the Texas state legislature has <u>overruled several local laws in the past</u> <u>decade</u>, so we give it a 50% chance that the sanctuary city laws would be overruled. This reduces the effect by half, to 1,460 WELLBYs.

We assume that it would cost \$100,000 dollars to increase the chance of sanctuary cities in Texas by 1%, which is the cost to buy a vote share in USA congressional elections according to Schuster (2020). Hence, advocacy for sanctuary cities would produce 16 WELLBYs per \$1,000, which is two times more cost-effective than GiveDirectly. This does not include a potential counterfactual where deportation might have stopped in a certain number of years anyway without the help of such an intervention. This would reduce the cost-effectiveness of the intervention but we are sceptical that stopping deportation will happen without more advocacy.

### 4.1.4 Canadian sponsorship programme

This BOTEC is based on Canada's Private Sponsorship of Refugees programme. In Canada, individuals can privately sponsor refugees and these don't count towards refugee limits. With this programme, it costs \$25,250 (USD, we converted from CAD) for a group to finance the resettlement of a family of five (mainly through providing financial support for the first 12 months). A similar programme is to be implemented in the USA, so this is potentially a general North American intervention.

We imagine the effect of sponsoring a family of five from Afghanistan. Although, note we are unsure whether sponsors can voice a preference for what type of refugee they would like to sponsor. Average USA/Canadian life satisfaction levels are 7 out of 10 and Afghani life satisfaction is 2.4 out of 10. We expect a relatively low return rate of 10% because we guess that the Taliban (or a similarly authoritarian regime) will retain control of the country for the foreseeable future. We assume that if someone failed to immigrate through these means there would be a 40% chance they would make it to an equivalent country in their lifetime. This leads to a total gain of 376 WELLBYs.

The cost effectiveness is 14 WELLBYs per \$1,000 spent, or about two times GiveDirectly. This is the intervention for which we are the most confident in our calculations, although we still make assumptions about the length of stay and the counterfactuals about whether refugees would still reach the destination country later without the intervention. A more detailed assessment would include the probability of moving to a country happier than the original one but less happy than the ideal one (for example, moving from Afghanistan to Pakistan instead of Canada). Plus, we do not include potential lives saved from helping refugees.

We would like to double check if this programme denotes a purely counterfactual facilitation of a refugee family. If it does, then it seems a reasonable benchmark to compare other immigration



increasing interventions to. We're interested in whether the USA programme, if it is implemented, will have any lighter financial requirements. If it does, then it would be more cost-effective.

# 4.2 More speculative BOTECs of interventions to help people move

In Table 3, we present five speculative BOTECS which are more uncertain and involve more guesses. They are particularly uncertain when it comes to their actual implementation. Our aim is to illustrate ideas for potential immigration interventions rather than providing a thorough assessment of real, instantiable possibilities. We discuss these interventions in more depth in Appendix C.

**Table 3**: Speculative direct interventions

Rank	Туре	Intervention	Cost-effectiveness in multiples of GiveDirectly	Note
1	Direct	Moving refugees	3-4	Somewhat reasonable. Uncertain about cost.
2	Direct	TurboTax-like software for Immigration	3	Unclear how reasonable. Mostly guesswork.
3	Direct	Nudging moves around Schengen	3	Seems somewhat reasonable.
4	Direct	Popularise immigration through the media	About 2	No BOTEC - guess
5	Direct	Create Schengen job matcher	About 2	No BOTEC - guess

### 5. Discussion

Altogether, we think that immigration benefits immigrants and increases their SWB. However, we are sceptical that there are extremely cost-effective interventions in this area.

We are unsure about the feasibility of estimating counterfactual value and whether efforts to increase immigration may backfire as a result of the potential backlash that could be created by increased immigration. The most promising interventions - those based on policy advocacy - are also very uncertain. Because of this uncertainty, it seems plausible that policy advocacy opportunities should be required to appear much more cost-effective than a direct intervention to receive the same recommendation <sup>16</sup> – because policy advocacy BOTECs are much weaker evidence.

<sup>&</sup>lt;sup>16</sup> For example, we may recommend direct interventions that are 5 times more cost effective than cash transfers, but we'd only recommend policy advocacy interventions that are something like 25 or 50 times as cost-effective.

We believe that advocacy aimed at other policy areas with broader support, such as reducing lead exposure, is likely to be more cost-effective.

