

# Helping animals or saving human lives in high income countries is arguably better than saving human lives in low income countries?

## Summary

- I think the following will tend to be the best to maximise the cost-effectiveness of saving a human life:
  - Accounting solely for the benefits to the person saved, saving human lives in countries with low, but not too low, real gross domestic product ([real GDP](#)) per capita. Saving a human life is cheaper in lower income countries, but self-reported life satisfaction and life expectancy decrease with income. So saving human lives in the lowest income countries may be suboptimal.
  - Accounting solely for the benefits from economic growth, saving human lives in countries with high real GDP per capita. Saving a human life is more expensive in higher income countries, but these have greater productivity and life expectancy. So paying more to save human lives there may be worth it.
- In terms of effects on animals, I consider:
  - It is unclear whether saving human lives has a positive/negative impact on nearterm welfare accounting for effects on both humans and animals.
  - Saving human lives in high income countries is better than in low income countries if the benefits from economic growth dominate. The former increases animal suffering nearterm more, but makes it peak and end earlier, such that there is a greater overall reduction.
  - Eating less animals and more whole-food plant-based increases economic growth via decreased mortality.
- My overall view is that:
  - If improving nearterm welfare is the best proxy to maximise future welfare, helping animals is arguably better than saving human lives in low income countries.
  - If boosting economic growth is the best proxy, saving human lives in high income countries is arguably better than in low income countries.
  - I guess improving nearterm welfare is a better proxy than boosting economic growth. Nonetheless, I am mainly in favour of research on whether [indirect longterm effects](#) dominate, and, if so, on which are the best proxies for them.

## History of my views

My views on saving human lives have evolved roughly as follows:

- I am only able to experience my own experiences, so it is only rational for me to do whatever maximises my own happiness. However, in practice, this means I should also care about others, so saving human lives is good.
  - I did not write about the above view, which I think crossed my mind when I was around 13, but it seems close to what I now know as [rational egoism](#).
- All human lives are worth roughly the same, so one had better minimise the cost per life saved, which in practice implies saving human lives in low income countries.
  - [A vida que podemos salvar](#) (30 March 2021), which translates to “The life you can save”.
  - [Será que podes fazer a diferença?](#) (27 March 2022), which translates to “Can you make a difference?”.
- Saving human lives in high income countries may well be bad due to the [meat-eater problem](#), as consumption per capita of animals with bad human lives is high there, which reinforces the above conclusion that one had better save human lives in low income countries.
  - [Are poultry birds really important? Yes...](#) (19 June 2022).
- Saving human lives in low income countries is better than in high income ones, but it is hard to tell whether it is good even there. The effects on animals might dominate those on humans in low income countries too due to the growing consumption per capita of animals with bad lives, and impacts on wild animals.
  - [Finding bugs in GiveWell's top charities](#) (23 January 2023).
  - [Scale of the welfare of various animal populations](#) (19 March 2023).
  - [Prioritising animal welfare over global health and development?](#) (13 May 2023).
  - [The Meat Eater Problem](#)<sup>1</sup> (17 June 2023).
  - [Badness of eating farmed animals in terms of smoking cigarettes](#) (22 July 2023).
- If improving nearterm welfare is the best proxy to maximise future welfare, helping animals is arguably better than saving human lives in low income countries. If boosting [economic growth](#) is the best proxy, saving human lives in high income countries is arguably better than in low income countries.
  - This post.

I have had a combination of the above views, but the timeline refers to the most heavily weighted one. Since my views have changed many times, I am not so confident the current one is stable.

## Saving human lives

### Cost

Assuming some kind of approximate rationality in public policy, I think the cost of saving a human life ( $c$ ) is roughly proportional to the value of a statistical life ([VSL](#)). This is arguably

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<sup>1</sup> Linkpost with some commentary of mine.

approximately proportional to the real GDP per capita of the country where the life is saved<sup>2</sup> ( $r$ ). So  $c = k_c r$ , where  $k_c$  is a constant.

## Benefits

I believe the benefits of saving a human life to the person saved ( $u_0$ ) are roughly proportional to the self-reported [life satisfaction](#) times the life expectancy at birth. Both of these factors [are arguably](#) approximately proportional to the logarithm of the ratio between the real GDP per capita of the country where the life is saved and that respecting a neutral life ( $r_0$ ). So  $u_0 = k_{u_0} \ln(r/r_0)^2$ , where  $k_{u_0}$  is a constant.

