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The (output) gaps in the SGP

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Executive summary

An inadequate Stability and Growth Pact may undermine the whole European economic integration process at its core. This is recognised by the European Commission in its 2015 Communication on the flexibility of fiscal rules, by referring to the Stability and Growth Pact (SGP) as "a cornerstone of the EU's economic governance and of decisive importance for the proper functioning of Economic and Monetary Union".

The paramount position of the SGP warrants a critical examination of recent developments in the public debate about this matter. Namely, the discussion over the flexibility of existing rules, fuelled by the 2015 Commission Communication on "[m]aking the best use of the flexibility within the existing rules of the Stability and Growth Pact".

Recent, increasing demands for greater fiscal leeway were met by a Commission Communication putting forward a new interpretation of the existing rules of the SGP, to allow for "a more growth-friendly fiscal stance". A lack of flexibility of the SGP rules has been often alleged to have thwarted the capacity of national fiscal policy to respond to the protracted situation of economic stagnation in the euro area. The 2015 Communication featured three sets of clarifications, regarding public investment, structural reforms, and cyclical conditions.

However, the space for public investment remains limited. In spite of a new *investment clause* being devised, its stringent criteria considerably hamper its potential to overhaul the ailing European economy. Furthermore, "investments deemed to be equivalent to major structural reforms" are still discriminated against and not treated as favourably as structural reforms.

The concept of structural reforms is broadened. The *structural reforms clause* is extended to the corrective arm of the SGP and broadened to include not only reforms that enable budgetary savings, but also reforms which reduce structural unemployment or promote an increased labour force and, hence, increase government revenues.

The attempt to provide a quantitative measure of the economic cycle based on the *output gap* emphasises the ubiquity of this concept in the SGP. A new *quantitative matrix* is advanced to define quantitatively what is meant by good and bad economic times. This reinforces the over-reliance of the SGP on the concepts of *potential output* and *potential output growth rate*, which underpin the notion of *output gap* and, thus, the notion of *structural budget balance*, which have been pervading the SGP since its 2005 revision.

Therefore, the *effectiveness* of the current SGP is contingent on both the solidity of these concepts and the reliability of their estimates. Without the *structural budget balance*, there would be no *Medium-Term Objectives* (nor path towards them), no *expenditure*

benchmark, no *quantitative matrix* to define *good* and *bad economic times*, no definition of *severe economic downturn*, no *required fiscal effort in structural terms*, and the criteria of the *investment clause* would also have to be reconsidered.

The solidity of the concepts refers to their correspondence to real economic structures and the precision of their definition. Although the assertion that the economic cycle has an impact on the budget balance is hardly disputable, it does not follow that there is a *potential GDP* from which the actual GDP deviates throughout its cycles (thus creating *output gaps*).

The reliability of the estimates may be attributed to the existence of a consensus regarding the method of calculating, and/or the concrete values of, these *variables*. There have been substantial and persistent revisions of *potential GDP* estimates which cast doubt on the ability of predictive models to provide reliable estimates for this variable.

There are several conceptual and practical problems that question the solidity of these concepts, and the unreliability of their estimates is widely acknowledged. However, the question of the ultimate usefulness of such concepts and their estimates is usually sidestepped, while new and somehow *improved* predictive models are put forward and their inevitable inconsistencies are simply regarded as an *unfortunate* "fact of life".

These concepts should be abandoned and the SGP should evolve into a *Fiscal Scoreboard* that would complement the existing Macroeconomic Imbalances Procedure Scoreboard. As a Fiscal Scoreboard the SGP would encompass a wide range of fiscal indicators that would cover different domains where latent problems could be revealed. This would provide a more detailed picture of the actual fiscal situation of member states than just relying on the headline deficit and debt indicators, and, if a set of cyclically-sensitive indicators were chosen, would facilitate the assessment of discretionary fiscal policy developments, without resorting to the calculation of some *potential GDP*.

This shift in the *character* of the SGP would avoid relying on such problematic concepts and contribute to a deeper understanding of (latent) fiscal imbalances of member states. The Fiscal Scoreboard would stand in stark contrast to the existing *one-size-fits-all* instrument for ensuring "sound government finances", without a clear commitment to understanding where the imbalances lie and why and how these have developed, insofar as governments comply with global headline limits and (rather problematic) structural budget balance targets.

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Introduction[1]

According to the European Commission, the Stability and Growth Pact (SGP) is "a cornerstone of the EU's economic governance and of decisive importance for the proper functioning of Economic and Monetary Union"[2]. Therefore, given its paramount position, an inadequate SGP may undermine the whole European economic integration process at its core.