Our most important uncertainties mainly concern the cost, likelihood of success, and acceptability of these interventions, particularly policy advocacy. Many of our figures are (somewhat informed) guesses. The biggest concern among these is the risk of backlash for immigration and future philanthropic efforts in general. In our BOTECs, we did not attempt to model how advocating for immigration might reduce the political capital that advocates could use for other important policy areas (e.g., biosecurity).

As we mentioned in Section 4 and Appendix D, we are surprised there has not been more quantitative work in the effective altruism community on the general topic of policy advocacy. We are very interested in feedback from others on the best way forward for estimating the likelihood of success in policy advocacy. We invite readers to critically engage with these BOTECs and consider them as stepping stones for more modelling and research, rather than guidance for funding decisions.

## 6. Next steps for research

Based on the considerations we have expressed, here are our recommendations for future research. We believe research on costs, policy, and risks are the most important next steps.

- 1. Policy interventions need more research. We think more can be done to quantitatively estimate the effectiveness of policy advocacy and answer the questions: What is the cost of influencing policy? How does one best influence policy? What is the role of media and public opinion? This is an important meta-research project in itself, as more understanding of quantitative priors for the likelihood of influencing policy and the costs of policy change could help future cost-effectiveness analyses regarding many policy advocacy questions. Because we think Open Philanthropy seems to perform more analysis than they publish, researchers should attempt to speak with them to check what they have done on the topic before performing further research.
- **2.** We need a more sophisticated view of the backlash risks, such as 'poisoning the well' of destination nations, empowering nationalist political parties, or even the effect on the political capital of philanthropists. It seems important to clarify the extent to which recent increases in immigration in Europe created a backlash.
- 3. There appear to be few academic studies of interventions aimed at increasing international immigration, on a micro level. How are these interventions implemented and what makes them more or less effective and acceptable? These could be useful but are likely onerous. What would likely be more useful is to review charities that help refugees leave dangerous

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countries, try to understand the average cost of moving people, and then try to form a view on the likelihood the refugee would escape anyways.

**4.** Better longitudinal evidence estimating the SWB effects of immigration in general, and effects on happiness and mood in particular. Almost all of the research we used is correlational. Few followed an individual from their origin country to their destination. More cross-country immigration panels would be an important test to confirm or question our model of SWB convergence. Research about the scale use and comparison frames of immigrants would be of interest as well.

We recommend that every study of this sort measures the SWB of respondents and their socio-economic gains over time (if possible, starting before the immigration process to compare before and after scores). Such studies should not only measure responses from immigrants but also a matched group of stayers as well as a matched group of natives.

We also have little understanding of how immigration affects levels of happiness and not just life satisfaction. More study of the happiness effects of immigration would be useful. Unfortunately, the Gallup World Poll (which was our main source of data for the effects of migration on life satisfaction) does not collect very good happiness data<sup>17</sup>, making the studying of this question difficult.

### 7. Conclusion

Overall, we think that moving from a less satisfied country to a more satisfied country will have large benefits for an individual's life satisfaction. We are reasonably confident in our general modelling of the relationship between immigration and SWB. When immigrating to a country with higher SWB levels, people appear to gain a large part of the SWB gap between the origin and destination countries. That gain is not 100% of the gap and can be explained by a range of moderating factors. More data could be extracted from studies and more analyses conducted. We think the figures we found could vary moderately with the addition of higher-quality evidence.

We are much more uncertain about the costs and likelihood of success of interventions related to increasing immigration. Our BOTECs include many uncertainties and guesses. In this shallow dive into immigration, we did not find an intervention we thought was particularly promising, and we're somewhat sceptical that we would find one with more time. The most promising are

<sup>&</sup>lt;sup>17</sup> It asks binary questions such as "did you smile or laugh a lot yesterday?", "did you experience a lot of enjoyment yesterday?", "did you experience sadness during a lot of the day yesterday?". These questions are less informative than Likert scales and are questionable to combine. When combined they give strange answers that put China ahead of Denmark (see <u>Gallup 2020 Global Emotions Report</u>).



interventions seeking to implement policies that increase immigration to countries like Switzerland and the USA. However, these are very uncertain and we would not be surprised if future research would find that their cost-effectiveness is lower. We recommend more research on quantifying interventions to influence policy as well as more detailed inquiries into charities which help immigration and at what cost. In addition, we would like a better understanding of the potential of policy advocacy on a polarised topic to create a backlash.

