

## ***What would it take?***

***Costs of a nationwide universal basic income around the world, and what countries would have to do to cover them.***

The debate over basic income is playing out in countries all over the world - including [Switzerland](#), [Finland](#), [India](#), [Namibia](#), [Canada](#), [Germany](#), the [UK](#), and the [United States](#). Every country has its own unique considerations as it decides whether to pursue a basic income program. But one question is common across them all: how to fund it.

The answer depends a great deal on how much funding capacity a country already has. Some countries with large existing welfare states or large general government revenues could in theory fund a universal basic income by reallocating existing government spending. Other countries would face a more complicated path: they might raise more in revenue (from taxes or other sources), design a program that isn't universal, set payments below the level of basic needs, or choose some combination of these approaches.

To understand how feasible basic income is as a government policy, an important first step is to review the funding capacity of each country around the world. To do that, we've estimated how much a basic income program might cost in each country, then compared that against the country's GDP, general government spending, and more specific social services spending. You can walk through the math and tinker with the assumptions yourself in [our affordability calculator](#).

Naturally, a full answer for whether a particular country could afford a basic income would require much more research into that country's specific situation. For this initial analysis, we've chosen to start with a broad global scan, using readily available data from the World Bank and other sources. We summarize the results of our analysis below.

***Poorer countries have varying abilities to fund a universal basic income of roughly \$2 PPP per day***

In the developing world, a common standard for bare minimum income is the World Bank's [global poverty line](#): \$1.90 per day, PPP.<sup>1</sup> About 30 countries have a large population living below this line.

As the table below shows, these countries would have widely varying abilities to fund a universal basic income at this \$1.90 PPP per day level for all adult citizens. The ones with substantial government resources - for example, China, South Africa, and Angola - could theoretically afford the program if they were able to repurpose existing social service spending. Those with much smaller coffers - for example, DRC, Ethiopia, and Uganda - would likely find such a program out of reach.

Country information				Basic income cost				
Country	# living	% living	Total	% of gov't			% of social	
	under \$1.90	under \$1.90	annual	expense	svcs	health	svcs ex	
	PPP / day	PPP / day	cost	% of GDP				
India	279M	21%	\$181B	9%	54%	341%	582%	
China	153M	11%	\$492B	5%	15%	66%	81%	
Nigeria	97M	53%	\$32B	7%	131%	181%	599%	
Bangladesh	70M	44%	\$31B	16%	159%	583%	993%	
Congo, Dem. Rep.	60M	77%	\$17B	49%	558%	1675%	3317%	
Indonesia	41M	16%	\$42B	5%	31%	187%	307%	
Ethiopia	33M	34%	\$16B	26%	241%	806%	4190%	
Tanzania	25M	47%	\$7B	15%	86%	222%	650%	
Uzbekistan	21M	67%	\$6B	9%	27%	80%	106%	
Madagascar	20M	82%	\$3B	29%	294%	1195%	9212%	
Mozambique	19M	69%	\$5B	33%	135%	615%	1619%	
Pakistan	16M	8%	\$26B	9%	53%	570%	728%	
Kenya	15M	34%	\$9B	14%	70%	521%	1360%	
Philippines	13M	13%	\$20B	7%	42%	441%	690%	
Uganda	13M	33%	\$5B	20%	165%	577%	1722%	
Malawi	12M	71%	\$2B	33%	67%	543%	2351%	
Zambia	10M	64%	\$2B	10%	64%	182%	554%	
Brazil	10M	5%	\$67B	4%	10%	18%	24%	
Niger	10M	50%	\$3B	37%	132%	1112%	6905%	
Burkina Faso	10M	55%	\$3B	23%	163%	459%	1294%	
South Africa	9M	17%	\$13B	4%	12%	41%	79%	
Burundi	9M	78%	\$2B	54%	262%	1017%	2974%	
Mali	9M	49%	\$2B	15%	116%	314%	740%	
Angola	8M	30%	\$5B	5%	19%	74%	108%	
Rwanda	7M	60%	\$2B	24%	185%	330%	1508%	
Ghana	7M	25%	\$4B	11%	50%	197%	448%	
Cameroon	7M	29%	\$4B	13%	110%	567%	1420%	
Cote d'Ivoire	7M	29%	\$4B	12%	90%	603%	1088%	
Sudan	6M	15%	\$9B	10%	135%	453%	3543%	
Benin	6M	53%	\$2B	20%	153%	456%	1311%	
Haiti	6M	54%	\$2B	28%	98%	(No data)	(No data)	
Senegal	6M	38%	\$2B	17%	98%	311%	806%	
Chad	5M	38%	\$2B	17%	74%	1292%	5643%	

Shows the annual cost of a universal basic income program providing every citizen age 18 or older<sup>2</sup> \$1.90 PPP per day, adjusted for the price level in each country. Shown for countries with >5M people living on less than \$1.90 per day.