The above does not capture all the benefits of saving human lives due to [indirect longterm effects](#). Based on an [outside view](#) perspective, one can say these ( $u_1$ ) are roughly proportional to the [advancement](#) in time of the trajectory of the global real GDP<sup>3</sup>, as [economic growth is](#) one of the best markers of progress<sup>4</sup>, although arguably still far from ideal. Such advancement decreases [astronomical waste](#), [may](#) decrease extinction risk, and [is](#) arguably approximately proportional to the real GDP per capita of the country where the life is saved times the life expectancy at birth there<sup>5</sup>, which I suggested above is proportional to  $\ln(r/r_0)$ . So  $u_1 = k_{u_1} r \ln(r/r_0)$ , where  $k_{u_1}$  is a constant. This translates into the [uncomfortable conclusion](#) of human lives in higher income countries being instrumentally more valuable<sup>6</sup>. I am not confident this is right/wrong, but here are some thoughts:

- One can argue naively increasing economic growth is worse than acting as if all human lives have similar total (intrinsic plus instrumental) value, since this promotes [cooperation and peace](#), which are great heuristics for beneficial [indirect longterm effects](#). On the other hand, boosting economic growth is often a good way to bring about cooperation and peace. For instance, open borders [could](#) double GDP (or [not](#)).
- While valuing human lives differently may seem counterintuitive in [effective altruism](#) circles (or [not](#)), it is the view:
  - Endorsed by the vast majority of governments, at least implicitly. Otherwise, there would not be huge differences in the VSL across countries.
  - Followed to a significant extent in personal human lives. Someone strongly endorsing [impartiality](#) has to appeal to instrumental reasons to justify caring much more about 1 unit of welfare in one's friends and family than in serial killers<sup>7</sup>.
- Both maximising economic growth and nearterm welfare impartially have counterintuitive implications. To maximise:
  - Economic growth, it would make sense for an altruistic person to accept a 50 % chance of more than doubling productivity plus a 50 % chance of dying.

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<sup>2</sup> In agreement with [Viscusi 2020](#). "For international differences [respecting VSL], I adopt an income elasticity figure of 1.0".

<sup>3</sup> See advancement of a value trajectory with an exogenous end in Figure 11.

<sup>4</sup> See also Tyler Cowen's book [Stubborn Attachments](#), which was [discussed](#) on The 80,000 Hours Podcast. [Applied Divinity Studies](#) has a related [piece](#) on the moral foundations of progress.

<sup>5</sup> Ideally, one [would](#) account for emigration and [catch-up growth](#).

<sup>6</sup> Relatedly, one of the sections of Tyler Cowen's book [Stubborn Attachments](#) is "Should Money Be Redistributed to the Rich?".

<sup>7</sup> This can be read as [the special obligations objection](#) to utilitarianism, which I do not think goes through (see responses in the link).

- Nearterm welfare, it would also make sense to accept the deal just above, because the donations one can make to save human lives are arguably proportional to one's productivity.

In addition, there is a [case](#) for economic growth being a good way of increasing nearterm human welfare.

## Cost-effectiveness

Based on the above, the cost-effectiveness of saving a human life is:

- Accounting solely for the benefits to the person saved,  $u_0/c = (k_{u_0}/k_c) \ln(r/r_0)^{2/r}$ .
- Accounting solely for the benefits from economic growth,  $u_1/c = (k_{u_1}/k_c) \ln(r/r_0)^8$ .

As a result, the following will tend to be the best to maximise cost-effectiveness:

- Accounting solely for the benefits to the person saved, saving human lives in countries whose real GDP per capita is 7.39 (=  $e^2$ ) times that respecting a neutral life<sup>9</sup>.
  - I think  $r_0$  is around 314 2017-\$ (=  $0.86 \cdot 365.25$ ), given a calorie sufficient diet in low income countries [costed](#) 0.86 2017-\$/person/d in 2017. If so, my approach suggests saving a human life would be optimal in a country with a real GDP per capita of 2.32 k 2017-\$ (=  $7.39 \cdot 314$ ). For context, this [was Ethiopia](#)'s value in 2021.
  - Minimising the cost to save a human life may not be the best heuristic. If it is too low, the decrease in benefits may outweigh the lower cost such that cost-effectiveness is lower. Burundi had the lowest real GDP per capita in 2021 [of](#) 714 2017-\$, which is 30.8 % (=  $714/(2.32 \cdot 10^3)$ ) of my estimate for the optimum.
- Accounting solely for the benefits from economic growth, saving human lives in countries with the highest real GDP per capita<sup>10</sup>. This makes intuitive sense under the view that progress is driven by research and development ([R&D](#)).
  - High income countries [had](#) 4.12 k R&D researchers per million people in 2015, 13.3 (=  $4.12/0.309$ ) times as many as lower-middle income countries.
  - There was no data for low income countries, but Ethiopia, which [is](#) aiming to become a lower-middle income by 2025, had 91 R&D researchers per million people in 2017, 2.09 % (=  $0.091/4.36$ ) as many as high income countries.