## 1

# Appendix A: Additional modelling considerations

### A.1 Long-term effects and counterfactual changes

The literature about the long-term effects of immigration is mixed, and gives an unclear picture of how an immigrant's SWB changes with time spent in the destination country. Akdede and Giovanis (2020) found a positive correlation between length of stay and SWB whilst Hendriks et al.'s (2018) analysis of the German Socio-Economic Panel finds a negative correlation. In Lönnqvist et al.'s (2015) review of the literature, they reported that different studies show that immigrants can experience increases in SWB over time, decreases over time, or follow a U-shape pattern where SWB "is at its highest immediately after migration (positive euphoria), after which it gradually worsens before picking up again with time spent in host country" (p. 497).

To estimate the effect of time on the percentage gained of the SWB gap between origin and destination we calculate the linear change in the percentages of gaps gained between the initial and final follow-up. We use Lönnqvist et al. (2015), the initial and final follow-up from Stillman and colleagues, and Hendriks et al.'s (2018) comparison of newcomers (less than five years in the destination country) to long-timers (more than five years) to estimate a change over time. We obtain a - sample size weighted - average of these linear changes, resulting in a 2.14 percentage point increase in the percentage of the SWB gap gained per year. This is a small effect that would not strongly affect our modelling, so we do not use it.

When encouraging immigration, we try to consider the counterfactual effect; what would have happened to an immigrant's SWB if the individual did not move? To estimate this counterfactual effect we use the Gallup World Polls' SWB data accessible from Our World in Data. We classify countries as "less satisfied" if their SWB levels were on average below 5 (on a 0-10 scale) before 2010. Then we compare the effects of time on SWB for each group of countries. We regress the SWB levels onto time in years (between 2010 and 2018), and we interact *time* and *being less satisfied*. We find that (1) SWB levels in more satisfied countries (non-significantly) increase over time by 0.008 points each year and (2) SWB levels in less satisfied countries increase significantly faster by an additional 0.039 each year. This suggests that the gap between satisfied and less satisfied countries is closing over time. However, this is a small effect that would not strongly affect our modelling.



### A.2 Moderating factors

We estimated that immigrants do not gain 100% of the gap. Immigrants might not have the same SWB levels as natives because they might be poorer or have less access to socio-cultural aspects of the destination country that benefits the SWB of natives (<u>Paloma et al., 2021</u>). For instance, immigrants in the USA have worse educational, economic, and employment outcomes (<u>Blau & Mackie, 2017, Chapter 3</u>).

A few other findings are worth mentioning. Not being in a precarious socio-economic situation and having social support is important for the SWB of immigrants (Shirmohammadi et al., 2022). Aoki and Santigo (2018) found that the English proficiency of childhood immigrants in the UK was related to their socioeconomic class as adults. Giovanis (2021) found participation in socio-cultural activities reduces the SWB gap between immigrants and natives. Tegegne and Glanville (2019; see also Jiang & Renema, 2021) found that lower social capital explained part of the gap in SWB between immigrants and natives. However, it might be that migrants with higher SWB levels are more likely to participate in socio-cultural activities or obtain higher social capital.

Another reason why immigrants may not gain 100% of the gap is due to prejudice. However, we found few studies that quantify this relationship. If we had more time, we would combine our 'percentage of the gap gained' data with attitudes towards immigration data from the International Organization for Immigration (2015) - or another source - and see how much it moderates the percentage gained of the SWB gap.

Another moderating factor is the reasons for moving. Refugees (people fleeing specific risks such as war or persecution; <u>UNHCR</u>, <u>2016</u>) might gain as much of the gap as regular immigrants do. Refugees are more likely to suffer from mental illness, which may stem from previous hardships (<u>Hynie</u>, <u>2018</u>). Hendriks et al. (<u>2018</u>) found that refugees in Germany had lower SWB levels than immigrants. On the other hand, refugees in the USA are better off economically than other immigrants, but this may be due to increased US selectivity with the refugees they allow residency (<u>Resstack et al.</u>, <u>2022</u>).

Helping refugees could be very effective as refugees come from the places with the lowest SWB, hence they would gain from the largests SWB gaps. Helping refugees could also save lives, depending on the threat in their country of origin. We do not model lives saved in our cost-effective analyses (Section 5); hence, we expect that our model of helping refugees is an underestimate.



