Chapter 6
Corporate Taxation in a Circular Economy

Jan Gooijer

Abstract A circular economy leads to challenges for the system of corporate taxation. However, there exist already a legal rationale for the levy of corporate tax in a circular economy. Such a rationale, a convincing *raison d'être* for corporate taxation in a circular economy, contributes to the legitimacy for a green corporate tax. I explore some new measures in corporate taxation that are consistent with a circular economy.

6.1 Introduction

With the European Green Deal the European Committee has set the agenda towards a sustainable economy. The fight against climate change, environmental pollution, the loss of biodiversity and the exhaustive use of resources requires a radical change in the current economic model. According to the Committee, that current model should be replaced by a model based on the concept of circularity. The profit-oriented free-market economy will have to change into a circular economy "that is restorative and regenerative by design, and which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles", see MacArthur Foundation (2015). It is clear that a successful transformation to a circular economy requires fundamental changes in the functioning of markets and the way in which market participants interact. As Backes (2017) rightly pointed out, the Committee's agenda requires 'a systemic change'. The relationship between market, state and society should be reconsidered and the boundaries of market forces will have to be redefined.

In order to achieve such new equilibrium between state and market, it is necessary to reconsider the fundamentals of various areas of law. Gerbrandy (2017), for example, stated that the basic principles and objectives of competition law are incompatible with the requirements of a circular economy. When it comes to tax

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law, the emphasis has so far been on the introduction of energy and environmental taxes. In the area of direct taxation a fundamental discussion about the principles of the tax system and the structure of that system in the light of environmental issues is yet to be initiated, see Traversa (2020). Corporation tax 'touches on the distribution of functions and weights between the State and the economy' and the systemic change into a circular economy requires us to evaluate whether the corporate tax system contributes to the desired balance, see Vogel (1988).

6.2 Dilemmas of Corporate Taxation in a Circular Economy

Two examples from the world of corporate taxation will make clear what the potential challenges are for the functioning of firms and their tax bill in a circular economy. The first example is that of real estate. If real estate development becomes more sustainable, the economic lifetime of buildings and the residual value will increase significantly. Buildings have to become more durable if we want to limit the resource use in the built environment that has now a standard lifetime of, say, 50 years. And after demolition, the re-use of existing materials increases the residual value of the real estate. In this situation of sustainable real estate development, cradle-to-cradle, depreciation is greatly affected: the normal tax deductible depreciation will be smaller or nil. At the same time, the cost for an office building or industrial site might not have changed much, or might even increase.

The second example is that of the ownership structures of assets and the financing structure of business operations. Under a conventional business model, an acquired product may be presented as an asset on the balance sheet, providing collateral for lenders. Under a circular business model, the buyer may not own the product in the conventional sense, resulting in less collateral for the lenders and, thus, higher interest costs. Furthermore, such a reduced asset base results in a reduced tax deductible depreciation. Depreciation on the products owned by the service provider will be included in the service payments, reducing EBITDA[1] of the buyer. Higher interest costs and reduced EBITDA will both have a negative impact on the tax deductible amount under EBITDA-interest deduction rules.

In both examples, tax deductible items are reduced, which leads to a higher effective tax rate. Regardless of one's views on the appropriate level of corporate taxation, this does raise issues for the legislator, as it leads to changes in the tax base, differences between countries and new areas for tax arbitrage. Thus, we need to raise the question of how corporate taxation in a circular economy should be structured.

[1] EBITDA is a commonly used measure of profitability: Earnings Before Interest, Taxes, Depreciation and Amortization.

6.3 A Legitimate Green Corporate Tax

The principles that underlie the tax system and which, in an optimal situation, would lead to a system that, taking into account the current social and economic circumstances, is perceived as fair and legitimate, must be reassessed regularly, see Avi-Yonah (2004). What principles should a green corporate tax be based on?

The underlying rationale for the corporate taxes that are currently in place is difficult to establish. There are several legal grounds, the hierarchy of which changes according to the perspective presented, see Bird (2002) and Boer and Elsweier (2019). If the relationship between corporate tax and income tax at the level of the shareholder is taken into account, the justification for levying corporate tax is what is called the support function in connection with the income tax, which is based on the 'ability to pay'-principle. Without a corporate tax, levying income tax on business profits and income from capital becomes largely illusory. From that perspective, corporate tax is 'backstopping the personal tax' (Bird, 2002).

