Should we use taxes or public debt to finance the ecological transition?

Fiscal illusion and Constitution in the climate change challenge

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1. Introduction.

It would probably not be an exaggeration to say that climate change is immense challenge human societies have to face. And it is a problem that was caused mainly by carbon emissions due to human activity burning fossil fuels. As written in the latest IPCC report[1] - Summary for Policymakers 2021: "It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. [...] Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since [2013]." Five possible future climate scenarios have been forecasted for GHG and CO2 emissions over the 21st century, namely near-term (2021-2040), mid-term (2041-2060) and long-term (2081-2100). In all five possible scenarios, the global surface temperature is expected to continue to increase until at least mid-century.

To face this challenge, various institutions have decided to control greenhouse gas emission reduction. For instance, the European Union decided that net emissions should fall to 55% of their 1990 levels by 2030, and zero by 2050[2]. To reach that goal, a radical social and economic transformation has to be undertaken. Consumers have to change their habits. Producers have to modify their modes of production. New forms of energy have to be invented. In other words, an ecological transition seems to be required. To be more precise, an ecological transition that requires huge amounts of money. Indeed, even if William Nordhaus claimed that without a new policy measure, climate change would reduce world GDP by just 3% or 4% by the end of this century, others argue that the costs would be huge. For instance, economist Bjorn Lomborg predicts that doing nothing would cost about $140 trillion (expressed in terms of damages provoked by climate change) while cutting the damage to $40 trillion would require policy costs

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[1] Intergovernmental panel on climate change 2021 - the physical science basis - summary for policymakers (p. 4)
[2] Stepping up Europe's 2030 climate ambition. Investing in a climate-neutral future for the benefit of our people (p. 2)

of circa $177 trillion. In any case, for political reasons, it seems impossible not to act against climate change. Thus, the common decision coming from the COP26 meeting in Glasgow in November 2021 was to engage in large, global public expenditure programs to slow down climate change because "[...] with concern that the current provision of climate finance for adaptation remains insufficient to respond to worsening climate change impacts in developing country Parties[3]".

Then, the question is obvious: how to finance these massive public expenditures? And, more precisely, which instrument should be used—taxes or debt? In a world in which public debts are already large, the question is particularly tricky. Who suffers if the public borrowing is unwise and the public expenditure to finance it is wasteful? How to preserve future generations from the primary burden of public loans? What Constitutional law can do to the current debate? What are the role and perspectives of European political parties?

We suggest discussing these questions within the frame of the Virginia School of Political Economy. The arguments are developed as follows. We first make readers wonder why we can treat the question of climate change as a form of public expenditure, namely environmental debt. Indeed, financing the latter by using debt, or taxes, raises the question of who is going to pay for the ecological transition. Are these two fiscal instruments identical, equivalent or not? The equivalence between debt and taxes was put forward by David Ricardo at the beginning of the 18th century but unearthed by the Italian public finance theorists two hundred years later and then by James Buchanan (see, in particular, 1958).

After exploring the reason the equivalence does not work, we discuss the environmental debt in terms of Ricardian equivalence. Having defined what is meant by transferring the burden to future generations, we move on to discuss another major problem against Ricardian equivalence which is the fiscal illusion. This was raised by Puviani (1903) and then recalled by Buchanan (1960,1967) and it is not unlike what behavioural economists did. We discuss the subjective dimension of costs. The latter, not only is an important aspect of Virginia's political economy's approach to debt but also an important factor for behavioural economics. Both share several key features. Nevertheless, the concept of the subjective nature of choice refers to the individualised processes by which individuals comprehend their choice contexts and assess the alternatives available to them. Subjectivity is a result of an individual's psychological processes.

Having discussed the subjective dimension of costs and the presence of illusion, we address the institutional and legal way to deal with those problems by reviewing the constitutional rules suggested by Buchanan. Environmental debt has political reasons and implications. Since we, as a collective, are willing to change and (re)shape our society towards a less polluted world, the interaction between politics and the economic problem occurs. Nevertheless, the Virginia School of Political Economy is the school that studies these interactions. We explore how to implement constitutional/legal regulations to avoid fiscal illusion

[3] Decision -/CP.26 - Glasgow Climate Pact https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf

and how this can be used to deal with environmental debt.

This paper is organized as follows. Section 2 discusses why we can treat the question of climate change as a form of public expenditure. Section 3 describes the Ricardian equivalence and why it does not work. Section 4 introduces the problem of fiscal illusion within Buchanan's works and behavioural economics main findings. Section 5 connects VPE to Behavioural Economics and L&E, and suggests how to deal with fiscal illusion in terms of constitutional/legal rule, therefore discussing how institutions and law can be used to address environmental debt. Section 6 presents the final considerations. Individuals should be adequately informed about the long-term economic implications of public debt to have a better comprehension of the present and future consequences. This requirement should be mandatory and perhaps added as a constitutional principle.