

Freedom and market failure

During this year's run-up to Hallowe'en, outrage is being expressed at the appearance on the market of plastic pumpkins.² Now that the use of plastic has become anathema and every effort is being made to decrease it, these objects were, in the opinion of many, perfectly superfluous. Furthermore, it diminished support for British farmers, who have become accustomed to growing millions of pumpkins specially for the festival. Yet, evidently there is demand for the plastic pumpkin. Indeed, it has been pointed out that growing pumpkins probably consumes more precious fuel oil than making them from plastic, especially considering that the plastic ones can be reused many times; on the other hand the pumpkin flesh removed to make the lantern can be turned into an excellent soup.³ Looking further ahead, similar arguments can be applied to "real" versus artificial Christmas trees. At the end of the day, the only truly sustainable action is to grow the pumpkin and Christmas tree oneself in one's garden. But should we heed calls for the government to step in and either heavily tax or ban outright the sale of these items? Is their commercial provision market failure? On the contrary, it seems like market success. Despite increasingly adverse public opinion, doughty entrepreneurs are providing what people want and have the freedom to buy, whether plastic or "natural". As von Mises has remarked, "It is not the task of government to improve the behaviour of its 'subjects'. Neither is it the task of businessmen. They are not the guardians of their customers. If the public prefers hard to soft drinks, the entrepreneurs have to yield to these wishes ..." [1]. If there is failure, it is on the part of the spiritual leaders of the anti-plastic movement, who have failed to win sufficient converts to the cause.

Let us look at some other examples. One is car parking at NHS hospitals in England. In most hospitals it is expensive to park, and the combination of limited (and even diminishing, since hospital extensions are often built on existing car parks) space and apparently increasing demand (possibly because fewer patients are using other means to reach the hospital) means that, in accord with market principles, it is becoming even more expensive. There has, again, been outrage, this time at penalizing the sick and their compassionate visitors, and sometimes

even the doctors and nurses who tend them. Presumably the outrage arises because healthcare should be provided free at the point of delivery, according to NHS tenets. But car parking is not part of healthcare. Taxi drivers will be happy if patients, visitors and healthcare workers unable to come by other means use a taxi rather than their own car. And in so far as driving tends to promote ill-health (e.g., by increasing sedentary hours and exposure to polluted air) it is eminently sensible for the NHS to discourage driving. Those who seem to think that it is somehow improper for hospitals to gain significant revenue from car parking fees (revenue that is doubtless put to good use in enhancing healthcare services) need merely reflect on the propriety of airlines gaining more revenue from duty-free sales than from tickets. They may think that the car parking fees should be used to pay for the construction of additional car parking. Similar arguments are heard concerning the fate of vehicle licensing revenues and the tax on motor fuel—the money should be used to construct new and better roads, it is asseverated. This is, however, as illogical as suggesting that the tax on whisky should be used to construct more distilleries. The government's motive in collecting these taxes is primarily revenue generation—demand for these goods is relatively inelastic, hence they are veritable cash cows as objects of taxation. Another strong motive is to discourage driving because of the adverse health effects, and thirdly there is a planning motive, because land is finite and diminishing the volume of traffic using the discouragement of price will diminish the need to expand the road network.

Through the provision of "free" (at the point of use) services—such as healthcare and road infrastructure—the State does accrue some rights of control over the use of these services. They are paid for out of taxation, and there are limits on the amount of tax that may be levied, hence limits on the extent of provision of such services. The initial premiss was that no one would go needlessly to a general practitioner (GP) for a condition that could easily be treated at home, or with a low-cost over-the-counter medicine from a pharmacist. Similarly it was presumed that people would not use a motor-car for a journey that could just as well be made on foot. These presumptions have gradually been eroded. Since the

A retail festival originating in the preparations for Hallowmas or All Saints Day (1 November), when the dead are commemorated. Formerly stronger in Scotland (and the USA) than in England, it has now spread to the entire UK as well as France and other countries.

² An important part of the festival's ritual is to carve a lantern from a pumpkin and place it somewhere where it is visible from the street.

The USA has its pumpkin pie, and Vaud has its soupe à la courge, but curiously in the UK few people seem to eat pumpkin.

⁴ For longer journeys, the market has provided railways, which have done remarkably well considering that their main rivals, the roadway network and the airlines, are provided essentially free by government and have essentially free use of airspace, respectively.