However, if the independence of the company is emphasized, and there is much to be said for this given the independent operation of large multinationals, then the corporate tax cannot be justified by relying on the maintenance of a properly functioning income tax (Brooks, 2003). The question then is what can be regarded as the guiding principles of corporate tax. Four arguments for the existence of a corporate tax can be derived from legal scholarship, to which I add a fifth one, the principle that also underpins environmental taxes.

The arguments are (i) the principle of privileged acquisition, (ii) the benefits principle, (iii) the prosperity principle, and (iv) the principle of balance of power. I add to these four principles a fifth one, (v) the polluter pays or damage principle. This is the principle that underpins environmental taxes, but in my view may also play a valuable role as a legal rationale for a 'renewed' corporate tax. I will briefly elaborate on these five principles below.

The Principle of Privileged Acquisition

According to the principle of privileged acquisition, the amount of tax due on income or capital, should be in proportion to the effort that is made to acquire that income or capital. A tax on income received without any significant activity being carried out is neutral in the sense that the tax will not cause the taxpayer to change his or her behavior, activities or investments.

Corporate tax is a tax on what is called pure economic profits ('rent' or 'excess profits'). Pure economic profits are the earnings in excess of the earnings needed to cover all the firm's costs (the costs on labor and on capital, including the opportunity costs on equity), see *inter alia* Brooks (2003) and De Langen (1954). Such profits would not have been achieved in a fully transparent and well-functioning free market but arise 'whenever a firm has a degree of monopoly power in a market, is exploiting naturel resources, is operating in a regulated industry, or has some unique location or other business advantage' (Brooks, 2003). Therefore, taxing such profits is justified under the principle of privileged acquisition.

The Benefits Principle
A company benefits from public expenditure. It makes advantage of the legal system from which it derives its legal personality and which makes it possible for the company to participate on the marketplace. Furthermore, companies benefit from a countries educational and healthcare system, infrastructure etc. Based on that fact, it is justified to levy corporate tax, see Gooijer (2019).

The Prosperity Principle
The third principle that is considered important in the design of corporate taxation is what it referred to as the prosperity principle (Brüll, 1964). The argument is that corporate taxation should be limited because it has a negative effect on the level of investments and future growth of companies, which has a negative effect on economic development, employment opportunities and, in general, on prosperity.

Obviously, this principle limits the scope of the principle of privileged acquisition: despite the fact that there is windfall profit (rent) and in theory a levy of 100% of these windfall profits is justified, the levy must be limited for the benefit of further economic development and investments in, for example, research and development. Therefore the prosperity principle mitigates the principle of privileged acquisition and ensures that 'sufficient' profit remains for (re)investment and economic growth.

The Principle of Balance of Power
A fourth rationale, particularly relied on to justify corporate taxation in the United States, is based on the economic power of corporate management, see Avi-Yonah (2004). I want to refer to the principle as the balance of power principle. Avi-Yonah argued that this rationale is of importance to today's corporation taxes. In the context of the question of the role of corporate tax in the transformation to a circular economy for which a changed relationship between state and market seems necessary, it is interesting to discuss Avi-Yonah's arguments in a bit more detail. The line of reasoning is as follows.

Because of their position and the financial resources companies often have at their disposal, corporate managers have power in the sense that they have the ability to influence the behavior of others. Avi-Yonah pointed to sociological literature from which it follows that this influence extends into three areas. First, political power, because corporate management can influence political decision-making. There is also economic power, which manifests itself mainly in relation to the employees and the communities in which companies are established (for example, the establishment of a factory and the location of the head office). Thirdly, especially if there is a monopoly or oligopoly, the corporate manager has power over customers. The dominance the American tech giants have, is a perfect example of this.