"[B]ased on the objective of sound government finances as a means of strengthening the conditions for price stability and for strong sustainable growth conducive to employment creation"[3], the SGP – first introduced in 1997, and subject to revisions in 2005 and 2011 – consists of a *preventive arm* (based on article 121 of the Treaty on the Functioning of the European Union (TFEU)) and a *corrective arm* (based on article 126, TFEU).

The *preventive arm* (Regulation 1466/97, as amended by Regulations 1055/2005 and 1175/2011 – henceforth, Regulation 1466) "aims at guaranteeing a sound budgetary position in all Member States", through the definition of *Medium-Term Objectives*. The *corrective arm* (Regulation 1467/97, as amended by Regulations 1056/2005 and 1177/2011 – henceforth, Regulation 1467) includes the provisions regarding the triggering of an *Excessive Deficit Procedure* for a Member State when it fails to comply with the deficit or debt limits established in the Protocol on the excessive deficit procedure annexed to the TFEU.

More recently, a lack of flexibility of the SGP rules has been often alleged to have thwarted the capacity of national fiscal policy to respond to the protracted situation of economic stagnation in the euro area – particularly by operationalising the Maastricht debt criterion when so many countries face a debt-to-GDP ratio above the 60% threshold it establishes.

On 13 January 2015, the European Commission, following a commitment enshrined in its *Political Guidelines*[4], released a Communication entitled "Making the best use of the flexibility within the existing rules of the Stability and Growth Pact", in response to the demands for greater flexibility. The paramount position of the SGP warrants a critical examination of these recent developments in the public debate.

The apparent shortcomings of the SGP may be sorted into three distinct layers: (1) its democratic *legitimacy*, (2) the *rationale* for the existence of the current fiscal rules,

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[1] A first draft of this paper was prepared in February 2015 during an internship in the European Parliament. For helpful comments and advice I am grateful to MEP Elisa Ferreira and her team, Luís Teles Morais and Paulo Trigo Pereira (IPP-TJCS), and António Afonso (ISEG-UL).

[2] European Commission (2015a)

[3] Regulation (EC) No 1466/97

[4] Juncker (2014)

and (3) the *effectiveness* of existing rules. The democratic legitimacy of the SGP is a fundamental and overarching issue, for only the existence of a European democracy of European citizens (qua *European* citizens) will prevent the SGP from being perceived as something *imposed from the outside*, though the possibility and desirability of such federal arrangement are open to debate. The scope of this paper, however, is limited to considerations on the latter two categories: the *rationale* for the existing set of fiscal rules (1) and their *effectiveness* (2). These two layers, in turn, are contingent on the *character* of the SGP, which includes both its true aim (what it is wanted for, or where it is supposed to lead) and the set of distinguishing features that define it in accordance with such aim. If the *character* of the SGP were to change, so would the *rationale* for choosing its content (namely, rules, in the current *character*) and the criteria for assessing the *effectiveness* of this content in promoting the fulfilment of the *character* (i.e. the achievement of such aim).

However, it should be emphasised that the aim here is not to provide an historical account of the evolution of the SGP, nor a comprehensive overview of the set of fiscal rules that it is comprised of (this is provided e.g. by the European Commission (2013)), but rather to provide a critical examination of recent developments (namely, the 2015 Commission Communication), identify some of the latent and overlooked flaws of the SGP, and explore possible alternatives.

Thus, the first two sections of this paper overview the main flexibility clauses identified prior to the Commission Communication and analyse the contribution of this Communication to the current economic governance framework. The third section focuses on the *structural budget balance*, the *output gap* and the *potential output*, and identifies these ubiquitous concepts as a much overlooked malaise of the SGP, while the fourth section sketches a possible alternative design for the SGP that would avoid relying on such concepts.

1. The pre-Communication flexibility clauses

In any paper that focuses on the flexibility of the existing Stability and Growth Pact (SGP), one is bound to come across the expressions *exceptional circumstances*, *severe economic downturn*, *unexpected adverse economic events* and *adoption of structural reforms* (see Micossi and Peirce (2014)). These are here regarded as the *pre-Communication* flexibility clauses.

Reference to *exceptional circumstances* is made in both the preventive (articles 5(1), 6(3), 9(1), and 10(3)) and the corrective (articles 2(1), 3(5), and 5(2)) arms of the SGP. In the former, these may allow a member state to deviate from its Medium-Term Objective (MTO) (or path towards it), while in the latter these may justify the decision not to trigger an Excessive Deficit Procedure (EDP) for a country which breaches the 3% deficit ceiling or, in the case of member states already under an EDP, justify an extension of the deadline for the correction of its excessive deficit.