<sup>8</sup> For reference, if I had assumed the benefits from economic growth were proportional to the real GDP per capita of the country where the life is saved, but not to the life expectancy at birth there,  $u_1/c = k_{u_1}/k_c$ . Consequently, in that case, the cost-effectiveness of saving a human life accounting solely for the benefits from economic growth would not depend on the real GDP per capita of the country where the life is saved.

<sup>9</sup> The derivative of  $u_0/c$  with respect to  $r$  is  $(k_{u_0}/k_c) \ln(r/r_0) (2 - \ln(r/r_0))/r^2$ , which is null for  $r = e^2 r_0$ . This is a maximum because  $u_0/c$  goes to 0 as  $r$  tends to  $r_0$  or infinity.

<sup>10</sup>  $u_1/c$  increases with  $r$ .

Note these are just heuristics I am discussing for illustrative purposes. Rather than picking a country based on real GDP per capita, one had better maximise the proxies more strictly connected to the target outcomes:

- Accounting solely for the benefits to the person saved, additional wellbeing years ([WELLBYs](#)) per dollar spent.
- Accounting solely for the benefits from economic growth, additional global real GDP per dollar spent<sup>11</sup>.

It makes sense to account for both benefits, but I am uncertain about which one, if any, dominates ([relatedly](#)). There is also room for debate about what are the best proxies for each of the above benefits, although they often correlate well with each other. Respecting:

- The benefits to the person saved, less disease improves wellbeing.
- The benefits from economic growth:
  - Across countries, I estimated a correlation of [0.767](#) between the logarithm of the real GDP per capita and the Future Expected Value Index (FEVI), which I [defined](#) as the mean of 14 socioeconomic indices<sup>12</sup>.
  - [Global real GDP](#) has increased with [global real GDP per capita](#).

In contrast, it is not immediately clear how the metrics I have discussed capture effects on animals.

## Effects on animals

### Impacting nearterm animal welfare

I have [argued](#) interventions focussed on helping humans should account for the effects on animals, as they may well be beneficial/harmful. In the context of human diet, there is the [meat-eater problem](#):

“The **meat-eater problem** (sometimes called the **poor meat-eater problem**) is the concern that some interventions aimed at helping humans might increase animal product consumption and as a result increase [farmed animal suffering](#), e.g. by increasing real income or human population.”

I [estimated](#) the cost-effectiveness of GiveWell’s top charities is only reduced by 8.64 % due to the negative impact on farmed animals, such that they remain beneficial. On the other hand, I have used the current consumption of poultry per capita, but this, as well as that of other farmed animals, [will](#) tend to increase with economic growth. I [estimated](#) the badness of the experiences of all farmed animals alive is 4.64 times the goodness of the experiences of all humans alive<sup>13</sup>, which suggests saving a random human life results in a nearterm increase in suffering ([relatedly](#)). Moreover, the beneficial/harmful [effect](#) on wild animals may well be much larger.

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<sup>11</sup> For an overview of what looks good under this metric, see [these](#) estimates from the Copenhagen Consensus Center, and its best investment [papers](#) for the sustainable development goals.

<sup>12</sup> The correlation between FEVI and some of the socioeconomic indices is even higher. For example, it is [0.894](#) for Varieties of Democracy’s main [index](#).

<sup>13</sup> Based on the conditions of broilers in a reformed scenario.

For the above reasons, I consider it is unclear whether saving human lives has a positive/negative impact on nearterm welfare. My estimates are not [resilient](#), but I see this as an additional source of sign uncertainty<sup>14</sup>. However, saving human lives may also shape longterm [animal welfare](#).