What is the problem of the (possible) dominant power of corporate managers? According to Avi-Yonah, there are 'two principal arguments why a liberal democratic state should curb excessive accumulations of private power'. The first argument concerns democracy, the second the principle of equality. For a democracy to function optimally, it is necessary that there is no great accumulation of power

among persons or organizations that do not have to render public account for the use of that power, Avi-Yonah argues. And private concentrations of power can affect equality within a society, equality in the sense that ‘every social “sphere” should have its own appropriate distributive principles and that possession of goods relevant to one sphere should not automatically translate into dominance in other spheres as well.’ Concentration of power in one sphere should not lead to disruption of relationships in other “spheres” of society, such as politics.

Corporate tax could play a role in countering excessive concentrations of power, resulting in the two aforementioned problems. After all, the levying of corporate tax reduces the financial possibilities of corporate managers, which has a direct effect on the position they occupy. Avi-Yonah: ‘Whatever the economic incidence of the corporate tax, from this perspective its most immediate burden falls on corporate management, and not surprisingly, they are the strongest supporters of corporate tax repeal.’

The Damage Principle

The economic rationale for environmental taxes such as CO_2-taxes and waste taxes is that of repairing market failure, based on the theories of the economist Pigou, see Parry (2012) and Stancil (2010). For example, costs associated with CO_2-emissions in a properly functioning market would be included in the cost price. Involvement of the state is necessary for the proper functioning of the market.

The legal foundation of environmental taxes - and of environmental law in general - is found in the ‘polluter pays’ principle, see Bervoets (2019). That principle, which is also laid down in Article 191, paragraph 2 of the Treaty on the Functioning of the European Union, expresses the notion that it is reasonable for polluters to bear the costs of pollution control and elimination, because they caused that pollution.

In my opinion, both principles are suitable for underpinning corporate taxation in a circular economy. Restoring a market failure can be seen as the economic equivalent of the legal principle of privileged acquisition (which in fact deals with the effect of, for example, monopoly positions). The polluter pays principle justifies the levy of corporate tax on profits from activities that causes damage to the environment. Following Grapperhaus (1995), I will use below the expression ‘damage principle’, because it better expresses the premise that in general the conduct of a business should not lead to damage to public goods and that, insofar as damage does occur, that damage should be compensated.

Summing up

There is not one decisive legal rationale for corporate taxation. In my opinion, however, the above-mentioned principles together have sufficient persuasive strength for the existence of corporate tax systems, also in a circular economy. When looking for a - composite - legal rationale for corporate tax in a circular economy, these motives must therefore be considered in conjunction with one another.

It is particularly relevant that the operation of the principle of privileged acquisition is limited by the principle of prosperity and that the balance of power principle seems to supplement the principle of privileged acquisition. While the latter permits

the levy of tax based on the mere fact that a beneficial position such as a monopoly has resulted in the pure economic profit, the former adds that corporate tax is justified to control the influence of corporate managers. Leaving pure economic profit unencumbered may lead to excessive concentrations of power with the possibility to exert undue influence in areas other than the economic realm.

On the basis of the damage principle, in particular those profits should be taxed that arise from activities that (potentially) cause damage to the environment. Under the damage principle, profits from activities that do not harm people and planet could be taxed less heavily. Furthermore, given the relationship between personal income tax and corporate tax and in accordance with the support function of the corporate tax, any measure introduced in corporate tax system should likewise apply to personal income taxes, as far as business profits are concerned.

6.4 Corporate Tax Design in a Circular Economy

It is clear that the principles discussed above must be translated into concrete measures in which conflicting principles must be weighed up. Furthermore, the effectiveness and feasibility of these possible measures should be considered. Below I outline some measures that I think are worth investigating further. First, I deal with the question how to differentiate between circular and conventional business activities. Then I will introduce a possible measure for the benefit of circular business operations that I believe deserves further research.

