

Seven lessons from the BCRS - Marie Briguglio

The bottle recycling scheme needs tweaking. Here are seven economic lesson from it.

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It is important to consider the distributional and social justice impact of schemes such as the BCRS. Photo: Matthew Mirabelli

Deposit-refund schemes are among the best ways to apply the polluter pays principle. Consumers pay a tax on purchase (for the potential pollution cost) but they get a full rebate if they dispose of it properly, without polluting.

Malta's newly-minted beverage container refund scheme (BCRS) operates on this principle. When a consumer purchases a container, they pay a 10c deposit. If they return it, they receive a 10c refund. Notably, the scheme is privately operated and the deposit is collected and retained by the scheme (not by the state) if consumers fail to return the container.

Without going into the environmental merit or otherwise of what happens once the containers are collected, the scheme already seems to have successfully <u>recouped far more containers</u> than voluntary recycling for kerbside collection. Economic carrots and sticks work faster than appeals for voluntary cooperation. That's the **first lesson** this scheme teaches us.

The **second lesson** is that for a privately owned scheme to deliver public sector goals, the incentives for the business must be aligned with those of policy. Malta's goal is to reduce and recycle as many of these containers as possible. But the scheme operators face a dilemma.

For each container sold, they earn 10c and for each one collected, they lose 10c. Therefore, they make more money the more consumers buy and the less they bring back. The operators' incentive is diametrically opposed to policy aims.

To counter this, the government gave the operators targets linked with penalties. But penalties must be sufficiently swift and high to entice the operators to collect. And, let's face it, enforcement was never any government's strong coat. The lesson here is to design the finance so the operators' incentives are aligned with policy goals.

How? For instance by giving operators a percentage per container collected rather than per container sold. This would reduce the need for penalties for non-performance, for it would be in the operators' automatic interest to collect as many containers as possible, to innovate and to make it convenient for as many consumers and retailers as possible to return containers.

The **third economic lesson** is that a scheme like this can impose socio-economic costs which can be avoided by clever design. The BCRS requires consumers to keep bottle barcodes pristine. This needs storage space which comes at a high cost in Malta. It requires them to commute to machines, which generates traffic and pollution, another sore point. It involves loss of productive and recreational time. It hurts competition by having machines only in certain outlets and by having earmarked vouchers.

It is possible to reverse many of these costs through tweaks in scheme design. More (but smaller footprint) machines in communal locations, vouchers for cash (not credit), more efficient large-volume machines in civic amenity sites are just some of the ideas floated so far.

These solutions and others will emerge quite naturally if operators have the right incentive in place (refer to lesson two).



Economic carrots and sticks work faster than appeals for voluntary cooperation

- Marie Briguglio



Fourth: As the price of beverage containers rises, substitutes will become more attractive. Demand for non-bottled water (tap filters, reverse osmosis, carbonators) will <u>undoubtedly increase</u>. The scheme may also induce a reduction in the consumption of soft drinks.

It is also likely that the government will come under increasing pressure to improve the quality of tap drinking water. These substitution effects could arguably be among the best outcomes that emerge from the scheme.

A **fifth**, more sinister lesson is that there will be (as there always are) unintended consequences and black markets. Some mavericks will learn how to deposit the same bottle over and over with a homemade contraption (say, string and tape).

Some spiteful revenge littering will take place. Some restaurants will charge an extra 10c even if their drinks are on spine. Black market, less controlled, beverages and containers will become an interesting prospect.

Less problematically, 'middlemen' will emerge soon, buying bottles from those who cannot commute to machines and keeping a cut for their efforts.

The **sixth** economic lesson relates to inflation. Raising the price of beverages – and especially of a necessity like drinking water – is likely to impact the (already rising) retail price index (RPI).

It is not entirely surprising to me that the scheme was launched just after the revision of the COLA. It will be very surprising if it does not impact the next estimation of level increases in Malta.

For the record, the RPI rose by around six per cent for beverages and tobacco (and 14 per cent for food) relative to the previous year in October 2022.

Finally, some will be better off as a result of the scheme (for instance, the operators) and others will be worse off (for instance, those who cannot afford substitutes, those who cannot commute to deposit bottles). Redistribution of wealth is worrying when it makes the rich richer and the poor poorer. But it can be addressed, for instance, by improving access to substitutes (drinking tap water) among the vulnerable.

That's the **seventh** lesson the BCRS will teach us: namely the importance of considering the distributional and social justice impact of schemes like these.

Some of these insights may help to further improve the regulation and operation of the BCRS. But, if not, they may at least be useful to consider ahead of the introduction of other deposit-refund schemes.
Designed well, such schemes can be a powerhouse for the reduction of waste.
Marie Briguglio is an economist.