NHS is not provided by the market, it requires a sense of civic responsibility from its potential users in order to remain viable. One of the founding aims of the NHS was to remove pockets of inadequate healthcare around the country, thereby raising the general level of health, which should gradually and concomitantly have reduced the demand for medical services. That does not seem to have happened. It might have been hoped that by raising the level of education of the population, people would be better able to look after their health, but the opposite seems to have happened—healthcare expenditure has risen *pari passu* with expenditure on education [2].

The right to intervene is perhaps nowhere more apparent than with matters of eating, drinking and smoking. It usually happens that governments have to cut through the niceties of scientific controversy and establish a definite policy, which is then followed with religious fervour. Thus, the government has judged that smoking tobacco and drinking alcohol create ill-health and must, therefore, be punitively taxed to discourage the habits. Drugs like cannabis, cocaine and heroin are deemed to be so bad that they are banned outright government doubtless regrets the loss of potential tax revenue.5 Most recently, the inordinate consumption of sugar has become a target for action. While the UK is not in quite as bad a situation as was Libya under Col. Gadaffi, in which sugar was subsidized, it is the NHS that has to bear the financial burden of the deleterious health consequences of excessive sugar consumption, including obesity, diabetes—often linked as diabesity—and tooth decay, especially among children. Since April this year, sugary soft drinks have been subject to a new tax in the UK. This seems a very modest step to take in view of the severity of the problem. 6 The measure was also criticized as disproportionately burdening the poor. Poverty and obesity appear to be associated with each other, but the mechanism of that association is unknown. As Wedderburn-Ogilvy has pertinently asked, "is the problem that junk food is cheaper than nutritious food, or is it that poor people do not know what to buy or how to cook ordinary food—or cannot be bothered to cook it?" [3]. He went on to point out that the implications and appropriate

remedies are very different. Nevertheless, there does not appear to have been any serious effort made to characterize the association. Hence, the remedies are stabs in the darkness of ignorance and may well be wholly ineffectual. Governments have acquired the taste for "nudging" behaviour, but the ethical justification is dubious (primarily on the grounds of quis custodiet ipsos custodes?) compared with a simple tax, as well as prone to giving results precisely opposite from those desired. A more draconian measure, such as the introduction of a system of food rationing, will be needed if there is to be any perceptible improvement. The alternative is to abandon the tenets of the NHS. If people must bear the costs of their imprudent actions, there can be no justification for State intervention with the aim of modifying behaviour.⁷

These apparent examples of "market failure" are manifestations of improperly accounting for the generation of external diseconomies in the market prices of goods and services. "Improper accounting" often means not accounting for them at all. Mishan discusses some of the practical difficulties of doing it [5], but since his time the possibilities of data gathering and data processing have been enormously enhanced and the effort of such accounting may nowadays be no greater than that of reckoning a carbon footprint, which has become almost routine. But the provision of free-at-point-of-use services (paid for out of taxation) in effect permanently sanctions the nonaccounting for diseconomies. While such services in principle offer efficiencies and a degree of social solidarity, experience has shown that they become abused through excessive use. This might be considered to be a manifestation of Jevons' paradox, or the Khazzoom-Brookes postulate [6], or simply moral hazard. Free-at-point-of-use services require a strong sense of social responsibility among citizens to be successful. Without that, the dominant behaviour seems to be that everyone tries to get their money's worth (i.e., more than they provided from their taxes)—even to the extent of voluntarily making oneself ill (through lifestyle choices) or ground down through unsuitable choices of modes of transport, which seems somewhat paradoxical.

⁵ An additional issue is that if people under the influence of such drugs are driving on a public road, their impaired cognitive function is likely to endanger other road users.

⁶ In 1990 in the USSR sugar was demonized by the government as "white death" and simply unobtainable in the shops, doubtless a highly effective method of diminishing consumption.

Prior to 1998 Switzerland more or less kept to market principles in healthcare—there was no universal provision; all healthcare had to be paid for by the recipient. In that year, however, universal compulsory private medical insurance was introduced, ostensibly to achieve social solidarity between people of differing states of health. The actual result has been that medical care is tightly controlled by the insurance companies, much to the ire of medical practitioners, who find that some treatments are adjudged to be too expensive to be reimbursed. Were social solidarity to have been the true motivation for the introduction of the new system, it would have been better to adopt an NHS-like system. At least the appraisal of the cost-effectiveness of medical interventions by the National Institute for Health and Care Excellence (NICE) tracks (slightly conservatively) rational appraisal based on the J-value [4].

