

Heavy Tax on Carbon Emission: Good or Bad?

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1. Introduction

The climate crises are upon us, and the G20 meeting is right around the corner. Here world leaders are meeting to discuss our way forward in terms of the climate problem. There are many different opinions about what we need to do to lower the world's carbon emission. There are also many different interests that we need to take into consideration when discussing different solutions and approaches to the climate problem. We for example have Russia that is one of the world's biggest producer and exporter of oil and gas, almost their whole economy is dependent on the income from these sectors. Then we have Brazil that cuts down their Amazonas Forest because of economic profit from selling the trees. Even Norway won't stop producing oil because of the economic advantages it gives us. All these examples highlight the power that economy have in the world, but we also see that energy politics plays a massive role. Energy politics is a vulnerable field, countries are very dependent on having a secure flood of energy either from their own producers from inside their country or from other countries. This field is closely related to political economy, and the economic factors that we slightly mentioned above. In this paper we will be looking into one of the possible solutions on reducing carbon emission. Tax on carbon emission is one method for reducing emission many countries use. It is this method we will dive into in this paper, we will argue the case for or against a heavy tax on carbon emission and backing it up with political economy theory. The goal of the paper is to see if we can find out whether this is an effective method on reducing emission or not.

Our findings include that this is a scattered field, and we have argued both for tax on carbon emission being good and bad. On the positive side we discussed taxes being good for a welfare state as Norway, higher taxes on carbon emission will lead to more money to the welfare state. On the other hand, higher taxes according to neoclassicals is a mistake. In neoclassical theory the state should not influence the market. If the state involves itself by giving higher taxes, then the consumers will not be able to control the demand and the companies will most likely produce too much product and won't be able to sell them because of an increase in prices lead by the tax on emission.

We also discuss that higher prices for different goods because of higher carbon tax is a bad thing because then people won't be able to buy what they want, but this can be a positive thing as well. It can be good for the environment that people can't overconsume, and if they can't buy products from China then they can buy from Norway instead and support local businesses. Lastly, we discuss that socialist economy supports higher taxes if it benefits the society.

First, we are going to look at some theory from political economy that we are going to use later in the discussion part. The theories we will be looking at are neoclassical and socialist political economy, Marx and Smith's theory of value, the theory of shift in supply and demand, and we are also going to explain elastic and inelastic prices.

After that there will be a discussion part where we will use the theories and try to explain if heavy tax on carbon emission is effective or not.

Lastly there will be a conclusion where we will sum up the findings and conclude in terms of our research question.

2. Theory

First, we will start off by introducing the theories for this paper, and later use them to try to explain why carbon emission is efficient or not.

2.1. Neoclassical political economy

In neoclassical economy they believe that markets allow consumers to shop around for what suits them best, at a price they can afford (Caporaso & Levine, 2012). Those whose goods are not favoured by consumers will go out of business (Caporaso & Levine, 2012). They say that markets are the most effective as well as the most democratic mode of economic organization that has yet been developed (Caporaso & Levine, 2012). In neoclassical political economy taxes are a form of government interaction, this is not something neoclassicals approve of and think this will lead to economic crises.

2.2 Socialist economy

A socialist economy offers collective ownership, usually through a state-controlled agency, it generally discourages private ownership (Lerner, 1934). A socialist economy organizes

economic activity through planning rather than market forces, they gear production towards needs satisfaction rather than profit accumulation (Lerner, 1934). Socialism is often criticized for not being good for the economy. This is because in a socialist economy the economic growth is slow, there is less entrepreneurial opportunity and competition, and a potential lack of motivation by individuals due to lesser rewards (Lerner, 1934).

2.3 Marx's and Smith's theory of value

Marx's theory of value builds on Smith's theory of value, they both say that the value of a product is decided by the amount of labor put into producing the product (D.K., 2013). Smith says that the value of a table is given by the labor put into it, plus the material you need, and then it fluctuates around the resulting price according to supply and demand (Smith, 2007). Marx builds on this theory but adds that the material used to make a product also is made by labor, therefore at every step labor is what adds value to the system, and not just in the last step as Smith points out (Marx, 1887).