These *exceptional circumstances* are defined as an unusual event outside the control of the member state with a major impact on its financial position, or a *severe economic downturn* in the euro area or in the Union as a whole, which in turn is defined in article 2(2) of the corrective arm as a negative annual real GDP growth rate or an accumulated loss of output during a protracted period of very low annual real GDP growth relative to its potential.

Naturally, there are enough grey areas in this concept of *exceptional circumstances* for some questions to be raised – what shall be considered as an unusual event outside the control of a member state? How accurately can an accumulated loss of output relative to the *potential output* be identified? How large must this accumulated loss be in order to be understood as a *severe economic downturn*?

The expression *unexpected adverse economic events* plays a role similar to the one played by *exceptional circumstances*, yet limited in scope to the corrective arm of the SGP (articles 3(5), and 5(2)). *Unexpected adverse economic events* may lead the Council, on a recommendation from the Commission, to adopt a revised recommendation for a member state under an EDP, extending the deadline for the correction of its excessive deficit.

Besides the *exceptional circumstances* and the *unexpected adverse economic events*, there is a further provision concerning the flexibility of the SGP to accommodate the economic cycle in article 5 of Regulation 1466, where it is stated that "[t]he Council and the Commission shall take into account whether a higher adjustment effort is made in economic good times, whereas the effort might be more limited in economic bad times". The definitions of *good times* and *bad times*, as well as the difference in the adjustment efforts in each of these situations, are left out of the legal text, thus, leaving room for considerable ambiguity and a significant degree of discretion.

The last of the *pre-Communication* flexibility clauses belongs exclusively to the preventive arm of the Pact. According to article 5(1) (and 9(1) for non-euro member

states) of Regulation 1466, member states may be allowed to deviate from their MTOs (or paths towards them), provided that an appropriate safety margin with respect to the deficit reference value (3%) is preserved, insofar as this deviation is attributed to "the implementation of major structural reforms which have direct long-term positive budgetary effects, including by raising potential sustainable growth, and therefore a verifiable impact on the long-term sustainability of public finances". However, no light is shed on what is meant by structural reforms which raise "potential sustainable growth" nor on how an ex-ante assessment of the contribution of any structural reform to the long-term sustainability of public finances can be made. It is also stressed that "[p]articular attention shall be paid to pension reforms introducing a multi-pillar system that includes a mandatory, fully funded pillar".

In "A blueprint for a deep and genuine economic and monetary union" (30 November 2012), the European Commission pledged to "explore further ways within the preventive arm to accommodate investment programmes in the assessment of Stability and Convergence Programmes."

This possibility was then addressed by Commissioner Olli Rehn in his letter (3 July 2013) clarifying how the Commission would interpret the *structural reforms clause* embedded in article 5(1) of the preventive arm to allow for such investment programmes. This so-called *investment clause* set out in the letter was however too restrictive to be of meaningful use. The Commission would allow deviations from the path towards the MTO, as long as three conditions were met:

1) *The economic growth of the member state remains negative or well below its potential;*
2) *The deviation does not lead to a breach of the 3% of GDP deficit ceiling, and the public debt rule is respected;*
3) *The deviation from the MTO is linked to national expenditures on projects co-funded by the EU under the Structural and Cohesion policy, Trans-European Networks and Connecting Europe Facility with positive, direct and verifiable long-term budgetary effect.*

Thus, this *investment clause* reduces public investment to an emergency tool to deal exclusively with *severe economic downturns* and fails to take into consideration its transformative power, and this is what ultimately renders it inadequate.

Finally, besides the aforementioned *pre-Communication* flexibility clauses, a greatly overlooked feature of the same article 5(1) (and 9(1) for non-euro member states) of Regulation 1466 is that "[t]he Council and the Commission shall also examine whether the stability programme facilitates the achievement of sustained and real convergence within the euro area (…)". It is also stressed in article 17(a) of the corrective arm that "the progress in ensuring closer coordination of economic policies and sustained convergence of economic performances of the member states in accordance with the TFEU"

should be at the centre of the assessment of the effectiveness of that regulation. It is rather ambiguous what this "sustained and real convergence" stands for and how the SGP has been actually facilitating it. In the current period of growing divergences between member states, this quite neglected aim of the SGP should be emphasised. Note that, according to the Alert Mechanism Report 2015, "high unemployment is expected to persist for longer with wide-ranging differences across Member States", "[t]he at-risk-of-poverty and social exclusion rate increased by 8.7 million since the crisis, with differences between Member States still growing", "[t]he EU-28 and EA-18 NEETS rate (young people not in employment, education, and training) averages decreased only very slightly, leaving large divergences among Member States", "Income inequality (S80/S20) is growing across and within Member States, particularly in those Member States that suffered the largest increases in unemployment".