### A.3 Theoretical and scale use concerns

Are the changes in SWB due to actual changes in SWB or to changes in scale use in how people respond to SWB questionnaires? Perhaps immigrants acquire the reporting processes of their destination country but aren't better off. We believe this is very unlikely. If there is a shift in scale use, we think it would come from people raising, not lowering, their standards about how good life could be. This would lead to us underestimating the true wellbeing effects of immigration <sup>18</sup>.

Another issue might be comparison frames. Do immigrants compare their life to those of people back origin or to those of people in the destination country? Whichever frame, these are still true reflections of SWB. If immigrants become less satisfied with their lives because they start comparing themselves with natives that are better off, then that is a 'true' change in satisfaction. However, it is a problem for the effectiveness of immigration in increasing SWB if most of the gains from immigration become tempered by inter-comparison (e.g., income gains are affected by relative comparisons<sup>19</sup>).

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<sup>&</sup>lt;sup>18</sup> For example, imagine one comes from a country where the best life imaginable (the '10' on the scale) only truly means a '5' in latent wellbeing, then they move to a country where they can imagine an even better best life, and the '10' on the scale means a latent '10'. If that person reports a 4 before moving (i.e., a latent 2), and a 6 (a latent 6 rather than a latent 3) after moving, they will have gained 4 rather than 2 points if they shifted what the maximum of their scale meant.

<sup>&</sup>lt;sup>19</sup> This raises a question about the effect of income. If immigrants are better off economically than they would have been otherwise, but less well off than natives in the destination country, how does this affect their wellbeing? If the effect of income is mostly due to relative gains in income relative to a reference group (Diener et al., 1993), what is the reference frame for immigrants? Stayers or natives? Perhaps their absolute gain in income still matters. Bartram (2011), for example, found that immigrants do benefit from absolute income, and more so than natives, but that benefit is small. As we noted in Section 1, income is not the only outcome through which immigrants might benefit.



# Appendix B: More on immigration spillovers

In this appendix we discuss the literature surrounding the spillover effects of immigration on the households left behind (when households do not move together), the origin community, and the destination community.

#### **B.1 Households**

Interventions targeting an individual can also affect their household (McGuire et al., 2022). Failing to account for this limits our understanding of how much immigration can affect SWB.

If interventions involve moving whole households, we assume that the benefit will apply to the whole household. In our modelling, we assume this applies similarly to children and to adults<sup>20</sup>.

Immigrants sometimes leave their families behind. From Ivlev et al.'s (2019) global sample of immigrants, we estimate that this happens in 14% of cases. To estimate the effect in this case we extracted seven effects<sup>21</sup>, converted them to Cohen's d (SD-changes in SWB)<sup>22</sup> effect sizes and found a non-significant, meta-analytic, average<sup>23</sup> increase of 0.005 SDs in SWB (or 0.01 WELLBYs) associated with having a family member who immigrated. Note that these studies are correlational<sup>24</sup> and that there might be a selection effect where families who sent someone abroad might benefit from remittances (and/or suffer from separation) in different ways or intensities than those families who did not.

<sup>&</sup>lt;sup>20</sup> Children might benefit more than adults, because, for example, they can more easily acquire the destination country's language (Newport et al., 2001).

<sup>&</sup>lt;sup>21</sup> It's not clear whether we expect this effect to be positive or negative because it's unclear whether separation (bad) or increased consumption (good) from remittances (<u>Jones</u>, <u>2014</u>) would have larger effects. Hendriks et al. (<u>2018</u>) compare the SWB of individuals with a household member abroad with matched individuals without and find that households with members abroad experience gains in life evaluations and positive affect but also increases in negative affect. Ivlevs et al. (<u>2019</u>) find that having a household member abroad improves life evaluations and positive affect beyond the effect of remittances - but also increases depression. Càrdenas et al. (<u>2009</u>) find a positive effect on the SWB of families left behind in a sample of Latin America and Caribbean countries. On the other hand, there are a few smaller studies which find negative effects on SWB (<u>Böhme et al.</u>, <u>2015</u>; Jones, <u>2014</u>, <u>2015</u>; <u>Nobles et al.</u>, <u>2015</u>).

We use d = 2\*t/sqrt(N) or, if converting odds ratios to Cohen's d, we use log(OR)\*sqrt(3)/pi.

 $<sup>^{23}</sup>$  We use a multi-level meta-analysis because this gives us an average effect size in Cohen's d, weighted by the precision of the studies (inverse of their standard error, which is derived from their sample size). The 'multi-level' part means the model will adjust for dependence between studies. See Harrer et al. (2021) for more details.