Marx says that capitalists bring nothing to the table in means of production, the only thing they do is taking someone else's labor and giving it to the next person for it to become their labor (Marx, 1887). Smith on the other hand relies on the belief that capitalists are the ones that bring the means of production themselves, and without capitalists we would not get the means that we need to produce different products (Smith, 2007).

2.4 Supply and demand

The theory of supply and demand is a product by many different thinkers, central names are Leon Walras for making the general theory of equilibrium, Daniel Ricardo, William Stanley Jevons and Carl Menger (Moss, 2010). Leon Walras's theory says that when demand shifts, prices will shift and supply will eventually catch up to meet the new demand, bringing the prices back down forming a new equilibrium (Moss, 2010). The theory of supply and demand says that the price will sink when we increase the production when supply and demand is not in an equilibrium because supply will be higher than what people are willing to buy (Moss, 2010). An example is, if a company produces tables and the price sinks and the company starts producing more tables to try to make more money, they will end up with tons of extra tables that they won't be able to sell. In addition to this problem there will probably be more

company's also producing tables, so the companies have to compete against each other to sell tables and lower their price even more. Since they upped their production, the prices must sink and then we have a new equilibrium, more supply and therefore lower price to get rid of all the tables.

2.5 Elastic and inelastic prices

If the demand of a good is elastic, it means that the change in the price of a commodity brings about a more than proportionate change in the demand for it (Rezapour, Farahani, & Drezner, 2017). This means that there are competition and demand that sort of help to control the prices, someone else may be producing the same thing as you and therefore you can't just take whatever price you want on a good.

If a price is inelastic, it means that the proportionate change in demand is less than the proportionate change in price (Rezapour, Farahani, & Drezner, 2017). This means that there are no easily accessible substitute available for the product you are selling and in theory this means that you can decide the price all by yourself. It especially occurs when that product accounts for a small proportion of total consumer expenditure.

It is good to know that the carbon price is inelastic because per now there is no substitute you can buy instead of carbon.

3. Discussion

In this next part we are going to be looking at whether or not heavy tax on carbon emission is good or bad. It is a mixed field, and some people say that heavy tax is a good thing and that it is good for both the environment and the economy, but others are more skeptical.

3.1 Taxes on emission; positive or negative?

Taxes in general can be seen as both something positive and something negative. It is positive because a country like Norway is built up on taxes from both people and companies. Norway is a welfare state, and we are dependent on the income from taxes to build roads, have access to almost free hospitals and free education. If we in this perspective increase the taxes on carbon emission it will just mean that the state will get more income and we can increase the services of our welfare society.

On the other hand, taxes in general means less economic growth according to the neoclassical theory of political economy. This is because as mentioned earlier in the text neoclassical theory believes that government should not interact in the market. They should not give more taxes, because then the consumers won't be able to buy and make a market for demand and companies won't be able to produce according to the demand.

If the taxes put upon the carbon companies are not closely followed up by the government, it can result in the net welfare of all population groups to fall (Fredriksson, 2001). Therefore it is very important that the government is careful and make sure that the taxes do not hit disproportionate, for example that they hit the rural area too hard. If they make sure that the taxes do not hit unfair then they can work well.

3.2 Socialist economy

As mentioned earlier socialist economy has the state as the main actor, the state owns almost everything, and they make sure there is little competition. Seen in connection to carbon emission taxes a socialist economy would support high taxes. This is because they are not driven by profit but rather by what is needed for the society, this means that in this society the government would support increased taxes to save the environment and support a green shift in the industry. In a socialist society a shift in demand may not be so bad and it will not lead to an economic crisis as in a neoclassical economy. This is because the market is controlled by the state and not the consumers, so the state has the power to set the prices, control the competition and influence what the consumers are buying.

Marx's and Smith's theory of value may not agree with the socialist view, they say that the value of a product is decided by the work put into every step of the production. This means that the state cannot by itself decide the prices of a product. They would say that if we set a higher tax on carbon emission the prices will increase in every single field where they need carbon. This again will lead to less consumption and an unbalance in demand and supply.

