"Environmental economics started developing five or six decades ago, drawing on older roots, but for a long time there was a near-complete disconnect between climate economics and macroeconomic policy. It is only very recently that economic policy reports—whether issued by international organizations such as the International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), and European Commission, by central banks, or by national treasury departments—have begun seriously addressing decarbonization." *J. Pisani-Ferry, 2021, Climate Policy is macroeconomic policy, and the implications will be significant*

Making the European fiscal rules "fit for 55": the quality dimension (Translation)

Summary

The current reform of the European fiscal rules cannot only be the n-th attempt to learn the lessons of the past and adapt the rules to a changing macroeconomic context. It must place at the center of the new governance the imperative of a just transition to a zero carbon economy that respects the limits of planetary resources. The reform will have to take into account the urgent need to invest substantial amounts in this transition. Exempting certain "green expenditures" from the common rule is a recurrent proposal to this effect. Defining these expenditures requires answering four questions: What specific objective should be associated with the expenditures to be prioritised? which criteria should be used to identify them? should they be evaluated in isolation or in terms of their contribution to a public policy? what governance should be in place, i.e. who should program, who should implement and who should validate the expenditures? We recommend basing the choice of privileged expenditure on a specific objective that has already been agreed at the European level, and that is not or only hardly contestable or challenged at the national level (objectives of the Green Pact for Europe and the pillar of fundamental social rights), while abandoning the currently used, but too imprecise objective of 'strengthening potential output'; we furthermore suggest identifying privileged expenditure, whether current or investment, by its contribution to a public policy and not in isolation. We suggest a governance similar to that adopted for the Recovery and Resilience Facility, which leaves the design and implementation of expenditures exempted from the common rules in the hand of the State and provides for validation by the European level. In addition, environmentally damaging expenditure, the "brown" expenditure, including tax expenditure, will be identified and their reduction programmed. Finally, Member States should be encouraged to accelerate the introduction of "green budgeting" methods that take into account the interactions between fiscal policies (expenditure and taxation), regulation and administration. This so-called 'whole of government' approach will require close and balanced coordination between finance and transition ministries. At present, climate change and environmental deterioration are still ahead of the financial amounts as well as of the budgeting and policy approaches that can combat them.

Introduction

The ongoing reform of European fiscal rules initiated by the European Commission just before the COVID crisis broke[1] cannot be the n-th attempt[2] to learn from the past and adapt the rules to a changing macroeconomic context. It will have to integrate a reflection on the responsibility and functions of European and national fiscal policies to achieve the objectives of the Green Pact for Europe and the urgent and overriding need to invest in climate policies, biodiversity protection and the circular economy. The imperative of environmental sustainability and just transition, in particular full decarbonisation by 2050 and rapid progress by 2030, becomes the most powerful argument and driver for the reform of the Stability Pact and the rules for the coordination of European economic and fiscal policies. Many of the proposed reforms to the Stability Pact acknowledge that economic and fiscal policies must take account of the climate emergency. They include the idea of favouring certain categories of green investments or expenditure in one way or another, notably by deducting them from the deficit or debt level relevant for implementing the rules.

Subject to their consistency and interaction with the respective reform of the deficit and debt rules, several options are on the table. They include a simple opinion of the Independent Fiscal Institution[3] on the sufficiency or insufficiency of public investment[4], a relaxation of existing flexibility clauses[5], or the full or

[1] https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_5322
[2] https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/timeline-evolution-eu-economic-governance_en
[3] As foreseen by the Stability pact
[4] P. Martin, J. Pisani-Ferry, X. Ragot, 2021, Reforming the European fiscal framework, Technical note, Conseil d'Analyse Économique, Paris
[5] European Fiscal Board, Annual Report 2020;

partial deduction of "green" expenditure from the deficit and debt[6]. A recurrent proposal is to align the methods of public accounting with private accounting and to include in current expenditure and deficit calculation only depreciation and maintenance by creating a separate account for capital expenditure. In addition, there are proposals to strengthen the European budgetary capacity, either on the model of the Recovery and Resilience Facility[7] (with European funding but programming and implementation through the national budget) or through an increase in the EU budget itself.

