EQUITY AND EFFICIENCY IN TIME OF CRISIS

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A fundamental insight from economic theory is that there need be no conflict between equity and efficiency – it is possible to distribute income and wealth in a fair manner without sacrificing value added and growth. In other words, a rare piece of good news from what is otherwise known as the dismal science: we can maximise the size of the pie and divide it up as we think fair.

Strictly speaking, the theoretical result is not quite true in practice - it is difficult, if not impossible, to redistribute income and wealth without distorting economic incentives and reducing the amounts of income and wealth that are available for redistribution.

Nevertheless, in the current energy crisis the dichotomy between equity and efficiency provides a useful starting point for thinking about how the crisis may be handled.

The root cause of the crisis is scarcity. Europe lacks gas, and Europe lacks electricity. In the short run, there is little chance of increasing the availability of gas. Europe itself is producing at full capacity, and imports are limited by infrastructure – pipelines and LNG-terminals – which it takes time to expand. Electricity generation may be increased somewhat, by bringing French nuclear capacity back online, by extending the lifetime of thermal plants and by getting mothballed plants out of the moth bag. However, this crisis is not going to be solved on the supply side: we will have to live with scarcity for a while.

The solution lies on the demand side as one way or the other energy consumption must be brought within the limits of supply.

Markets are ensuring this balance by doing what markets do – pushing prices up. Thereby they not only signal that supply is scarce, but also provide an incentive for reducing demand. The resulting increase in prices is unprecedented for two reasons. First, the shocks to the supply side are large. Second,

demand for energy is quite inelastic as a large reduction in demand warrants a huge increase in price. Gas and electricity have few or no alternatives thus, reducing consumption is painful and costly.

The gains provided by the market mechanism should be obvious. Demand has been kept in balance with supply, and shortages and rationing – not to speak of interruptions or blackouts, which can be very costly – have been avoided. Individual countries have been helped by their neighbours, such as when the deficit in France due to the unavailability of nuclear capacity is alleviated by imports from Germany, Spain and others. Perhaps most importantly, the fact that the supply shocks have been spread over the entire European market has cushioned the blow to any individual country.

However, markets do not distinguish between rich and poor or between deserving and undeserving: everybody is facing the same high price. This may be viewed as unfair, and it is certainly not popular. It is then not surprising that governments around Europe have attempted to bring prices down, especially for household consumers. In France, electricity prices have not been allowed to increase much, and in Norway the government is refunding the additional cost when prices exceed a certain level. Spain has taken a different route, by subsidising the cost of gas for electricity generators to bring down electricity prices.

Such policies are directed at the symptom of the crises – high prices – rather that its root cause – scarcity. In fact, such policies make the crisis worse: scarcity worsens, and prices go even higher.

When the Norwegian government effectively caps the price for household consumers, these consumers reduce their energy demand by less than they would have done had they faced the full market price. Their muted response means that other sectors of the economy must save even more. The market handles this by bringing prices further up, to incentivise those who are still facing the market price to save more energy. In other words, the burden of high prices and energy saving is shifted from households to businesses, the public sector and other parts of the domestic economy, as well as to neighbouring countries. Similarly, the price cap in France, exacerbated by reduced domestic generation, is a kind of a "beggar thy neighbour" policy as neighbouring countries have had to supply France to cover its deficit. Paradoxically, Spain, with its apparent "cheap" gas-fired generation, has not only burnt a lot of gas to cover domestic electricity demand, but has also been among those supplying France.

These inefficiencies could have been avoided by, instead of reducing prices, compensating consumers for their impact. Compensation can be undertaken through the existing tax and social security framework, as has been done in for example the UK, where existing taxes have been reduced and grants to low-income families have been increased. Alternatively, one can provide extraordinary cash

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payments, such as the "energy checks" used for example in Denmark. Germany has recently introduced a comprehensive package that is targeting students, pensioners, people on minimum wage and others.

Compensation has at least two important advantages relative to price regulation. First, compensation does not reduce the incentive to save on energy. Second, compensation can more easily be designed to reach those who need it the most.

The benefit of price reductions is proportional to energy use, higher energy consumption means larger gains. In principle, it is possible to limit the gains to high-energy users, by setting caps on the amount of energy that is covered, or by having different price tranches, but this is administratively cumbersome. More importantly, the benefit from price reductions cannot easily be targeted to those who need it the most. Compensation schemes, on the other hand, may be tailored to the economic conditions of recipients, such as income, family size and other relevant socio-economic indicators. Getting compensation right is not easy, but certainly more effective than tampering with prices.