<sup>&</sup>lt;sup>24</sup> Gibson et al. (2011), looking at the quasi-experiment of immigration from Tonga to New Zealand, report negative economic effects on families still in Tonga, at least, in the short-run. However, they do not report SWB effects (but follow-up studies do).

How the effects on left-behind families change over time is unclear. Joarder et al. (2016) found that the number of years spent abroad reduced the SWB of the household in Bangladesh when their family member went to Malaysia but improved their SWB when they went to the UK. This is too uncertain for us to include in our modelling.

### **B.2 Origin community**

It is unclear if the effects on the household left behind generalise to the origin community, so we do not add any origin community spillover effects. The only SWB evidence we have of the effect of emigration on the origin community is Lara's (2019) study of the relationship between emigration rates for areas in Mexico and the SWB of people in Mexico. They found mixed patterns: when controlling for individual characteristics, emigration rates increased SWB for men but decreased SWB for women.

One concern is that emigration could limit the ability of the origin country to improve its institutions. This could be true if emigration drains high-skilled individuals from the country, making it poorer and less likely to reform. We expect this concern to be blunted somewhat by high rates of return (29% globally, Azose & Raftery, 2018) and remittances (which are three times the size of development aid). Remittances seem correlated to beneficial political (Williams, 2018) and economic (Yoshino et al., 2017; Kratou et al., 2015) effects at the country level. Historical quasi-experimental evidence from Sweden found that Swedish emigration led to a higher likelihood of reform for local governments in Sweden (Karadja & Prawitz, 2019). However, this study may not generalise to other contexts. We think that the positive effects of emigration may be less likely in authoritarian countries where potential reformers may emigrate at higher rates.

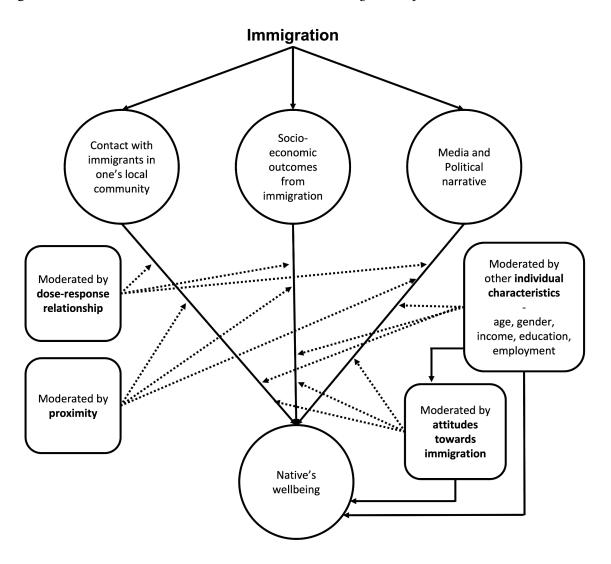
### **B.3 Destination community**

Increased immigration to a country could impact the SWB of the people already living there. The literature on the effect of immigration on natives' SWB levels is mixed<sup>25</sup>. We base our analysis mainly on studies reported in reviews conducted by Akdede and Giovanis (2020) and Hendriks and Burger (2021). Some studies find a significant positive relationship (Akay et al., 2014; Akay et al., 2016; Betz & Simpson, 2013), others a null or mixed relationship (Akdede & Giovanis, 2020; Giulietti & Yan, 2018; Ivlevs & Veliziotis, 2018; O'Connor, 2020; Papageorgiou, 2018), and others a significant negative relationship (Howley et al., 2020; Kuroki, 2018) between immigration and the SWB of natives.

<sup>&</sup>lt;sup>25</sup> Contact with people coming from different cultures also yields mixed findings for their effect on SWB levels of natives. Some find positive outcomes (<u>Akay et al., 2016</u>) whilst others find negative outcomes (<u>Churchill et al., 2019</u>; <u>Kuroki, 2018</u>; <u>Longhi, 2014</u>).

The variety in findings can be explained by the heterogeneity of the phenomenon, as immigration seems to impact different people in different ways depending on their age, gender, income, education, employment status, and attitudes towards immigrants. In Figure 3 below, we summarise our beliefs about the pathways and moderators involved in spillovers on the native community due to immigration.