Whatever technique is chosen, four questions need to be answered: what specific objective should be associated with the expenditure to be prioritised? what criteria should be used to identify them? should additional expenditure beyond the “normal” rule be conditional on other measures taken, whether fiscal, regulatory or administrative, or even on additional expenditure to ensure that budgetary spending is embedded in a consistent sector policy [8]? what governance should be in place, i.e. who should programme, implement and validate the expenditures?

The new fiscal rules will have to be established to meet two objectives:

- to allow, even incentive, of the financing and policies necessary for a just transition within the deadlines;
- to correctly fulfil the macroeconomic functions of public finances, while respecting the full use of resources and sustainability of public debt.

This note addresses only the first of the two points. As a reminder: global greenhouse gas emissions[9] are not currently on a trajectory compatible with the commitments of the Green Pact for Europe and failure to comply with the Paris agreements would lead with a high probability to unsustainable economic and social costs[10], including possible irreversible breakdown scenarios. Without additional measures to those already planned, Europe's emissions are also not compatible with the 2030 commitments of a 55%

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[6] F. Giavazzi, V. Guerrieri, G. Lorenzoni, C.-H. Weihmuller Revising the European Fiscal Framework ; Z. Darvas, G. Wolff, A green fiscal pact : climate investments in time of fiscal consolidation
[7] For example: https://voxeu.org/article/combining-environmental-and-fiscal-sustainability
[8] For example, subsidizing the acquisition of an e car does not help without planning a t the same time loading stations and measures to avoid rebound effects. A rebound effect occurs when an innovation or a measure aiming at the reduction of the consumption per unit of energy or material incentivizes to use the economies realized for consuming more, in some cases with a perverse effect on energy or material use. See an explanation of the rebound effect here.
[9] See the report by UNEP and the 2021 report by the IPCC on the scientific basis of climate change
[10] See the special report by IPCC on “Global warming 1°5”

reduction in GHG emissions compared to 1990 despite the drop in emissions due to the economic depression caused by the COVID epidemic[11]. There is no alternative to a just energy transition and, at the very least, to respecting the commitments made with the Green Pact for Europe.

The promotion of quality by current fiscal rules

Current fiscal rules under the Stability pact give little consideration to the "quality" of public spending, defined as its impact on the policy objectives. They focus almost exclusively on the aggregates - public deficit and debt - leaving the aspects of redistribution and resource allocation, central to national policies, in the hands of the Member States[12].

However, the quality of public spending is not completely absent from present rules. The so-called structural reform and investment flexibility clauses are intended to provide an incentive to improve the quality of national economic policies and public spending. According to these clauses, the implementation of structural reforms likely to reduce public expenditure in the long term or to strengthen "potential output" can justify a temporary deviation from the deficit or expenditure target. The same applies to investments with an expected and verifiable impact on potential output and benefiting from European co-financing.

The guide to the application of the Stability Pact[13] gives some examples of reforms that may legitimise a deviation from the budgetary target: pension, health insurance and public administration reforms, areas that are sensitive to national policy choices. Moreover, as "potential output" is defined essentially in relation to a "non-inflationary" unemployment rate, the structural reforms that can be mainly considered in addition to the above mainly target the labour market aiming at greater flexibility.

The current definition of the reforms and expenditures that can justify a deviation from the rule is therefore based on arguments that have nothing to do with a social and ecological transition. The objective of "just transition" and the consequences of climate change are outside the scope of the budgetary rules as defined in the Pact's implementation guide. This judgement is

[11] See the report of the European Agency for Environment, P. 18
[12] European Fiscal Board 2019, Assessment of EU fiscal rules and 2020, Annual report
[13] Vade me cum

notwithstanding the signals of a political inflexion taking better account of the social question, such as the Porto declaration in May 2021 or the adoption of the European pillar of social rights. Ensuring the coherence between the objectives of a just transition and the “quality” dimension of the Stability pact is a task that remains to be done.