## Shaping longterm animal welfare

Toby Ord [describes](#) 6 ways of changing humanity's future value:

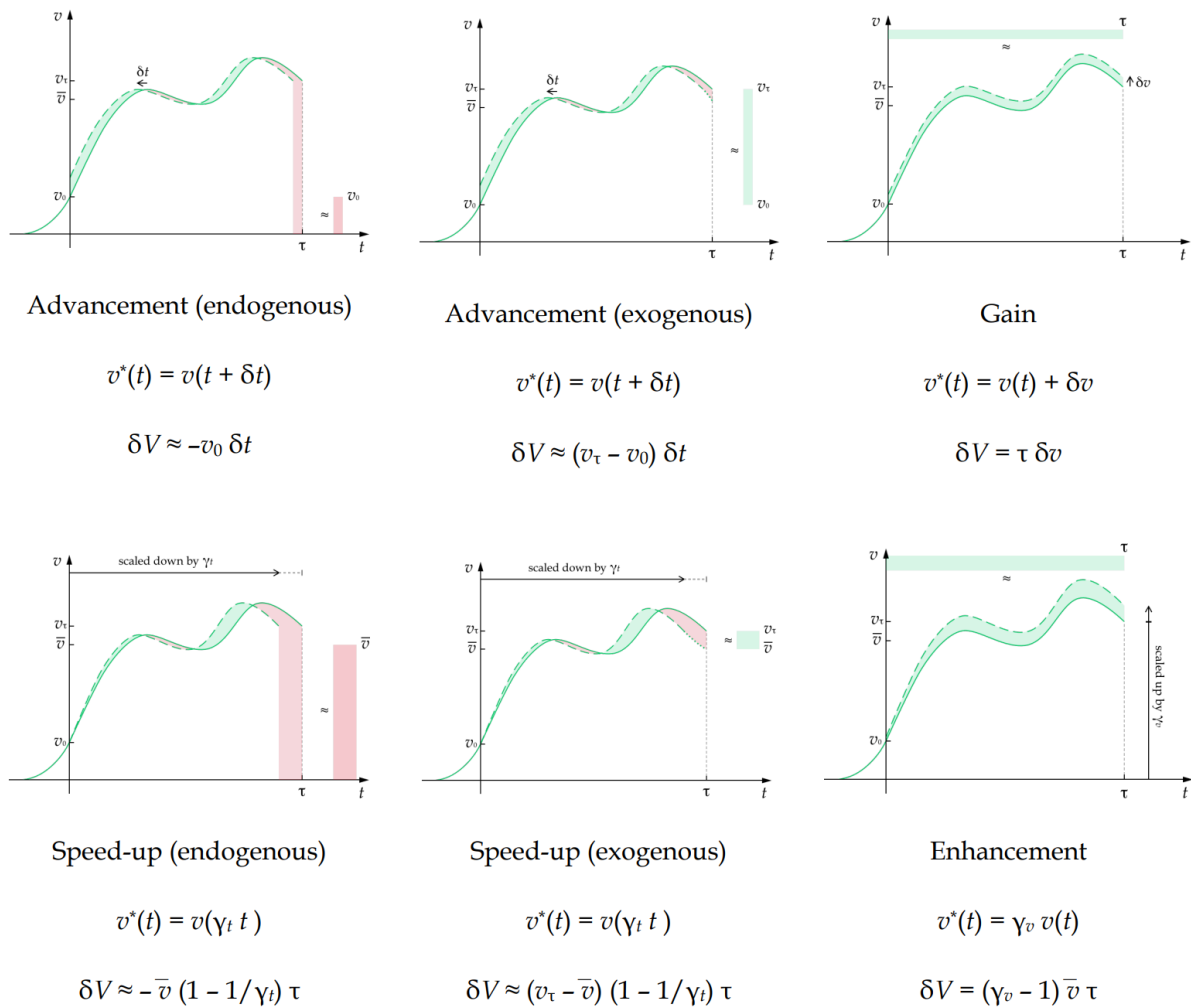


Figure 11. A summary of the different idealised changes to humanity's longterm trajectory.

I think the above framework can be used to assess the [indirect longterm effects](#) of saving human lives on animal welfare. To this end, one can imagine:

- The vertical axis respects animal suffering (instead of humanity's value).
- $\tau$  respects the time until the end of animal suffering (instead of the time until the end of humanity's value).