**Wealthier countries have varying abilities to fund a universal basic income with a much higher benefit size**

In the developed world, the debate about how much money constitutes a basic income tends to anchor on national poverty lines rather than global ones. National poverty lines are measures of [relative rather than absolute poverty](#), and hence are higher for richer countries. In the United States, for example, the current poverty line is [\\$12,085 per year](#) for a single adult - which, at \$33 per day, is about 17 times the global poverty line. Different countries use different methods to set their national poverty lines, but many [researchers](#) and [international organizations](#) have come to embrace around 50% of median income as a common standard.

If we assume that each developed country uses this standard to set its basic income benefit, then gives the benefit to every adult citizen, the result is a range of affordability across countries.<sup>3</sup> For countries like France, Sweden, and the UK, the cost of a universal basic income falls within the amount currently spent on social services (which suggests these governments could have more flexibility to repurpose existing funds). For most other countries, the program is moderately to significantly larger than existing social service spending (which suggests they might find other funding sources more essential).

Country information		Basic income cost				
Country	Benefit amount (per year)	Total annual cost	% of GDP	% of gov't		% of social svcs ex
				expense	svcs	health
United States	\$15,480	\$4,229B	24%	73%	118%	208%
Japan	\$11,966	\$1,409B	34%	81%	145%	204%
Germany	\$11,728	\$884B	26%	60%	101%	138%
France	\$12,044	\$690B	28%	58%	86%	120%
United Kingdom	\$10,789	\$609B	21%	54%	90%	131%
Italy	\$9,790	\$547B	30%	70%	106%	149%
Canada	\$14,486	\$461B	30%	96%	163%	265%
Australia	\$18,444	\$375B	28%	106%	143%	265%
Spain	\$8,238	\$347B	29%	65%	108%	151%
Korea, Rep.	\$6,805	\$312B	23%	120%	243%	441%
Netherlands	\$13,376	\$199B	26%	63%	109%	169%
Switzerland	\$26,365	\$197B	30%	89%	158%	215%
Belgium	\$13,439	\$133B	29%	65%	96%	148%
Sweden	\$14,969	\$129B	26%	49%	93%	123%
Saudi Arabia	\$5,120	\$118B	18%	48%	(No data)	(No data)
Poland	\$3,413	\$117B	25%	58%	118%	155%
Austria	\$14,110	\$110B	30%	62%	104%	145%
United Arab Emirates	\$10,110	\$85B	23%	81%	(No data)	(No data)
Hong Kong SAR, China	\$10,606	\$73B	23%	125%	453%	1042%
Israel	\$10,541	\$66B	22%	59%	140%	189%
Portugal	\$5,236	\$49B	25%	52%	94%	134%
Greece	\$4,714	\$46B	24%	49%	108%	126%
Czech Republic	\$4,605	\$44B	24%	73%	111%	172%
Chile	\$2,700	\$40B	17%	80%	165%	246%
Hungary	\$3,063	\$27B	23%	50%	105%	128%

Shows the annual cost of a universal basic income program providing every citizen age 18 or older 50% of median income per year, adjusted for the median income in each country. (Where median income is unavailable, 25% of GDP per capita is used.)

Shown for high-income countries with >5M people

Note: Government expense for countries with federated systems (e.g., U.S., Canada) includes spending at regional level.<sup>3</sup> See the methodology notes for full explanation.

**All countries have a number of options to make a basic income program more affordable**

In all these countries, the initial “sticker price” of a basic income is only the beginning of the story. A number of policy levers could change the math above.