Let us look at an example without free-at-point-of-use services—the UK housing market. It is generally agreed that there is an acute shortage of houses, primarily driven by population growth exceeding the rate of building new houses. Hence, following market forces, house prices have risen. The market appears to be dysfunctional because the increased prices have not led to significantly increased building. It is asserted that planning restrictions discourage new building. These restrictions are primarily intended to preserve the aesthetic attraction of places, and ensure that housing development is accompanied by adequate new infrastructure, but these intentions are not always achieved. There is a great deal of debate about the issue and various proposals for resolving the crisis have been aired. One of them is that local authorities should resume house construction, thereafter renting them at minimal prices. Another is that the government should forego its revenue from the stamp duty payable each time a house is purchased, thereby making houses more affordable. Yet another is that planning restrictions should be greatly relaxed. This market is special because the supply of land is finite. A growing population inevitably increases the price of land, which constitutes a significant part of the price of a house. And there are already manifold diseconomies arising in the construction of new houses not accounted for-such as the noise, air pollution and disruption caused by the construction itself, the loss of amenity where houses are built on land formerly used for recreation, including untended tracts that may merely be used for walking one's dog, ecological diseconomies such as the loss of green plants and the myriads of insects and other small animals living among them, and aesthetic diseconomies—many housing developments are not pleasing to look upon. There is also the fiction of carbon neutrality to contend with [7]. Properly accounting for these diseconomies would make housing even more expensive. Without a drastic reduction of the population, no conventional solution to the housing crisis appears to be possible.

My own proposal is to recognize that the amount of land can effectively be increased by erecting multistorey buildings-i.e., apartment blocks-provided people are willing to forego individual gardens. In this regard there is a great difference between the UK and continental Europe, with apartment blocks being the norm in the latter. They have an unhappy history in the UK; e.g., most recently the Grenfell Tower fire [8], and are often genuinely unattractive places to live. For apartment blocks to be successful there needs to be a radical reassessment of urban living [9], with every effort made

to renew the attraction of cities. This will include innovative design—Le Corbusier is an especially valuable inspiration—and incorporating as much greenery as possible, lining streets with trees and letting creepers grow up the sides of buildings, for both aesthetic reasons and for the sake of improving air quality. Roofs can be covered with solar water heaters and photovoltaic electricity generators. District heating from waste incineration becomes viable at population densities above around 4000 inhabitants per square kilometre (note that London has a population density of only about 1500 inhabitants/km²). Urban incinerators burning waste of high calorific value (paper, cardboard and plastics) are a viable way of coping with waste, requiring minimal transportation of the waste generated within the city, and save the trouble of separating waste for recycling, which is itself troublesome and results in materials of degraded quality.

Some of the disadvantages of urban life remain unavoidable, not least the distance of food supplies, increasing the need for packaging. But more consequential, visionary land allocation, ensuring that cities were encircled by market gardens, could greatly improve the present need to transport food long distances to cities.

It should also be noted that the public ownership of apartment blocks is much less controversial than of individual houses, because "ownership" of an apartment in a block is anyway strongly contingent on sharing a large part of the building (including roof, staircases, lifts and central services).

With the abrupt prohibition of the import of waste plastics into China at the beginning of this year, waste disposal has suddenly become a huge problem for the UK (and other countries)—capacities for disposal (landfill, incineration and recycling) being inadequate for the amount of waste generated. Landfill capacity is obviously limited by the finite supply of land. Some consideration has been given to transforming landfill into a renewable resource by mining it, but it will doubtless take many years for such a technology to be developed. Incinerator capacity is inadequate and such incinerators as there are have often not been intelligently sited—many rural sites have been chosen, which generally maximize the aesthetic disamenity of the plant as well as the costs of transporting the waste to the plant and the incineration products away from it,8 which generally still need to be landfilled, and render use of the abundant heat generated by the plant for industrial and residential district heating unviable. Recycling relies on the voluntary and unremunerated cooperation of private citizens in presorting waste prior to collection. It would have been acceptable in

⁸ Chiefly "incinerator bottom ash", the mass of which is typically about one quarter of the mass of the incoming commercial, industrial or municipal waste.

commodious Victorian mansions with servants, but is an unreasonable imposition on the typical modern lifestyle. The only reasonable solution of the waste problem is to drastically reduce the quantity generated.

The generation of waste has become an intrinsic part of economic growth, over many decades. ¹⁰ Drastic action will be needed to sweep away habits that have become firmly embedded into social practice. It does not help that the cost of disposal of the waste associated with a product is a diseconomy largely ignored in the product's price. The costs are typically borne by local taxation, which funds refuse collection services. Nevertheless, the higher the population density, the more concentrated the points of collection and disposal, and hence the more cost-effective the operation. Another advantage of urban living in the continental European style is the superfluity of automobile ownership, which itself generates a large amount of waste.

