Purchasing Power Parity (PPP)

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How much is a dollar worth? It depends where you live. One dollar buys much more in Poland (PPP 0.51) than it does in France (1). We therefore use the measurement PPP to calculate someone's purchasing power. 1/0.51 = 1.96. Therefore 1€ buys the equivalent of 1€96 in Poland of what a French person would buy for 1€. If a salary for a teacher in the UK is 20% more than in France, but if the PPP is 20% better in France, there is no advantage *(not real data)*

PPP. CocaCola

From Learn Robin Hood

NB. Imported or produced locally.

PPP comparisons

- On the last slide you saw different prices for CocaCola. Some people use BigMac (McDonalds beefburger) instead of PPP. You need to think about if the product is imported or made locally. CocaCola – Mexico.
- This will be the same for a BigMac – local ingredients; local labour.
- An imported good (a machine for bottling CocaCola) will cost the same (plus any import duties) in Mexico, the EU or the USA. In PPP terms, the machine will be more expensive in Mexico since the PPP will be <1 (EU and USA).

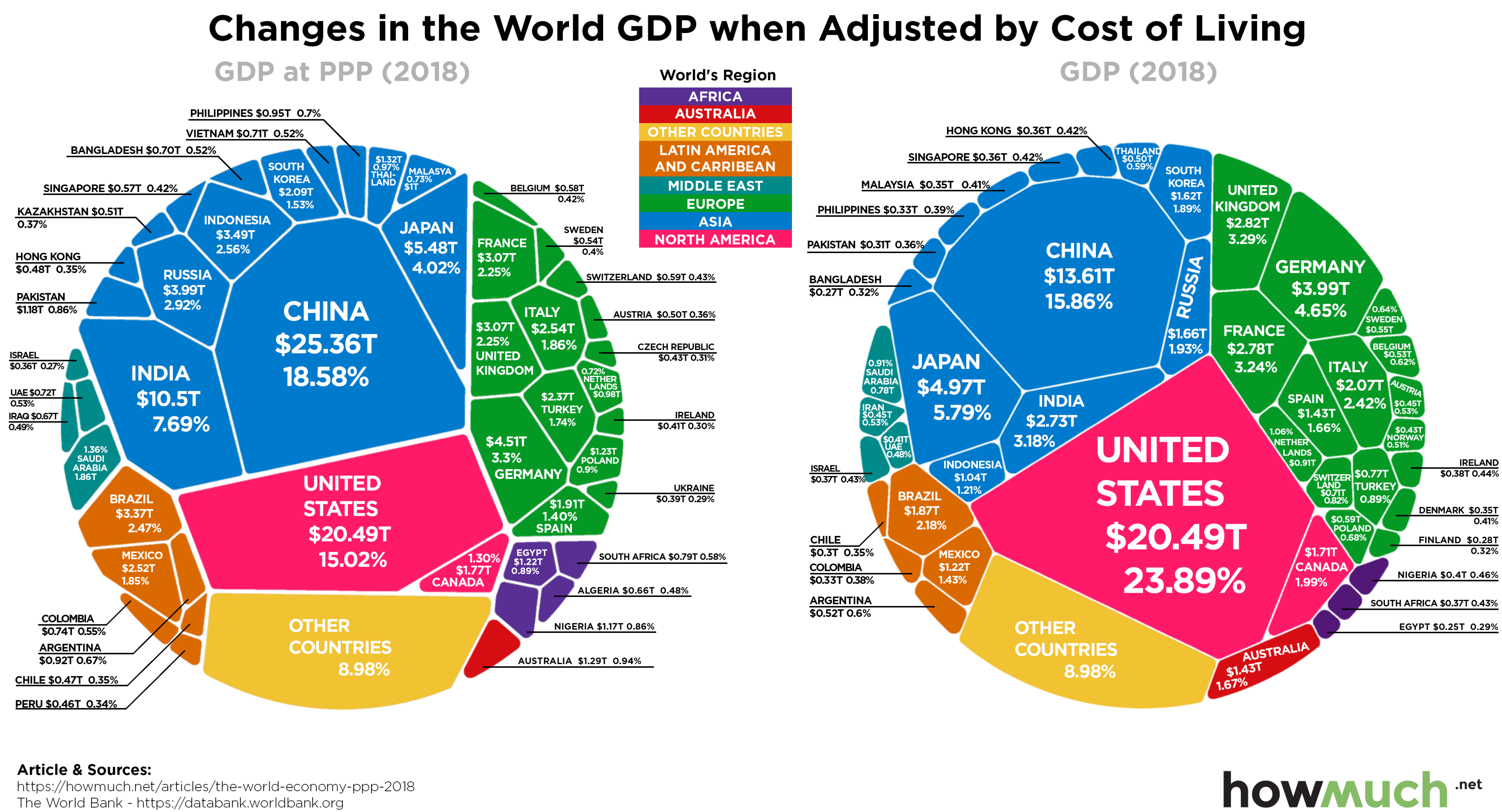
- PPP is based on the dollar. 1$ = PPP 1 (often stated as 100).
- See the PPP data base here.
- To calculate PPP in different countries, divide one by the other.
- You live in Chile (PPP 0.66). You go on holidays to Denmark (PPP 1.24). 0.66/1.24 = 0.53. This means that what 1€ buys in Chile, when in Denmark it only buys 0€53 of goods. Life is nearly twice as expensive.
- Inversely, if you are Danish and you visit Chile, 1.24/0.66 = 1.88. Life is 88% cheaper in Chile than in Denmark.