These flexibility clauses have been formally used in very few cases. In addition to the resistance of national authorities to follow European recommendations on subjects at the heart of national political debates, there are two technical reasons for this: firstly, the conditions set and the deviations allowed are such that their value is limited from a quantitative point of view; secondly, the poor ability to estimate the impact of a reform or investment on potential output has been recognised. The search for an agreement on this estimate is therefore likely to be quickly referred to the political level[14]. This second reason is not surprising: "potential output" is an unobservable variable and its estimation raises many methodological problems[15]. It is therefore difficult, and from the point of view of good scientific method impossible, to "verify" the impact of a reform or an investment on it.

Specificities of ecological, climate and just transition policies

The paradigm and macroeconomic models on which budgetary rules are currently based do not allow to address adequately the transition that is needed. There is no doubt that transition and transition policies will have a significant impact on the variables usually looked at by "macroeconomists", notably on private and public investment or on GDP. But this does not mean that climate policies can be forced into the mould of this paradigm and these models. These have been designed and developed in ignorance or neglect of the planetary boundaries and transformations imposed by climate change and climate policies. Climate policies differ from what is yet commonly considered macroeconomic policy in several ways:

- The climate crisis and transition policies tend to reinforce inequalities. Inequalities relate to the respective contribution of social groups to greenhouse gas emissions, to their vulnerability and their capacity to adapt to impact of climate change, as well as the impact of transition policies on real incomes and jobs. The impact of climate change and

[14] As it has been the case for the method of estimation of the potential output itself that has been contested at the ministerial level.

[15] See for an explanation of the role of potential output in EU fiscal surveillance a contribution by EC officials and for a critic Tooze.

policies will also differ from region to region and according to economic activities: whether it be progressive erosion, declining land productivity, rising sea levels, disappearing glaciers or the resurgence of extreme events, floods, fires, water stress, extreme heat events.

- Decarbonation policies are characterised by a much longer time horizon than is usually used in macroeconomic policies[16].

- Their results are measured by material indicators, in particular energy indicators (greenhouse gas emissions, share of renewable energies) or indicators closely linked to energy consumption (transfer in t/km of freight from road to rail), which are outside the scope of the macroeconomic models currently used as a basis for decision-making and which deal mainly with monetary variables from national accounting. The models do not integrate, or do not adequately integrate, the physical risks associated with the resurgence of extreme weather events and the effects of global warming[17].

- They are designed at sector level (In particular, energy, transport, industry, agriculture and buildings). The transformation of each sector will continue to require specific public interventions for many years to come, even if a gradual move towards cross-cutting policies, including a single carbon price, can be expected[18]. These interventions[19] combine 1) measures that increase the cost of emitting greenhouse gas (GHG), whether through regulation, taxation, a right to emit or a reduction in subsidies; 2) investments in public buildings, public and/or regulated energy distribution or transport networks that will shape consumer preferences and reduce costs of decarbonated energy; 3) support for private investment, research and development, adaptation to climate change and professional training; 4) social transfers to compensate the vulnerable losers not in the situation to adapt.

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[16] The time horizon for the deficit and debt target of the European budgetary rules is 3 years

[17] It is one of the conclusions of the Strategy Review of the ECB Evolution of the ECB's analytical framework, Occasional Paper Series , N° 277, September 2021. See also for the lack of production in the mainstream literature on this subject N. Stern and A. Oswald ; on the systematic and absurd undervaluation of climate risks for the economy, including by group 3 of the IPCC (economists) see S. Keen or A. Grandjean. See also the blog post by Greentervention

[18] The need to differentiate policies according to sectors or sub-sectors is explained by a) inequalities in the availability of alternative non-carbon goods or services, including lack of infrastructure, resulting in substantial differences in carbon price elasticity b) actors' time horizons that are incompatible with proper consideration of the long-term benefits of "green" investment c) liquidity or debt constraints d) slow and different evolution of preferences from one sector to another

[19] IMF, note to the Group of Twenty, Reaching net zero emissions

- They aim at transformations of the structures of the economy, consumer preferences and production processes of an unprecedented scale and untested nature likely to depreciate the relevance of macroeconomic aggregates and, in any case, to destabilise the relationships between them[20].