One lever is additional funding. Countries could choose to raise taxes - on incomes, assets, or more specific targets like carbon emissions or financial transactions. Countries could also choose to distribute the revenues from shared resources - either emulating an existing model (e.g., [Alaska's oil-funded dividend](#)) or creating a new one (e.g., [distributing the profits from inventions that replace human labor](#) as Robert Reich has suggested). For developing countries, another funding source could be incoming foreign aid. The Brookings Institution [has pointed out](#) that the amount needed to move everyone in the world above the global poverty line is \$80B total, while worldwide official development assistance is currently more than twice that (though only a small fraction of it may be repurposable).

Another lever is cost-saving modification of the basic income program. Countries could reduce benefit sizes beneath the levels suggested above - either because they find a lower level is enough to meet basic needs, or because they decide to provide an amount below basic needs. Countries could also target fewer beneficiaries by removing the “universal” element of the program. This might mean means-testing the benefit so only the poor receive it, or limiting the program to specific geographies or [demographics](#).

Finally - and importantly - even without pulling such levers, countries could see a much lower “net” cost of basic income depending on their tax regime. While the basic income benefit might go to every citizen regardless of wealth, an existing progressive income tax would tax it at higher rates for the wealthy than for the poor. For this reason, many have pointed out that a basic income for every citizen could in practice reach the [same outcomes](#) as a [negative income tax targeted at only the poorest](#): you might be giving a basic income to a rich person, but the rich person would be giving it right back in taxes.

To show one version<sup>5</sup> of the lower “net” price tag implied by this argument, below is how the affordability numbers would change if each country took the means-testing route and only gave a basic income to people *below* the relevant benchmark poverty line.<sup>6</sup>

#### *Lower income countries (global poverty line)*

As the table shows, limiting to the program to only those living under \$1.90 PPP per day would bring a basic income program into more affordable terrain for many countries.

Country information				Basic income cost				
Country	# living	% living	Total	% of gov't			% of social	
	under \$1.90	under \$1.90	annual	expense	svcs	health	svcs ex	
	PPP / day	PPP / day	cost	% of GDP				
India	279M	21%	\$38B	2%	11%	72%	124%	
China	153M	11%	\$55B	1%	2%	7%	9%	
Nigeria	97M	53%	\$17B	4%	70%	97%	320%	
Bangladesh	70M	44%	\$13B	7%	70%	255%	433%	
Congo, Dem. Rep.	60M	77%	\$13B	38%	431%	1293%	2560%	
Indonesia	41M	16%	\$7B	1%	5%	30%	49%	
Ethiopia	33M	34%	\$5B	9%	81%	270%	1405%	
Tanzania	25M	47%	\$3B	7%	40%	104%	303%	
Uzbekistan	21M	67%	\$4B	6%	18%	54%	71%	
Madagascar	20M	82%	\$2B	23%	241%	977%	7531%	
Mozambique	19M	69%	\$3B	22%	92%	423%	1113%	
Pakistan	16M	8%	\$2B	1%	4%	47%	60%	
Kenya	15M	34%	\$3B	5%	23%	175%	457%	
Philippines	13M	13%	\$3B	1%	5%	58%	90%	
Uganda	13M	33%	\$2B	7%	55%	192%	572%	
Malawi	12M	71%	\$2B	23%	47%	385%	1667%	
Zambia	10M	64%	\$1B	6%	42%	118%	357%	
Brazil	10M	5%	\$3B	0%	0%	1%	1%	
Niger	10M	50%	\$1B	18%	66%	560%	3476%	
Burkina Faso	10M	55%	\$1B	13%	90%	254%	715%	
South Africa	9M	17%	\$2B	1%	2%	7%	13%	
Burundi	9M	78%	\$1B	42%	204%	790%	2309%	
Mali	9M	49%	\$1B	8%	57%	155%	364%	
Angola	8M	30%	\$2B	2%	6%	22%	33%	
Rwanda	7M	60%	\$1B	15%	112%	199%	909%	
Ghana	7M	25%	\$1B	3%	13%	50%	113%	
Cameroon	7M	29%	\$1B	4%	32%	166%	416%	
Cote d'Ivoire	7M	29%	\$1B	3%	26%	175%	316%	
Sudan	6M	15%	\$1B	2%	20%	68%	529%	
Benin	6M	53%	\$1B	10%	81%	242%	696%	
Haiti	6M	54%	\$1B	15%	53%	(No data)	(No data)	
Senegal	6M	38%	\$1B	6%	37%	118%	306%	
Chad	5M	38%	\$1B	7%	28%	497%	2169%	

Shows the annual cost of a non-universal basic income program, provided only to those aged 18 or older who currently live on under \$1.90 PPP per day. The benefit size is still a full \$1.90 PPP per day, adjusted for the price level in each country.