Differentiating Between Businesses

A green corporate tax differentiates between sustainable business operations and operations that cannot be qualified as such. To differentiate between these forms of business operations the approach in the 'Regulation on the establishment of a framework to facilitate sustainable investment' may be helpful.[2] That regulation 'establishes the criteria for determining whether an economic activity qualifies as environmentally sustainable for the purposes of establishing the degree to which an investment is environmentally sustainable'. The regulation recognizes six environmental objectives that are taken into account to establish whether a given economic activity is to be regarded environmental sustainable: mitigation and adaptation of climate change; sustainable use of water; transition to a circular economy; prevention of pollution; and the protection and restoration of biodiversity. An economic activity is considered environmentally sustainable if it (a) makes a substantial contribution to one of these environmental objectives, (b) does not seriously affect it, (c) meets technical screening criteria set by the European Commission and (d) complies with international guidelines on business and human rights. The technical screening criteria are included in the Technical Annex of the report of the EU

[2] This is laid down in Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020, on the establishment of a framework to facilitate sustainable investment.

Technical Expert Group on Sustainable Finance (2019). The annex consists of 600 pages with detailed descriptions of business activities that are qualified as environmentally sustainable. This has been done as much as possible in line with existing EU regulations.

The framework provided by the regulation serves to promote sustainable investments. Public-interest entities[3] with at least 500 employees in 2021 will have to include information in their annual report from 2022 on the extent to which their activities can be considered environmentally sustainable within the meaning of the regulation. The statement should include the proportion of capital and operational expenditure related to those environmentally sustainable activities.[4]

This regulation forms an excellent starting point for 'green' measures in corporate taxation. The organizations to which the regulation applies already have the relevant data. For smaller organizations, it should be examined how activities can be efficiently classified in accordance with the guidelines laid down in the regulation.

A Capital and Labor Costs Allowance

A lower effective tax on green profits could obviously be achieved through a differentiation in the corporate tax rate. However, this may provide an approach that is too general, making an accurate and practically very complicated profit split necessary for companies with mixed activities. The focus could therefore be on the two factors that enable entrepreneurship and that can be specifically attributed to the relevant green activities: labor and capital. The effective rate on green profits is reduced by means of an (extra) deduction on capital, to the extent the capital is used for qualifying sustainable business activities and an extra deduction related to the labor costs that are related to these activities. The capital allowance stimulates the use of and investment in assets for sustainable activities, as well as investments in research and development. Employment in the sector is stimulated through the labor costs allowance. By allowing the deduction to consist of these two components, it is achieved that both labor and capital intensive sustainable companies can make use of the facility. In this way, it contributes to one of the goals of the European Commission's (2018) action plan.

Such a measure would in my view fit perfectly with a corporation tax redesigned to meet requirements of a circular economy, in alignment with the legal rationales of a corporation tax: the principles of privileged acquisition and balance of power, and the damage and well-being principle. I recall the two examples from above. Investments in real estate that is developed in accordance with the cradle-to-cradle principle benefit from the capital allowance, would lead to reduced tax deductible depreciation under current corporate tax systems. A capital allowance for such investments should at least eliminate that disadvantage. The same applies to the possible effect of product as a service models on tax deductibility of interest. An extra

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[3] Entities as mentioned in Article 2, paragraph 1 of the Regulation 2013/34/EU of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings.

[4] Article 8 Regulation (EU) 2020/852.

tax deductible amount on the capital used to finance sustainable business activities could erase possible negative consequences of changes in balance sheets and cash flow.

6.5 Conclusion

The challenges posed by the climate and environmental crisis require a critical evaluation of the entire legal system, including that of tax law. In my opinion, the basic principles of corporate taxation, supplemented by the damage principle, justify the introduction of special measures aimed at environmentally sustainable businesses. Therefore, further research into the possibility and effectiveness of a capital and labor cost allowance is recommended. By means of such an allowance, the negative effects of a changed balance sheet and cash flow position of sustainable business operations could be counteracted or even turned into a benefit, depending on the amount of the deduction. Such a capital and labor cost allowance would preferably be introduced throughout the European Union via a European directive in order to prevent tax competition between the member states.[5] The alternative may be to introduce a European corporate tax based on the above mechanism, though this may still be a long way off.

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[5] Following the judgment of the ECJ of 23 April 2009, C-460/07, ECLI:EU:C:2009:254 *(Puffer)*, the benefit from a capital and wage bill allowance introduced by means of a directive, does not qualify as State aid as referred to in Article 107, paragraph 1 of the Treaty on the Functioning of the European Union.

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