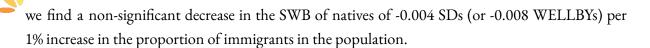
Figure B.1: Illustration of the causal mechanisms of immigration spillovers on native communities



We extract results from the aforementioned studies, convert them to Cohen's d (SD-changes in SWB) effect sizes and calculate the meta-analytic average of the effect of immigration on the SWB of natives (15 effect sizes with 2.7 million observations). Different studies have operationalised 'immigration' (the dosage) in different ways<sup>26</sup>. Hence, we transform the effect size of each study so that they represent the effect of a 1% increase in the share of immigrants in the population. Overall,

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<sup>&</sup>lt;sup>26</sup> For example, Akay et al. (2014) use the proportion of immigrants (relative to natives) in an area, whereas Howley et al. (2020) use 100,000s of immigrants in an area, and Akdede and Giovanis (2020) use net migration rates for countries in their analysis.



#### Limitations

Our analysis has some limitations. First, all of these studies are correlational, using population surveys (e.g., ONS in the UK) and SWB questions in panel surveys (e.g., the BHPS in the UK). Although, almost all of these studies look at data over time and exploit some form of geographical variation in the number of immigrants. Additionally, these studies only look at European countries or the US as destination countries, and 6 of the 15 effect sizes are from the UK, so the effects may not generalise.

Second, we find a mix of six negative and nine positive effects on the natives. As we illustrated in Figure B.1, we think the relationship between immigration and native wellbeing is quite complex. What explains these mixed findings that are, on average, slightly negative (but non-significant)?

#### Explaining the mixed findings with attitudes

It doesn't seem like economic outcomes explain the story, as immigration appears good for most participants in the destination economy<sup>27</sup>.

We think the mixed findings might be explained in part by attitudes towards immigration, which vary considerably across countries<sup>28</sup>. Being older or unemployed - which were both related to negative spillovers from immigration (<u>Ivlevs & Veliziotis</u>, 2018) - are also related to more anti-immigration attitudes (<u>O'Rourke & Sinnott</u>, 2006). In their study, Akdede and Giovanis (2020) found that immigration rates had a positive effect on SWB in northern, western, and eastern European countries, but a negative effect on southern European countries. The authors suggested this is due to southern European countries typically wanting lower levels of immigration than other parts of Europe, especially northern and western countries (as seen in <u>IOM</u>, 2015).

We test the interaction of immigration levels and attitudes towards immigration on the SWB of the natives in a brief calculation. We find the average percentage of respondents who believe there should be less immigration in the IOM (2015) for each of the effect sizes we have extracted,

<sup>&</sup>lt;sup>27</sup> In general, migration seems to be good for the economy of the destination nation (<u>Clemens, 2011</u>; <u>OECD, 2014</u>). Akdede and Giovanis (<u>2020</u>) found that immigration rates had a significant positive effect on earnings and a non-significant positive effect on employment for natives in Southern Europe, even though this was a region where immigration rates had a small non-significant negative effect on life satisfaction. Although immigration may have a small negative impact on natives with lower socio-economic statuses (<u>Vargas-Silva, 2020</u>) – this is still a contested academic issue.

<sup>&</sup>lt;sup>28</sup> Data from IOM (2015) shows that attitudes towards migrants in the top 10 countries with the highest percentages of migrants are mixed (only 13% of people surveyed in the United Arab Emirates wanted immigration to decrease but 69% of respondents from the UK wanted immigration to decrease).

according to their destination country or region. When we add this measure of attitudes as a moderator (alongside the share of immigrants), we find a non-significant increase of 0.043 SDs of SWB for each 1% increase in the proportion of immigrants and a significant negative decrease of -0.001 SDs of SWB for each 1% increase in the belief that there should be less immigration. These figures implies that there is an average negative effect on the SWB of the natives if more than 43% of the population believes there should be less immigration (0.043 - 0.001\*43 = 0).

It remains unclear if the relationship between attitudes and native spillovers is causal. While our analysis is not fully conclusive, it suggests to us that attitudes towards immigration might moderate the effect of immigration on natives. Therefore, interventions to improve attitudes towards immigrants could reduce negative spillovers and potentially increase positive spillovers (see Appendix C.4).

#### Further questions

Further questions for the spillover effect on natives for which we do not have answers are:

- How do the effects change over time?
- Which natives are affected and to what extent (e.g., is it only natives close to areas with high immigration rates)?
- What is the role of different communication channels about immigration (e.g., media vs. direct contact in the community)?
- Does immigration from different countries lead to different attitudes and spillovers?
   Natives may be more welcoming to immigrants of the same ethnicity.
- What is the dose-response relationship between immigration rates and the spillover on natives? We assumed it was linear, but other relationships are possible.