Shown for countries with >5M people living on less than \$1.90 per day.

*High income countries (national poverty lines)*

Likewise, in the developed world, limiting the program to only those making below the national poverty line would substantially increase its affordability.

Country information		Basic income cost					
Country	Benefit amount (per year)	Total annual cost	% of gov't		% of social svcs ex		
			% of GDP	expense	health		
United States	\$15,480	\$639B	4%	11%	18%	31%	
Japan	\$11,966	\$227B	6%	13%	23%	33%	
Germany	\$11,728	\$137B	4%	9%	16%	21%	
France	\$12,044	\$56B	2%	5%	7%	10%	
United Kingdom	\$10,789	\$91B	3%	8%	13%	20%	
Italy	\$9,790	\$163B	9%	21%	32%	45%	
Canada	\$14,486	\$43B	3%	9%	15%	25%	
Spain	\$8,238	\$73B	6%	14%	23%	32%	
Korea, Rep.	\$6,805	\$46B	3%	17%	36%	64%	
Netherlands	\$13,376	\$18B	2%	6%	10%	15%	
Switzerland	\$26,365	\$15B	2%	7%	12%	16%	
Belgium	\$13,439	\$20B	4%	10%	14%	22%	
Sweden	\$14,969	\$18B	4%	7%	13%	17%	
Poland	\$3,413	\$20B	4%	10%	20%	26%	
Austria	\$14,110	\$4B	1%	2%	4%	6%	
Hong Kong SAR, China	\$10,606	\$14B	5%	24%	89%	204%	
Israel	\$10,541	\$14B	5%	13%	31%	42%	
Portugal	\$5,236	\$9B	5%	10%	18%	25%	
Greece	\$4,714	\$17B	9%	18%	39%	45%	
Czech Republic	\$4,605	\$4B	2%	7%	11%	17%	
Chile	\$2,700	\$6B	2%	11%	24%	35%	
Hungary	\$3,063	\$4B	3%	7%	16%	19%	

Shows the annual cost of a non-universal basic income program, provided only those aged 18 or older who currently live on under 50% of the median income per year. The benefit size is still 50% of the median income per year, adjusted for the price level in each country. Shown for high-income countries with >5M people. Excludes countries without available data on proportion under poverty line.

Note: Government expense for countries with federated systems (e.g., U.S., Canada) includes spending at regional level.<sup>4</sup> See the methodology notes for full explanation.

Finally, it's worth noting that all of the above calculations are based on present-day realities. Some basic income proponents suggest that future developments could make a program of this kind more politically and economically feasible. For example, if automation [reshapes labor markets fundamentally](#), a large increase in un- or under-employment might create more political will for tax changes. Correspondingly, if automation creates much higher productivity, governments might have more resources to disburse. Changes like these could cause policymakers to revisit their present-day assumptions and alter the above calculations. (How likely these changes are and how soon they might emerge remain the focus of [ongoing debate](#).)

Clearly, the analysis above is only the start of the conversation. Policymakers will continue to debate the feasibility of a basic income in their countries, tackling many factors beyond the financial ones mentioned here. But as the debate swirls, we think it will be useful to keep this basic cost logic in mind.



## Endnotes

1. PPP stands for “Purchasing Power Parity” and represents the adjustment for differences in price levels relative to the US. In reality, the “\$1.90” poverty line equals different amounts in different countries: for example, \$1.12 in China, where price levels are lower, and \$2.77 in Switzerland, where price levels are higher.

2. To provide a common standard for debate, we use the term “universal” to mean all inhabitants of the country aged 18 or older. Some have suggested children should be included in a universal basic income program. This would of course increase the cost relative to what’s captured in these numbers.

3. Wealthier countries *could* choose to use the global poverty line as the benefit size for a bare minimum universal income program (or as an entry point to a fuller implementation). Recent reports show that [pockets of extreme poverty still exist across the developed world](#) - for example, [about 1% of American households still live below \\$2 a day](#). Here is what the costs would look like for wealthier countries to deploy a UBI sized to keep everyone above the global poverty line - recognizing this is far below any amount currently being debated in these countries, and would leave still leave poor recipients below the national standard for poverty.