- Their implementation will often be under a "trial and error" regime due to the uncertainties of actors' reactions to novel policies.

Towards an effective 'green and social' golden rule

A good "ecological and social" golden rule shall give a favoured treatment to expenditures aiming at accelerating the transition. Such a rule should also increase the coherence between fiscal policies and energy transition policies as they are or should be reflected in National Energy and Climate Plans or other national "low carbon" strategies. Eight conditions can be identified:

- No longer assigning to these expenditures the indeterminate and unmeasurable objective of "potential output", but linking them to specific objectives, agreed at the European level and that are difficult to contest and can be expected to be only little contested at the national level. The pursuit of full employment policies and the European pillar of social rights, the fight against global warming, the protection of biodiversity, the objectives of the circular economy are obvious candidates even if there may be different views from one country to another on how to achieve them;

- Leave as much scope as possible for national policy choices. If a just transition to a decarbonised economy and the pursuit of other environmental objectives are required of all states, the preferred paths may differ: relying more on future innovative technologies or more on more sober consumption patterns, more or less egalitarian, relying on more or less centralised energy production, on an intensive use of public transport, on soft individual transport or on decarbonated individual cars.

- Basing the eligibility of expenditure – either current or investment - on its contribution to a public policy – most often at sector level -contributing to

[20] ECB, Evolution of the ECB's analytical framework, Occasional Paper Series , N° 277, September 2021

the acceleration of a just transition. Taking also account of tax expenditures.

- Identify environmentally damaging ('brown') expenditure, including tax expenditure, and provide incentives to reduce it. For example, the amount of privileged expenditure could depend on a programmed reduction of such expenditure.

- Using specific and measurable indicators of results and not output indicators, products or achievements. What is to looked at is not the number of kilometres of cycle paths built, but the reduction in carbon-based transport. It is not the number of homes that have been insulated, but the actual reduction in carbon-based energy consumption. It is not the number of vocational training courses provided, but the number of employees in a doomed sector who have found a job. It is not the amount of social transfers but the reduction in the number of households suffering from precariousness.

- Extending the time horizon of budgetary programming and economic policy choices. The energy transition is a very long-term undertaking with high initial fixed investment and qualification costs. The reduction of uncertainties, for example on the sustainability of programmes to support the energy renovation of buildings, or on the choices in terms of energy production or transport infrastructure, conditions the propensity of companies and households to invest, to change their preferences and to adapt;

- Strengthen administrative capacity to design, implement and monitor policies and fight corruption. A recent report highlights that progress by Member States in introducing "green budgeting" or environmental performance budgeting methods is still very uneven, incomplete and often non-existent. A joint OECD/IMF/European Commission report also stresses the importance of incorporating these methods into an approach that includes all regulatory and administrative measures, even if they are not directly supported by the budget (the so-called 'whole of government' approach)

- Recognising the uncertainties inherent in public policy, the unknown of the loop economy-energy-climate, the right to make mistakes and the obligation to correct them.

The contribution of the Green Taxonomy

The taxonomy for sustainable finance[21], the so called green taxonomy, was conceived to describe the environmental performance necessary for an economic activity to contribute to one or more of the six EU environmental objectives[22] without harming the others[23]. Its purpose is to inform companies, banks, financial issuers and investors, and policy makers of the conditions under which an economic activity is sustainable. It classifies economic activities according to strictly technical criteria based on their contribution to the achievement of environmental objectives. It distinguishes between economic activities permanently compatible with a zero carbon economy or other environmental constraints as well as absent an alternative, those whose contribution to the decarbonation is transitory as long as the damage is minimized during a transitory period. It also recognises "enabling" activities as those facilitating activities of the two previous types.