<sup>14</sup> Uncertainty about whether saving human lives increases or decreases nearterm welfare.

The time just mentioned is endogenous/related to humanity's activities, and I believe greater economic growth can a priori be represented as an advancement or speed-up. So it increases animal suffering nearterm, but makes it peak and end earlier, such that there is an overall reduction of:

- For an advancement, “current annual animal suffering”\*“advancement in years” (top left graph).
- For a speed-up, “mean annual animal suffering until it ends”\*(1 - 1/“speed-up factor”)\*“time until animal suffering ends in years” (bottom left graph).

Consequently, it appears that saving human lives will tend to decrease animal suffering if it increases economic growth. Likewise for other interventions. Furthermore, the above expressions suggest the reduction in animal suffering is larger for greater “current annual animal suffering”. Since higher real GDP per capita [is](#) associated with greater consumption of animals, and this is linked to greater animal suffering, saving human lives in higher income countries will tend to decrease animal suffering more.

Nevertheless, greater economic growth does not necessarily lead to less animal suffering (nor [differential progress](#)). I guess it does [in expectation](#), but there is lots of uncertainty, and work explicitly focussed on improving animal welfare is still very much worth it. Michael St. Jules commented, rightly in my view, that<sup>15</sup>:

“It’s worth pointing out that it’s largely due to the work of [effective animal advocacy](#) [EAA] that animal suffering is being reduced. This hasn’t happened for free or by default; we’re paying for it.

Some EAAs are interested in slowing the growth of factory farming or worst practices (like cages) and possibly even preventing it where it’s not yet very established and animal product consumption remains low, including in parts of Africa (see work supported by the [Open Wing Alliance](#), the [EA Animal Welfare Fund](#) or [Animal Advocacy Africa](#), like [Utunzi Animal Welfare Organization](#)). Economic growth could make that work harder, because economic growth [drives intensification](#) and animal product consumption (see also [Gilbert 2015](#)).

I agree that given similar rates of factory farmed animal products per capita, it’s easier to reduce factory farming if people are richer, though, because [willingness to pay](#) for animal welfare is probably higher. So maybe it will make our work cheaper then, or maybe it will even happen without us. But it could make our work harder now, and we miss the chance to prevent some intensification early on [\[relatedly\]](#).”

## Does saving human lives increase economic growth?

In general, I suppose it is fair to say saving human lives increases economic growth, since labour [is](#) one of inputs ([relatedly](#)), unless we are talking about people who have already retired<sup>16</sup>. So saving human lives will tend to decrease animal suffering if this follows from boosting economic growth.

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<sup>15</sup> I just added some of the links.

<sup>16</sup> Even then, people who are no longer formally employed can still work (e.g. caring for grandchildren).

Here is the answer from ChatGPT 4 to the question just above (with minor changes to the text format):


“The question of whether saving human lives increases economic growth is multifaceted and involves understanding the complex interplay between health and economic development.


There are several key aspects to consider:

- **Workforce Productivity.** Improved health typically leads to increased productivity. Healthy individuals can work more effectively, take fewer sick days, and contribute more actively to the economy. This increase in productivity can lead to higher economic output.
- **Demographic Changes.** Saving human lives, especially in younger populations, can contribute to a demographic dividend. This term refers to the economic growth potential that can result from shifts in a population's age structure, mainly when the working-age population grows larger relative to the number of dependents.
- **Human Capital Development.** Health is a component of human capital. When people live longer and healthier human lives, they can invest more in education and skill development, enhancing their employability and potential for innovation, which is vital for economic growth.
- **Healthcare Costs.** On the flip side, increasing life expectancy can raise healthcare costs, especially in ageing populations. This scenario can strain public health systems and divert resources from other economic activities.
- **Dependency Ratio.** If life-saving measures primarily extend the human lives of the elderly, this could increase the dependency ratio (the ratio of non-working-age to working-age people). A higher dependency ratio can place a financial burden on the working population, potentially slowing economic growth.
- **Empirical Evidence.** Studies have shown a positive correlation between health improvements and economic growth. For example, research by the World Health Organization and others suggests that investments in health lead to economic growth by improving productivity, reducing healthcare costs, and enhancing the quality of human capital.
- **Long-Term Perspective.** The impact of saving human lives on economic growth may vary in the short term versus the long term. In the short term, rapid population growth due to decreased mortality can strain resources, but in the long term, it can lead to a more skilled and productive workforce.