Country information		Basic income cost					
Country	Benefit amount (per year)	Total annual cost	% of GDP	% of gov't		% of social svcs ex	
				expense	svcs	health	
United States	\$737	\$201B	1%	3%	6%	10%	
Japan	\$629	\$74B	2%	4%	8%	11%	
Germany	\$649	\$49B	1%	3%	6%	8%	
France	\$674	\$39B	2%	3%	5%	7%	
United Kingdom	\$785	\$44B	2%	4%	7%	10%	
Italy	\$616	\$34B	2%	4%	7%	9%	
Canada	\$699	\$22B	1%	5%	8%	13%	
Australia	\$895	\$18B	1%	5%	7%	13%	
Spain	\$546	\$23B	2%	4%	7%	10%	
Korea, Rep.	\$549	\$25B	2%	10%	20%	36%	
Netherlands	\$664	\$10B	1%	3%	5%	8%	
Switzerland	\$1,009	\$8B	1%	3%	6%	8%	
Belgium	\$678	\$7B	1%	3%	5%	7%	
Sweden	\$770	\$7B	1%	3%	5%	6%	
Saudi Arabia	\$282	\$7B	1%	3%	(No data)	(No data)	
Poland	\$349	\$12B	3%	6%	12%	16%	
Austria	\$686	\$5B	1%	3%	5%	7%	
United Arab Emirates	\$424	\$4B	1%	3%	(No data)	(No data)	
Hong Kong SAR, China	\$551	\$4B	1%	6%	24%	54%	
Israel	\$774	\$5B	2%	4%	10%	14%	
Portugal	\$499	\$5B	2%	5%	9%	13%	
Greece	\$508	\$5B	3%	5%	12%	14%	
Czech Republic	\$401	\$4B	2%	6%	10%	15%	
Chile	\$419	\$6B	3%	12%	26%	38%	
Hungary	\$347	\$3B	3%	6%	12%	14%	

Shows the annual cost of a universal basic income program, provided to those aged 18 or older who currently live on under 50% of the median income per year. The benefit size is \$1.90 PPP / day.

Shown for high-income countries with >5M people. Excludes countries without available data on proportion under poverty line.

Note: Government expense for countries with federated systems (e.g., U.S., Canada) includes spending at regional level.<sup>4</sup> See the methodology notes for full explanation

4. We use the United States federal + state budgets and the Canada federal + province budgets as the denominator for the “% of gov’t spending” section. If we used only federal spending, the United States number would move from 73% to 103% and the Canadian one would move from

96% to 178%. See “Methodology Notes” for a full rationale of the government spending numbers.

5. Note that this is just one possible flavor of a “partial” basic income - as discussed above, many other permutations of cost savings are possible. The negative income tax case specifically would likely include a graduated scale of benefits depending on the recipient’s income level.

6. Note that this scenario involves the *full* basic income amount being given to *all* those means-tested below poverty line. For example, in a developing country, someone making \$0.01/day PPP and someone making \$1.89/day PPP would both receive \$1.90/day PPP.

## Methodology Notes

### (A) Cost of basic income program

The total cost of a basic income program is the benefit amount times the target population, plus costs incurred from of the transferring the money. Below are the benchmarks we use for each one of these components. (Our calculator allows you to choose from these benchmarks, or set entirely numbers for each component.)

#### *1. Benefit amount*

Global extreme poverty line (\$1.90 PPP)

- We start with the World Bank's official global extreme poverty line of \$1.90, which is in terms of 2011 PPP USD. We translate this amount to current USD by multiplying it by the ratio of GDP in current USD to the GDP in 2011 PPP USD country by country. (For both GDP figures we use the latest recorded from the World Bank).
- We've set this as the default benefit size for all countries the World Bank defines below the "high income" level. In practice, it might be a starting point for discussion of basic income in any country with a substantial population of the extreme poor.