Nevertheless, there are already some seeds of renewal present in existing practice. One has the freedom to buy unpackaged fruit and vegetables from the ancient markets still gracing many English towns and cities, and it is of better quality and cheaper than what is to be found in supermarkets. Here is an example of the diseconomy of packaging being incorporated into the price of the product.

Obesity is associated with many diseconomies. We have already mentioned its disproportionate claim on the resources of the NHS. But where markets do operate, they have also encouraged it, by ensuring that demand for fattening foods and sedentary activities, as well as large sizes of clothing, is met. Furthermore there is no penalty for excessive body weight when purchasing an airline ticket, even though more fuel is consumed for transporting a heavy person than a light one, resulting in more anthropogenic carbon dioxide emission, and the person also requires more food, which in modern agricultural (agroindustrial) practice also involves more fuel and carbon emissions. It is surprising that the "green" lobby campaigning for a more sustainable society has not yet taken the overweight and obese to task for disproportionately contributing to global warming.

It looks as though a renaissance of urban living, with as the first priority surroundings so aesthetically attractive as to practically compel people to choose it as their environment, would resolve a multitude of

problems. Such resolution could be formalized by constructing diagrams of immediate effects [11]; it is beyond the scope of this editorial to attempt that now. The question remains, can the free market provide such an environment, and if not, what are the barriers?

Von Mises' precept to businessmen and entrepreneurs takes no account of the power of advertising to engender demand where none would otherwise exist. Packard has eloquently written about the ravages of advertising [12], and Mishan recommends prohibiting it [13]. This could be part of the general framework of law and order, which is the most fundamental task of the State to provide. Government "nudge" would have to be included in the prohibition for the sake of fairness and consistency—representatives are not elected to be the custodians of those who elect them.

Under such circumstances, could services like the NHS and roads be retained? Very probably yes, if accompanied by efforts to inculcate a greater sense of social responsibility. This will be much easier in an attractive, inspiring built environment. Can the market successfully do the rest?

Finally, let us return to the plastic pumpkin and what might be wrong with it. The great explorer Wilfred The siger has described a return visit he made to Abu Dhabi in 1977, thirty years after his pioneering journeys across the desert: "... at the Agricultural Show at Al Ain ... I watched Arab schoolboys in flared trousers and sequined jackets playing 'pop' music on guitars, while other boys and girls moved in procession, carrying plastic palms. Grey-bearded men watched this betrayal of their culture with evident approval" [14]. Yet plastics organic polymers—are a great and noble invention. As the distinguished chemist Lord Todd remarked, "I am inclined to think that the development of polymerization is perhaps the biggest thing chemistry has done, where it has had the biggest effect on everyday life. The world would be a totally different place without artificial fibres, plastics, elastomers, etc. Even in the field of electronics, what would you do without insulation, and there you come back to polymers again" [15]. They have been sadly misused by the waste makers. Hopefully we have still retained enough of our cultural traditions to be able to reverse decline and make a success of urban renewal.¹¹

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⁹ Ironically enough, in those days the amounts of waste generated would have been one or even two orders of magnitude less than presently.

As perceptively chronicled by Vance Packard [10]. He writes about the USA, but the practices there have gradually spread to the rest of the world.

¹¹A much more difficult example of apparent failure than even the housing market is in education. There is not space here to develop the topic, hence this brief footnote. In the UK there is particular concern due to the shortage of engineers [16], which may be greatly weakening the economy. The problem is sometimes generalized as the "STEM skills gap" (where STEM is an

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acronym for science-technology-engineering-mathematics). The obvious market mechanism of correction, namely increasing remuneration of engineers, does not seem to be happening, and when it does the higher remuneration is depreciated as "inflated". Engineers generally require higher education, which in England is paid for by the student. There has been a modest increase in student numbers over the last 10 years, but much less than in biology and veterinary science [17]. Fees are generally the same regardless of subject, and are heavily regulated by the government, which does not, however, conspicuously use its powers to endeavour to match numbers studying to national needs. Indeed, government policy on graduates is baseless from a scientific-engineering viewpoint [18]. It may be, of course, that deficiencies in primary and secondary schooling have resulted in candidates inadequately prepared for higher education in engineering. Like the NHS, schooling in the UK (as in many other countries) is free-at-point-of-use. Does this likewise lead to an inadequate appreciation of its potential and even abuse [19]? Depressingly, for some time the government response to the skills problem has been to create quangos, such as the Learning and Skills Council, the Skills Funding Agency and the Education and Skills Funding Agency as well as germane bodies of obscure legal status such as Skills Training UK, moving ever further away from anything like a market.