# Appendix C: Even more speculative BOTECs to help people move

In this appendix we discuss our even more speculative BOTECs of interventions to increase immigration.

### C.1 Evacuating refugees from Venezuela and Ukraine

In this analysis, we imagine moving a family out of Venezuela or Ukraine. This is speculative as we did not review any programmes that are dedicated to moving refugees from these countries or the costs involved. These are direct interventions like the refugee resettlement programme mentioned in Section 4.1.5.

We estimate that moving a family from Venezuela (an unhappy Latin American country) to Costa Rica (a much happier Latin American country) would produce 30 WELLBYs per \$1,000 spent, which is four times as cost-effective as GiveDirectly. We guess that a resettlement programme in Costa Rica could be cheaper than one in Canada.

The ongoing Russian-Ukrainian conflict created many refugees from Ukraine moving into the rest of Europe. We imagine this intervention delivered by small organisations helping to move people who are relatively closer to the frontlines. Because of the Schengen Area, and how welcoming the European nations have been to Ukrainian refugees, this could be a much cheaper intervention than the Canadian resettlement programme. We imagine it will only be necessary to cover a month-equivalent cost of \$1,100 to move a family, after which the destination country's services will care for them. We estimate that helping a Ukrainian family move to Europe produces 24 WELLBYs per \$1,000. This is three times more cost-effective than GiveDirectly, although we are very uncertain about the cost.

In both cases, we are making guesses about the return rate and the counterfactual likelihood of leaving Ukraine or Venezuela later without the help of an intervention. Again, we are omitting potential benefits from helping to save lives. We expect attributing counterfactual value to these interventions would be difficult.

A real organisation in the same vein of evacuating refugees is <u>Liberty in North Korea</u>, which spends \$13,257 guiding North Koreans out of China (if they were discovered they'd be deported)<sup>29</sup>. The cost-effectiveness of this organisation would depend on how much they decrease the likelihood of deportation back to North Korea and the SWB of North Koreans who are forcibly returned

<sup>&</sup>lt;sup>29</sup> Michael St. Jules wrote <u>a post</u> on the Effective Altruism Forum about the organisation.

(assuming they survive). This would be difficult because there is no apparent data on the SWB of North Koreans, and if there was, we would doubt the veracity of the responses.

# C.2 Software to facilitate the administrative process of immigrating

We calculated the cost-effectiveness of a hypothetical software that would assist the administrative process of immigrating to the USA. It appears that there is already a company called <u>Boundless</u> that appears to fill this role. We estimate that an additional service would produce 20 WELLBYs per \$1,000 spent, which is about three times more cost-effective than GiveDirectly. However, a core uncertainty here is how much earlier people would move to the USA (i.e., how much of an effect) this would cause compared to a counterfactual world without such a software package.

## C.3 Incentivise people to move within the Schengen Area

People might want to move within the <u>Schengen Area</u> (a 'free movement of persons' zone in Europe). This would be easier than coming from outside of the Schengen Area, but potential movers might need more information or motivation to do so.

This idea seems plausible because there's some evidence that cash transfers can increase internal migration (Hidrobo et al., 2021; Adhikari et al., 2018) and international migration (Angelucci, 2015; Gazeaud et al., 2021) in low-income countries. However, we should note the case of No Lean Season, a programme by Evidence Action that attempted to scale-up cash transfers to incentivise seasonal migration within Bangladesh. They found null results and so shut down the programme. This updates us that the operations and implementation of interventions to increase immigration might be very hard.

We consider this intervention to be aimed at people from relatively dissatisfied countries in the Schengen Area such as Hungary, Portugal, and Greece. We expect each mover to gain 8 WELLBYs (or 20 WELLBYs per \$1,000 spent) which would be about three times as cost-effective as GiveDirectly.

### C.4 Promote immigration-friendly media

An intervention that seems potentially promising, but we didn't have time to estimate the cost-effectiveness for, is funding popular media depicting immigrants in a positive light. This media would be specifically aimed at conservatives in the United States, who are less sympathetic to immigration. This intervention would aim to affect two important factors: the number of migrants



that conservatives allow via policy, and attitudes towards migrants which can have negative SWB impacts on migrants and potentially on natives.