In short, compensation schemes – whether within or outside of the ordinary tax and social security system – represent a more efficient way of achieving equity than price regulation.

If price regulation is extended to the entire energy market – such as has been suggested for gas – another problem materialises: price will no longer contain demand and consumption must be reduced by other means, i.e., by rationing.

Rationing is already being introduced in several countries, such as Germany and France, and many of the measures clearly make sense, such as turning down temperature in government buildings and turning off lights at night. When successful, they help reduce energy consumption and thereby energy prices. However, rationing can be a blunt instrument and once it is extended beyond the obvious, it becomes difficult to ensure that it does not hit where it hurts too much. Many may be willing to live with a maximum temperature of 19 degrees, but not all, and whilst certain forms of energy usage may be considered unnecessary by some, they may be viewed as very important by others.

The bluntness of rationing will be especially hard felt once it is directed at reducing the activity of, or closing, businesses. The extremely complicated web of dependencies between different sectors of the economy has been made visible both during the pandemic and in the post-pandemic period when activity has picked up again, small interruptions in one corner of the economy can have considerable knock-on effects in entirely different areas. There is high risk that rationing directed at certain industries or companies may have repercussions through whole value chains. The rise in energy prices also impacts on economic activity, in some cases forcing businesses to close, but markets come with safety

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valves. If a certain part of the economy is sufficiently important, it will be able to pass on higher energy costs and continue to operate. Rationing schemes do not have similar feedback mechanisms as their success relies on government administrators' ability to foresee all possible contingencies. Admittedly, rationing may be made more effective by using market-like mechanisms – such as auctions or tenders for reduced consumption – but as long as it is directed at certain sectors or industries, it cannot achieve the same flexibility as the markets themselves.

Government interventions, whether in the form of subsidies or compensations, must be financed, and an obvious candidate for taxation is the energy sector itself. Producers of gas, as well as electricity generators who do not rely on gas, have benefitted from higher gas and electricity prices. It is only natural that governments cast their eyes on the profits of energy companies, if such profits are beyond what these governments consider to be socially acceptable.

There are good economic arguments for approaching the taxation of energy companies carefully. The profits they are now earning are, partly or wholly, rewards for earlier investments – to some extent compensation for losses on what would otherwise have been stranded assets. Moreover, the introduction of extraordinary taxes on current profits may send a warning to investors that the upside of energy investments can well be capped in the future also. And the funds that are now accruing to energy companies may be used to finance their future investments in new renewable capacity.

While these arguments are certainly valid, their importance seems limited in the current situation. Profits are now higher than any investor can ever have dreamt of, energy companies do not lack access to funds for profitable investments, and the circumstances right now are so unique they are unlikely to create precedence for future policies. It would therefore seem that temporary specific taxation aimed at extraordinary profits will only create small, if any, inefficiencies.

This is not to say that the design of such taxes will be unimportant. If one aims at fine-tuning the tax to the characteristics of different technologies – such as has been proposed by Greece and others – one risks affecting the availability and operation of generation capacity. There are considerable cost differences even between plants of the same or similar technologies, and there are additional costs of bringing back moth-balled plants, especially nuclear plants. Moreover, plants with low running costs have high-capacity costs and hence need a larger mark-up to cover all costs. It would seem a simpler scheme, such as setting a (sufficiently high) uniform price cap on all technologies and tax revenues above that – which seems to be the solution favoured by the European Commission – would entail a smaller risk of distorting energy supply and aggravating the scarcity problem.

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While the demand-side costs of the energy crisis are evenly shared across Europe – everywhere consumers are facing high prices – the benefits to the supply side are not. Some countries, such as Norway, generate most or all their electricity from sources other than gas,hence a large part of the generation fleet benefits from high prices. Other countries, like Italy, rely heavily on gas and thus do not benefit much from high electricity prices. This means that the ability to finance compensation and other measures to alleviate the impact of high energy prices is quite different across countries. While politically difficult, one would have thought that redistribution or solidarity scheme across Europe would be natural.

We do not yet know the finer details of the measures that will be put in place in the next few months, but this week's European Commission proposals suggests that they will to some extent respect the dichotomy between efficiency and equity: leave the markets alone, tax profits of non-gas generators and distribute the revenues to those who struggle to pay their bills. If nothing else, this would be sound economics.

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