Wealth Transfer

- If France (PPP 1) invests **1m€** in Chile (PPP 0.66), it will have 88% more effect on the economy than the same investment in Denmark.
- Now we can add on the multiplier effect. If the investment is in an area with a high percentage of labour (with a high Marginal Propensity to Consume – MPC) and nationally-made goods, we can imagine a multiplier effect of 3.
- Therefore French 1m€ investment = PPP of 1.66m€ * 3 = an effect on the economy of **4.98m€**
- Therefore the transfer of money from rich to poorer countries is highly beneficial to the poorer country.
- N.B. CAP payments – same subsidy, different PPPs. Therefore the subsidy has a greater effect in poorer (low PPP) countries.

GDP per capita with PPP

- What is the nominal GDP per capita (per person) in different countries? (total GDP divided by the population). Look here.
- Let's take the GDP per capita of Ireland (112K) and Portugal (27K). 112/27 = 4.15. The Irish are over 4 times richer than the Portuguese. *(IMF 2023)*
- BUT. The PPP in Ireland is 1.18, and in Portugal it's 0.76 (2021). So 1€ buys more in Portugal than in Ireland. 1.18/0.76 = 1.55, so the gap is less in **GDP per capita PPP** terms.
- Look here to find GDP per capita with PPP.
- Ireland GDP/pc/PPP = 138K, Portugal = 45K. 138/45 = 3.1.
- So, in **PPP terms**,The Irish are **3.1 times richer, not 4.2 times** richer than the Portuguese.



Source: HowMuch.net

France: 3.24%. PPP-adjusted 2.25%

USA: 23.89%. PPP-adjusted 15.02%

China: 15.86%. PPP-adjusted 18.58%

PPP Exercise 1

Separate each table workgroup into two subgroups (A and B)

You are going on holidays from France with 1,000€ to spend.

A. You are going to Norway

B. You are going to Mexico

From the PPP link on your lesson page, find the purchasing power of your 1,000€ (divide French PPP by the holiday country's PPP and multiply it by 1,000).

Compare your results with the rest of your table.

PPP Exercise 2

A. You are exporting 10,000€ of vegetables from Turkey to France. Vegetable exports have a multiplier effect of 2. What is the effect on Turkey's economy?

B. You are importing an MRI (IRM in French) machine from France (50K€) into a hospital in Hungary where normal (non-import) government spending has a multiplier effect of 2. What is the effect on Hungary's economy?

PPP Exercise 1. *Answer*

You are going on holidays from France with 1,000€ to spend.

A. You are going to Norway

B. You are going to Mexico

From the PPP link on your lesson page, find the purchasing power of your 1,000€ (divide French PPP by the holiday country's PPP and multiply it by 1,000).

A. France. PPP = 1. Norway. PPP = 1.24. 1 / 1.24 = 0.8. You have the ***equivalent of 800€*** *for your 1K€.*

B. France. PPP = 1. Mexico = 0.56. 1 / 0.56 = 1.8. You have the ***equivalent of 1,800€*** *for your 1K€*

PPP Exercise 2

A. You are exporting 10,000€ of vegetables from Turkey to France. Vegetable exports have a multiplier effect of 2. What is the effect on Turkey's economy?

Turkey PPP = 0.36

1 / 0.36 = 2.8. The equivalent of 10K€ of exports is 28K€. The ME is 2, therefore the impact on the Turkish economy is **equivalent to 56K€**

B. You are importing an MRI (IRM in French) machine from France (50K€) into a hospital in Hungary where normal (non-import) government spending has a multiplier effect of 2. What is the effect on Hungary's economy?

France PPP = 1. Hungary PPP = 0.56. 1/0.56 = 1.8. It costs the Hungarian economy **the equivalent of 90K€**. This money leaves the Hungarian economy and therefore has a **negative multiplier effect** (the money is not being spent on internal goods or labour where it could have been spent with an ME of 2). **Therefore, the theoretical cost would be 180K€.**

Purchasing Power Parity

- For more information, see these articles from Eurostat:

- An analysis of PPPs
- PPPs in Europe and the World
  Comparative Price Levels in the EU
  International PPPs