Just as a private investor will not assess the profitability of the activity and decide to undertake it on its base, the taxonomy alone does not allow a public actor to judge the environmental effectiveness of its action, even if the activity financed meets the technical criteria. This effectiveness will generally depend on the regulatory, fiscal and financial context in which the expenditure takes place, the behaviour of the private actors concerned and possibly complementary expenditures.

Nevertheless, taxonomy has a role to play in assessing the contribution of certain public expenditures to environmental objectives. Compliance with technical criteria remains necessary whenever an economic activity is financed or co-financed by public money, but it is not always sufficient: the material used to build an enabling infrastructure may comply with the criteria of the taxonomy, but a lasting effectiveness of this infrastructure to reduce greenhouse gas emissions depends on the intensity of its use and its conformity with the preferences of the users.

[21] EU Regulation 2020/852

[22] Climate change mitigation, climate change adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, the protection and restoration of biodiversity and ecosystems.

[23] Platform for sustainable finance and European Commission

The Recovery and Resilience Facility approach

The method chosen for the Recovery and Resilience Facility includes some of the proposals above. It links expenditure to non-financial measures ("reforms"). It puts some emphasis on implementation capacity and the fight against corruption. It links funding to specific politically agreed objectives at European level (green transition, digital transition, regional cohesion and the European pillar of social rights).

However, the ill designed objective of “strengthening the potential output” is not left out. Its governance, which leaves the design and implementation of the policy in the hands of the Member States and provides for validation of the programme at European level, seems at this stage to be a success. It could inspire the modalities of an agreement on the expenditure to be prioritised and the measures that should accompany it, provided that it does not interfere with national policy choices that are not directly linked to the specific objective pursued.

Nevertheless, three weaknesses should be highlighted. These weaknesses can probably be explained by the urgency with which the disbursements had to be made. They include the lack of long-term budgetary programming, the use of output indicators, and not of outcome indicators as well as an evaluation of measures based on stated objectives and not on expected performance[24]. The asymmetry of information between the national decision-maker and third parties weakens the accountability. European authority in charge of validating the program and monitoring its implementation are affected as well as a political representation, civil society or social partners wishing to exercise a democratic control.

[24] See annex V and VI of the regulation 2021/241

Conclusion

New budgetary rules should allow for a substantial increase in financing for the just transition objective. Macroeconomic policy reasoning must incorporate the economy-energy-climate feedback loop. And greater attention than at present must be paid to the quality of public finances. Progress in these two dimensions will determine the appropriateness of the sustainable increase in public spending that is needed in the face of the climate crisis.

Multi-annual budgetary planning must be required. Capacities for "green budgeting" and social and environmental impact assessments, including for identifying the conditions for the acceptability of changes, will need to be strengthened. In any case, close coordination and cooperation between the Ministry of Finance and sectoral ministries should be organised. The new budgetary rules should provide an incentive for states to make rapid progress in these areas. The new European budgetary rules should encourage states to make rapid progress in these areas. At present, climate change and environmental deterioration are still ahead of the amounts and budgetary methods used in finance ministries to combat them.

Some measures essential to the transition will take time to be decided: because they are heavy decisions committing the country for decades and requiring difficult informed democratic debates (power generation plants) or because they presuppose an awareness or evolution of preferences through information and consultation (urban mobility). Trial and error may also be necessary for a better understanding of behaviours or preferences, for example in the design of social transfers facilitating the acceptability of an increase in energy prices or in the diffusion of technological innovations.

But this should not be a reason to procrastinate there are low-hanging fruits to be identified and harvested in many areas, preparation for the professional retraining of employees of carbon-based industries, certain infrastructures for alternative mobility that will obviously be unavoidable, energy efficiency in buildings, investment in solar and, more often wind energy, and land use. We cannot afford to wait to pick them up