2020 Research report summary

Taxation of profits in the energy sector

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Summary

AN INCREASED PRODUCTION capacity in the energy sector demands new investments. Both the production and distribution of electricity are capital-intensive enterprises. The facilities required for the production and distribution of electricity result in large costs, primarily in the form of the depreciation of the facilities themselves. These investments are also associated with high financing costs.

Another important issue is the ability to readjust energy production towards the production of electricity from renewable sources of energy. This process includes a shift from electricity production using fossil fuels to electricity production from renewable fuel sources. This process demands large investments. It should also be noted that electricity consumption might increase significantly, which again demands large investments in the production and distribution of electricity.

The Swedish tax regime is one component that affects investments and reinvestments in the energy sector as well as the costs of these investments. The formal corporate tax rate has been lowered during the last few decades, but there has been a corresponding broadening of the corporate tax base, which means that total taxation has not effectively been lowered to the same extent as the formal corporate tax rate.

The purpose of this report is to examine how parts of the Swedish tax regime affect investments, reinvestments and the dismantling of existing facilities in the energy sector. As a first objective this report examines if the current tax law benefits investments through beneficial tax rules regarding depreciation, which is important for the ability of energy companies to self-finance their investments. A second objective of this report is to illustrate the possibility of deducting interest expenses. This is an important topic since new investments are often financed, at least partly, by loans. The third objective is to investigate what tax-related consequences arise from the dismantling of the existing production facilities.

Taxation and depreciation in the energy sector

It is important to identify which taxes apply to this sector and to what extent they affect the companies when analyzing the effect of taxation of the sector. Income tax and property tax are fiscal taxes and their purpose is to finance the public sector. These taxes must be separated from non-fiscal taxes, of which the main purpose is to control or impact the behavior of individuals and companies. The most common form of non-fiscal taxes are environmental taxes, which simultaneously have a controlling purpose and put a price on natural resources.

I have decided to limit my analysis of the level of the taxation in the energy sector to the effects of two fiscal taxes; the income tax and the property tax. The income tax is calculated on the actual income arising from a facility while the property tax can be explained as a taxation of standardized income arising from a facility. The tax base of the property tax is based on the calculated production capacity of the facility which, in turn, is used to calculate the taxation value of the property – which aims to approximate the market value of the facility. This means that there is some similarity between the Swedish property tax and most forms of wealth tax, which is another form of fiscal tax. It should also be noted that there are only two sectors in Sweden that are affected by the property tax to any significant extent, namely the energy sector and the real estate sector.

The Swedish tax regime contains two fundamentally separate systems for depreciation. In regard to buildings and land improvements, the system is based on annual depreciations made according to plan. This method means that each individual asset is depreciated according to a plan based on the economic lifespan of the asset. The method is similar in nature to the method used in bookkeeping and gives no particular tax incentives per se. It should be noted that these types of assets make up less than 25 percent of the total value of all fixed assets in the energy sector.

The accounted value of the asset pool of the energy sectors consists of 75 percent of assets that are classed as machines or inventory. From an income tax perspective, the method of depreciation applied on these assets is book depreciation. This method means that assets are depreciated collectively according to the pool principle. This standardized method means that the investment cost can be divided over five years even if the economic lifespan of the facility in question is significantly longer.

In 2019 new rules restricting the general ability for companies to deduct interest rates were implemented based on an EU directive. The maximum deduction allowed for a net interest expense is limited to 30 percent of the company's EBITDA.

The net interest expense that is considered non-deductible in the year that they have incurred can be carried forward and can, with some limitations, be deducted over a six-year period.

Conclusions

Firstly. The effective corporate tax is somewhat higher in the energy sector than for Swedish companies in general. A probable contributing factor is that the business model of the sector is based on directly selling produced electricity. This means that the profit is taxed in its entirety. Another reason is that there has not been any restructuring of the energy sector during the investigated time period and thus no large tax-exempted income. The total effective taxation of the energy sector increases significantly if the property tax is also accounted for. The difference in taxation between the energy sector and other sectors (except the real estate sector) does also increase significantly. The property tax for the energy sector has been lowered in recent years but the lowered property tax has been replaced by a system whereby the energy sector makes payments into a water fund. This means that the situation has not changed for the energy sector from a liquidity perspective. The property tax has simply been replaced with a payment to the water fund.