In summary, while saving human lives can certainly contribute to economic growth, the exact nature of this relationship depends on various factors, including the age distribution of those whose human lives are saved, the overall health of the population, and the capacity of the economy to absorb and utilise a growing workforce.

See also:


 [Economic impact of healthcare](#) to explore how health improvements can drive economic growth.

 [Human capital theory](#) for understanding the role of health in human capital development.

You may also enjoy:

 [Global Health Initiatives](#) to see how worldwide health programs affect various economies.



 [Demographic dividend](#) for insights into how population dynamics influence economic growth.”

## Eating less animals and more whole-food plant-based increases economic growth

Economic growth may increase animal suffering nearterm via resulting in greater consumption of animals. Nonetheless, I believe there is a good case for eating less animals and more whole-food plant-based to increase economic growth:

- [According](#) to the EAT-Lancet Commission, the global adoption of a predominantly plant-based healthy diet, with just 13.6 %<sup>17</sup> ( $= (153 + 15 + 15 + 62 + 19 + 40 + 36)/2500$ ) of calories coming from animals, would decrease premature deaths of adults by 21.7 %<sup>18</sup> ( $= (0.19 + 0.224 + 0.236)/3$ ). Less premature mortality implies more time to contribute to economic growth.
- From [Springmann 2015](#), “as a percentage of expected world gross domestic product (GDP) in 2050, these [annual] savings amount to 2.3% (1.5–3.1%) for HGD diets [healthy global diets], 3.0% (2.0–4.0%) for VGT [vegetarian] diets, and 3.3% (2.2–4.4%) for VGN [vegan] diets”.
  - “The second scenario [healthy global diets (HGD)] assumes the implementation of global dietary guidelines on healthy eating (16, 28) and that people consume just enough calories to maintain a healthy body weight (29)”. As with the EAT-Lancet diet, adopting healthy global diets would imply a major reduction in the consumption of animals. “The HGD diet included (per day) a minimum of five portions of fruits and vegetables (16), fewer than 50 g of sugar (16), a maximum of 43 g of red meat (28), and an energy content of 2,200–2,300 kcal, depending on the age and sex composition of the population (29)”.
  - “The last two scenarios also assume a healthy energy intake but based on observed vegetarian diets (30, 31), either including eggs and dairy [lacto-ovo vegetarian (VGT)] or completely plant-based [vegan (VGN)]”. I think this means the vegetarian and vegan diets are not optimised for health. They just correspond to the diets vegetarians and vegans actually follow in the real world.

## My overall view

If improving nearterm welfare is the best proxy to increase future welfare, helping animals is arguably better than saving human lives in low income countries. I [estimate](#) corporate campaigns for chicken welfare increase nearterm welfare 1.37 k times as cost-effectively as [GiveWell's top charities](#), and I am not confident that saving human lives is good/bad accounting for effects on animals<sup>19</sup>.

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<sup>17</sup> Calculated based on values in Table 1.

<sup>18</sup> Mean of the 3 estimates in Table 3.

<sup>19</sup> Although there is [some](#) nuance.

If boosting economic growth is the best proxy, saving human lives in high income countries is arguably better than in low income countries. However, in this case, I would [not](#) see changing population size as a top area, and may prioritise [AI safety](#) interventions.

I suppose one has to hold the [total view](#) in order for improving nearterm welfare to be a better proxy than boosting economic growth. I believe the [first agricultural revolution](#) was for the better, but it [may](#) well have resulted in a lower quality of life nearterm, whereas it arguably increased total welfare via facilitating population growth.

I guess improving nearterm welfare is a better proxy than boosting economic growth. Nonetheless, I mostly agree with Richard Chappell [that](#) effective altruism's worldviews need rethinking. I am mainly in favour of research on whether indirect longterm effects dominate, and, if so, on which are the best proxies for them. I have the sense the effective altruism community prematurely converged on minimising (human) [disease burden](#), potentially [even](#) in the context of global catastrophes, without giving sufficient credit to alternatives. For example, increasing global real GDP, or (my preference of) improving the welfare of humans plus animals. On the one hand, I strongly endorse [expected total hedonistic utilitarianism](#), and would agree that minimising disease burden as typically defined is one of the best available proxies for it. On the other, further research on what to maximise seems useful to make the maximisation less [perilous](#).

## Acknowledgements

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