3.3 A new equilibrium?

Some of the skeptics point out that in the presence of existing distortions, the introduction of carbon emission taxes can itself exacerbate these distortions with a resulting increase in the level of excess burden (Oates, 1995). The science suggest that this effect can easily outweigh

the efficiency gains from recycling the revenues so as to reduce rates on existing taxes (Oates, 1995).

On the other side we have Sandmo how says that if we set the taxes equal to marginal social damage provided sufficient funds to finance the entire public budget, then all distorting taxes can be done away with (Oates, 1995). This way we will achieve efficient levels of externality-generating activities and a revenue system with no excess burden (Oates, 1995).

These two guys argue about if we will be able to get the carbon emission tax big enough for it to have any real effect on the emission. They try to see if it is possible for the state to both have taxes on carbon emission to get the pollution levels down, but also if it is possible for the emission tax to make it better/cheaper for the rest of the population to live, aka reduce the taxes for regular people.

They keep arguing that a higher tax on carbon emission not only will lead to higher prices in this field of work but also in other fields, such as shipping and various other sectors dependent on carbon. If the carbon price gets higher, then even small toys from china can get more expensive. It is not only going to get more expensive for the producers but also for the consumers. Lawrence Goulder has a phenomenon called “tax-interaction effect” this is when a tax on polluting waste emissions in the production of various goods will raise the price of these goods, thereby reducing the return-to-work effort and inducing a substitution if additional leisure for consumption (Oates, 1995).

Here it is argued for that a higher tax on carbon can lead to higher prices in many other goods for both the producers and the consumers. This might seem like a negative thing, but is it really a negative thing? I would argue for that it is not just negative. In terms of the climate crises, it is a good thing that people consume less. And if the imported items are more expensive because of an increase in shipping prices then the local products may have a chance of competing with them, then the consumers may choose local products which is good both for the environment and for the local economy.

On the other hand, if we only look at the economic perspective this might be a bad thing. If we push the prices up too much, the production rate stays stable, and the consumers buy less we might push this right into an economic crisis because we will bring down the demand. As mentioned earlier in the text the theory of supply and demand says that when demand shifts, prices will shift and supply will eventually catch up to meet the new demand, bringing the prices back down forming a new equilibrium. In our case this will not be possible, the prices

are not going down because of the high taxes, if the company lower the price they will lose a lot of money and will have to close. But if they don't lower the price so that it can fit the demand, they will be left with tons of finished products at the fabric won't be able to sell. This too will eventually lead to the fabric closing. Put in other words, there will be no natural new equilibrium when we go in and change things up so rapidly.

4. Conclusion

First, we looked at some central theory for the text, we looked at neoclassical and socialist political economy, Marx and Smith's theory of value, the theory of supply and demand, and elastic and inelastic prices. Then in the discussion part we used this theory to try to explain whether heavy tax on carbon emission is a good or a bad thing.

Generally, tax in Norway can be seen as a good thing, this is because we are a welfare state, and we use tax to make life more comfortable and easier for our population. On the other side, higher taxes according to neoclassicals is a mistake. In neoclassical theory the state should not influence the market. If the state involves itself by giving higher taxes, then the consumers will not be able to control the demand and the companies will most likely produce too much product and won't be able to sell them because of an increase in prizes.

Seen in connection with carbon emission taxes, a socialist economy would support higher taxes. This is because they are not driven by profit but rather by what is needed for the society, this means that in this society the government would support increased taxes to save the environment and support a green shift in the industry. On the other side we saw Marx and Smith's theory of value, they would argue that government interferences is a bad thing and that it will lead to less consumption and an unbalance in supply and demand.

Lastly, we discussed that higher tax on carbon emission will lead to higher prices in a lot of fields that are dependent on carbon, such as the shipping sector. This can be a bad thing because then the prices will be higher, and people will not be able to shop like before. On the other side, this can be a good thing because then the overall consumption can go down and that is good for the environment.

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