Secondly. Tax-based depreciation offers a considerably quicker write-down of expenses than depreciation in accordance with book depreciation. These differences create an interest-free credit for the energy companies. The length of this credit increases the longer the lifespan of an asset. The difference in size of the tax credits creates different incentives for companies to invest and reinvest in diverse types of facilities. For example, a hydroelectric power plant has a longer lifespan than a wind turbine and thus a greater credit. Distribution facilities have a lifespan that at least matches the lifespan of a hydroelectric power plant. The energy sector has a total tax-based credit that corresponds to around one year's worth of investments. The tax-based depreciation rules are competitive when compared to similar rules in neighboring countries.

Thirdly. As a main rule interest expenses are deductible for Swedish income tax purposes. However, there are special rules limiting the deductibility of interest expenses. The effect that arises when interest expenses become non-deductible is that the finance cost increases by an amount corresponding to the corporate tax on the non-deducted interest expense – in simple terms this results in an increase in cost of around 20 percent. The energy sector has consolidated in the last few years, which has resulted in the financing made with stockholder equity equaling the financing that comes from borrowed equity. Despite this, consolidation of the total debt

levels in the energy sector remains high. As an example, an increased interest rate of 1–2 percentage points can have the result that the interest expenses are no longer deductible in their entirety. This can have negative consequences, especially for reinvestments where an increased financing cost cannot be passed on to the customers. The distribution companies who operate in a partly price-regulated market may have to carry the entire increase in finance cost themselves. This will result in a demand for a higher dividend before taxes, which might result in a decreased access to new capital.

Fourthly. Expenses for the dismantling of facilities are deductible and the dismantling can thus take place without any taxation effects. This presupposes that the company in question has a profit that the dismantling cost can be set off against. The tax system gives some opportunities to carry back, which means that the cost of dismantling can be set off against previously made profits. This is primarily the case for wind turbines and nuclear power plants.

Recommendations

Given that there is a large need in society for investments into the energy system, it might be in the interests of Swedish society to create a tax regime that keeps down the financing costs for these investments. This would ensure that investments that are critical to the Swedish society take place. I suggest that the abolition of the property tax should be investigated, and I furthermore suggest the following:

1. Keep the interest-free tax-based credit that the current rules of depreciation result in. The energy sector is well consolidated but small interest margins in combination with the limitation on the deductibility of interest might incur an increase in financing costs. The neighboring countries of Sweden have similar rules regarding the depreciation of assets. This means that these tax rules are important for the energy sector from a competitive perspective. A less beneficial tax regime in this regard would result in a decreased ability for the Swedish energy sector to compete with the energy sector in its neighboring countries.
2. The option to exempt interest-related costs related to infrastructure from the new rules limiting the deductibility of interest should also be considered. There are several opportunities in the EU directive that the rules limiting the deductibility of interest are based upon to make exceptions to these rules. One such possible exception is for investments in infrastructure projects. This exception has not been included in the Swedish tax regime. Many of the investments that the energy sector is currently facing would

be included in this exception. This is particularly the case for the distribution companies. With regard to the price regulations in the distribution market and further to the extensive need for investments in the energy sector, there are compelling reasons to introduce this exception for infrastructure projects.

3. In the investment phase of a project, the income is often limited while the company faces high-interest expenses which can result in interest expenses being non-deductible in their entirety. In order to ease the burden on companies in this position there is a special carry-forward rule that allows a company to deduct non-deductible interest expenses at a later year. It is only possible to carry forward interest expenses for six years. This time limit is based on a normal business cycle but is also based on simplification aspects. For many companies that make large investments, this time period is far too short. However, there are no principle or practical reasons for this time limit. This time limit should thus be removed so that non-deducted interest costs can be carried forward indefinitely.