50% of median income

- We calculate 50% of the country's median disposable income, using latest OECD data (for participating countries, converted to USD based on current exchange rates) or Pew's combination of UN Povcal and Luxembourg Income Study data (for all others, converted from 2011 PPP USD to current USD via the method explained above). It's worth noting that a portion of the data we use from Pew is for consumption rather than income; we follow them in treating it as the nearest equivalent. See Pew's discussion of their methodology [here](#).
- We've set this as the default benefit size for all countries the World Bank defines as "high income." It is a rough way to set consistent logic for national poverty lines across countries - in practice, these lines vary from country to country and often have different thresholds for different household configurations (e.g., single adult versus married couple).

25% of GDP per capita

- We calculate 25% of the country's latest GDP per capita in current USD, as recorded by the World Bank.
- We've set this as the default benefit size only for "high income" countries for which data on median income is unavailable. We use 25% because it is close to 50% of median income, as measured by the population-weighted average across OECD countries.

#### *2. Target population*



#### Full adult population

- We multiply the latest data for a country's total population (per the World Bank) by the percentage of its population 18 years or older (per the UN).
- We treat this number as the default, "universal" population for a basic income. Including children in the population would naturally imply higher costs than this default.

#### Means-tested at global poverty line

- We multiply the full adult population (per the method above) by the percentage of a country's population estimated to live below \$1.90 per day PPP (per the World Bank). (Note that this age-adjustment assumes a similar demographic profile between those below this line and those above it).
- We do not use this number as a default, but present it as an alternative for countries contemplating the benefit size of \$1.90 PPP.

#### Means-tested at national poverty line

- We multiply the full adult population (per the method above) by the percentage of a country's population estimated to live below the country's national poverty line (per the World Bank or, if not available, the CIA). (Same age-adjustment caveat as above).
- We do not use this number as a default, but present it as an alternative for countries contemplating the benefit size of 50% of median income. (Note that this population size is likely imperfectly matched to the benefit size, since it reflects a country-specific poverty line that may be above or below 50% of median income.)

### 3. *Transfer costs*

#### Default of 10% added costs

- We use this percentage because it is similar to GiveDirectly's own expense ratio for cash transfers. Naturally this cost would vary based on the location and scale of the program.

#### (B) Government resources

Once we find the cost of the program, we compare it to the resources a government could theoretically devote to it. We use four versions of comparison:

##### 1. *GDP*

- We use the latest GDP in current USD as reported by the World Bank

##### 2. *Government expense*

- As a default, we use total government expenses reported by the World Bank, which represents only spending by the *central* government..

- In countries with especially large *non-central* resources (e.g., countries with both state and federal budgets, or countries with separate wealth from resource extraction) this World Bank number becomes a less realistic reflection of government spending ability. To detect these cases, we flag countries in which the social services spend implied by other data (see below) is >80% of the World Bank's total spend estimate. We infer from this that such spending on social services is actually coming from a larger pie than the central government alone, and hence the cost of a basic income should be compared against that larger pie.
  - The countries flagged in this way are: the United States, Canada, Japan, Brazil, Switzerland, Germany, Spain, Estonia, United Arab Emirates, Lithuania, Poland, Sweden, and Samoa.
- For these countries, we use an alternative data source: the Heritage Foundation's 2016 aggregation of data from the OECD, IMF, regional development banks, and other sources. This data represents spending across all layers of government, not just central.
  - As a further refinement, we have used latest available budgets for the United States and Canada to restrict their spending numbers to only state / province and federal sources. We've done this to avoid the local and municipal spending numbers that may be baked into the Heritage data, which we believe are less in keeping with the intuitive reference points for the basic income debate in these two countries.

### 3. *Social services expense*

- We use the International Labor Organization's latest record of "total public social expenditure" as a percentage of GDP, which is gathered from the IMF, the OECD, and other development research sources. We then multiply it by the latest GDP in current USD.
- We chose this measure as a rough estimate of the broadest category of expense that might be considered for repurposing to a cash transfer program.

### 4. *Social services expense excluding health*

- We use the International Labor Organization's latest record of "public social protection expenditure excluding health benefit in kind" as a percentage of GDP, which is gathered from the IMF, the OECD, and other development research sources. We then multiply it by the latest GDP in current USD.
- We chose this measure as a rough estimate of a more narrow category of expense that might be considered for repurposing to a cash transfer program. (For context on the much narrower category of expense countries currently devote to cash transfers specifically, see the World Bank's [Social Protection Indicators](#).)