How we calculated the 27x efficiency on sustainable savings

Source: Nordea Group Sustainable Finance

These figures are based on that the average individual works until he reaches the age of 65 with a working lifespan of about 42 years. During this 42-year time period, the example estimates how much we impact the climate through our lifestyles and savings. Starting with your carbon footprint from water consumption and something you do on a regular basis – taking showers.

On average, a shower lasts for 5 minutes and we do this typically 5.5 times a week. For every minute of shower, 0.44 kWh are required to heat that water. Heating 1 kWh causes about 100 gram of CO2 emissions. This means that if you reduce the amount of time you spend in the shower with 2 minutes, you save 25.2 kg of CO2 emissions per year and 1.06 tonnes of CO2 emissions throughout your working lifespan.

Regarding our travelling habits, we travel on average 2.7 times abroad per year. Trips to Thailand and the U.S are popular international destinations, but also Spain. For that purpose, we assume that the average international trip represents a distance the same as from Stockholm to Madrid. A round trip of that distance causes 450.6 kg of CO2 emissions. If you were to be happy with only 1.7 international trips a year instead of 2.7, you would save 18.93 tonnes of CO2 emissions throughout your working lifespan.

Talking about transport, looking at the average distance driven by car per capita in Sweden at 6 630 km, and with an average carbon footprint of 0.096 kg CO2 per km driven, you emit 636 kg of CO2 emissions every year. Taking the train, instead of the car, is an efficient way of reducing this footprint as it only emits 0.0000021 kg CO2 per km transported for you individually. As a matter of fact, were you to take the train instead of the car, you would save 26.7 tonnes of CO2 emissions throughout your working lifespan.

However, our eating habits are even more troublesome for the environment. The total consumption of meat per capita is 74.7 kg. Beef causes the most emissions while poultry and fish cause much less. For the purpose of simplification, we can say that 1 kg of meat causes on average 14.4 kg of CO2 emissions. Hence, if you would only eat 1 piece of meat per week, you would save a staggering 35.7 tonnes of CO2 emissions throughout your working lifespan.

All of these activities are great for contributing to a more sustainable world. However, the way you save your money can make a significant difference. To find exactly how much more effective it is to save sustainably in comparison to above mentioned activities, the example examines the premium pension as a proxy for a traditional fund vs a sustainable fund. In the premium pension system in Sweden, 2.5% of your gross salary is invested in a default fund of equities and bonds with an average annual return of 9.3% since inception at the time of the calculation. The average gross salary in Sweden is at 32 800 SEK per month, so you are investing 9 840 SEK annually into this fund (unless you make an active choice to invest them differently). The average person has a premium pension portion that represents 19% of the total pension capital, which in turn aggregates to half of total financial savings.

The default fund has exposure to companies with the highest amounts of oil, coal and gas reserves in the world. Using the proportion of fossil investments of this fund as a proxy for a traditional fund in your total financial savings, your personal carbon footprint from savings becomes significant unless you have invested sustainably.

A sustainable fund is a fund that invests in sustainable companies. Fossil companies are not sustainable given their reliance of oil, coal and gas reserves. Hence, we can assume that a sustainable fund does not typically hold fossil holdings. With this data, through the absolute carbon footprint methodology, we can determine how much you would save in your carbon footprint budget by making an active choice to change your savings into sustainable funds. Note that given the high compounding effect with regular deposits and an average annual return, the footprint becomes large as your savings grow. Summing up the amounts of carbon emissions saved each year from year 1 to 42 will amount to roughly 2,200 tonnes of CO2 emissions throughout your working life span.

Compared with the CO2 savings made in the other activities combined, at 82.4 tonnes, it is 27 times more efficient to allocate your investments sustainably. For the transition to a low carbon economy to materialize, much of the oil, coal and gas reserves of these fossil companies will need to be left in the ground. It will otherwise be difficult to compensate for it in other ways as demonstrated above. The economic value of these companies will naturally also decrease and as such poses a financial risk to your holdings in these companies in the long term. It therefore makes sense from a financial perspective, as well as environmental perspective, to allocate your savings and investments into sustainable alternatives. It is one of the most effective ways for you to combat climate change.

The purpose of this calculation is to give substance of thought. The true carbon footprint of your total financial savings will naturally depend on the fund type, the amount of savings, the holdings, and many other variables. The purpose is not to undermine other activities that promote sustainable development or limit greenhouse gas emissions, but to express the importance of considering your climate impact through savings.