To do this cost-effectiveness estimate we'd need to review the effectiveness of media at changing attitudes and connect changing attitudes to policy change. A few experiments find that exposure to information correcting misconceptions about immigrants (e.g., there are fewer immigrants than one might think, they commit less crime and use fewer social services) can affect attitudes, at least in the short run (<u>Grigorieff et al., 2018</u>; <u>Facchini et al., 2022</u>; although, Hopkins et al., (<u>2019</u>) found no effect of correct information on attitudes).

One illustrative example of media having a political impact is Ash et al. (2021) who exploited quasi-random geographic variation in the saliency of the Fox News Channel (FNC, a popular conservative media outlet) as a proxy for exposure and found that "A one standard deviation decrease in FNC's channel position boosted Republican vote shares by at least 0.5 percentage points in recent presidential, Senate, House and gubernatorial elections. The effects of FNC increased steadily between 2004 and 2016 and then plateaued. Survey-based evidence suggests that FNC affects elections by shifting the political preferences of Americans to the right."

# C.5 Immigrant-labour matchmaking organisation for Europe

A matchmaking organisation that connects immigrants with employment opportunities could help immigrants move through the Schengen Area (or across any area with free movement and regional variation in SWB). An example in the USA is the <u>Independent Agricultural Workers Center</u> which helps USA farmers hire seasonal workers from Mexico and Central America. We do not have a BOTEC for this sort of intervention. We think it would be promising if no such organisation already existed.



# Appendix D: Methodological concerns related to policy CEAs

Modelling policy advocacy is difficult because there are few experiments, natural or otherwise, that estimate the effect of policy advocacy (in any domain). Furthermore, we might question how much they generalise to different domains (e.g., influencing policy on education might not generalise to policy on immigration). We reviewed 26 studies<sup>30</sup>, 10 of which we found useful. Most of these studies were about the relationship between campaign finance and vote share in different elections.

Policy advocacy modelling involves answering complex questions such as:

- Does advocacy action directly affect the outcome we care about? For example, even if advocacy successfully pushes for raising immigration quotas, <u>immigration quotas are not</u> <u>always filled</u>.
- How costly is it to advocate for an issue, buy votes, or change opinion? There appears to be a literature on the cost to win a vote, with studies in several different countries (e.g., UK: <u>Cage & Dewitte, 2021</u>; Taiwan: <u>Wang, 2022</u>; France: <u>Bekkouche et al., 2019</u>; Switzerland: <u>Jaquet et al., 2021</u>; and the USA: <u>Kang, 2016</u>, <u>Sides et al., 2021</u>, <u>Schuster, 2020</u>).
- Does the probability of advocacy succeeding decrease with the polarised nature of the topic? Our prior here is that advocacy for such a polarised topic as immigration is unlikely to succeed.
- What is the probability that a successfully-advocated-for-policy, or its goal, would have happened anyways? Often, advocacy efforts might only bring forward a policy event.
- How do you attribute causal responsibility for success in policy advocacy if there are multiple advocates?

The main approach we observe in the effective altruism community is to make a subjective guess after considering case studies of an organisation's past success and the success of similar organisations working on similar problems. Founders Pledge (FP) has done the most transparent analyses of the possible cost-effectiveness of policy advocacy. See their work on clean air, GPI's rural employment, housing affordability, and FP's guide to evaluating policy advocacy. Several researchers have expanded on FP's work on the effectiveness of environmental advocacy, but they also rely on subjective inputs (see Giving Green's CEA of climate activism and James Ozden's CEA of Extinction Rebellion).

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<sup>&</sup>lt;sup>30</sup> These came from a quick, non-systematic search using google scholar and <u>Elicit</u>.

We expect Open Philanthropy, which has supported several policy advocacy campaigns, has a method for assessing the likelihood of policy success, but we did not find published details of this process. Open Philanthropy (2013) performed a shallow investigation into labour mobility as a means of decreasing poverty. However, the report is mostly conversation notes with experts and doesn't provide much of a foundation for identifying the promising opportunities in this space. In a blog post, they mentioned that they're winding down their immigration policy advocacy. We haven't asked about this, nor their general method for policy advocacy, but this is something we would do with more time. Open Philanthropy's winding down of its involvement in immigration policy advocacy updates us towards thinking that this might not be a cost-effective venture.

Because we are thinking about a general case, and we're not evaluating specific organisations, we try to rely on empirical evidence to form a prior on the likelihood of advocacy success.