2. The Commission Communication on the flexibility within the SGP

On 13 January 2015 the European Commission, following a commitment enshrined in its Political Guidelines, released a Communication entitled "Making the best use of the flexibility within the existing rules of the Stability and Growth Pact", in which the Commission clarifies how the flexibility embedded in the existing SGP rules should be interpreted, so as to promote "a more growth-friendly fiscal stance in the euro area". The document features three sets of clarifications, very much in line with the clauses highlighted in the previous section of this paper, regarding investment, structural reforms, and cyclical conditions.

The clarifications regarding investment are twofold: (1) the treatment given to the financial contributions from Member States to the new European Fund for Strategic Investments (EFSI), and (2) the refinement of the *investment clause* introduced by Commissioner Olli Rehn in his letter from 3 July 2013.

The financial contributions from Member States to the Fund benefit from a particularly favourable treatment in this document. These contributions shall be considered "one-off expenditures" and, therefore, will not affect the path towards the MTO (under the preventive arm) or the compliance with the required fiscal effort (under the corrective arm), since both are assessed in structural terms and, by definition, do not take such "one-off expenditures" into account. Furthermore, non-compliance with the deficit or debt reference values enshrined in article 126(3) of the Treaty on the Functioning of the European Union (TFEU) which may stem from contributions to this Fund will not trigger Excessive Deficit Procedures, as long as these deviations are small and expected to be temporary.

The *investment clause* put forward by former Commissioner Olli Rehn is revisited to accommodate the projects co-financed by the European Fund for Strategic Investment. The three conditions set out in the original *investment clause* were reconsidered and rewritten as five. According to the new criteria, a member state may benefit from this clause, insofar as:

1) *Its GDP growth is negative or GDP remains well below its potential (resulting in a negative output gap greater than 1.5% of GDP);*
2) *The deviation from the MTO or the agreed fiscal adjustment path towards it does not lead to an excess over the reference value of 3% of GDP deficit and an appropriate safety margin is preserved;*
3) *The deviation is linked to national expenditure on projects co-funded by the EU under the Structural and Cohesion policy, Trans-European Networks and Connecting Europe Facility, and to national co-financing of investment projects also co-financed by the EFSI, which have direct long-term positive and verifiable budgetary effects;*

4) *Co-financed expenditure should not substitute for nationally financed investments, so that total public investments are not decreased;*
5) *The Member State must compensate for any temporary deviations and the MTO must be reached within the four-year horizon of its current Stability or Convergence Programme.*

Although these five conditions clearly borrow from the original clause, there are several noteworthy differences. Firstly, the concept of "well below its potential" in condition 1) is quantified in terms of the estimated output gap – this may seem to make this condition somehow more precise, however, it also reinforces the role of the problematic concept of *output gap* in the economic governance of the Union (see section 3). Secondly, compliance with the public debt rule is left out of condition 2) – provided that, at the moment of this Communication, sixteen member states had a debt-to-GDP ratio above the 60% threshold[5], this waiver could remarkably broaden the scope of this clause. Thirdly, projects co-funded by the EFSI are naturally added to the list of national expenditures which are allowed.

Condition 4) is new, however, it appears to be of little relevance, and it is hard to understand how such condition may be enforced. Much more relevant is condition 5) which considerably narrows the actual room for investment inside the SGP. This last condition is so stringent that it may even invalidate the whole *investment clause*. In a way, it might be said that, according to this condition, *member states are allowed to deviate from the agreed fiscal targets, as long as they do not deviate at all*.

Although a similar idea was already present in the original *investment clause*, it was clearly contingent on the improvement of the economic situation of the member state – "[o]nce these temporary conditions [of large negative output gap] are no longer in place and the member state is forecast to return to positive growth, thus approaching its potential, any deviation as the above must be compensated so that the time path towards the MTO is not affected" –, which, at least explicitly, is not the case in the new version of the *investment clause*.

In the Communication, it is also highlighted that this new *investment clause* will be applied irrespective of the economic situation of the euro area or the EU as a whole, whereas the original clause supposedly hinged on the condition of a large negative output gap in the Eurozone or the EU as a whole. However, in the letter of 3 July 2013 by former Commissioner Olli Rehn, it remains unclear whether such condition of large negative output gap referred to the situation of any individual member state, or only to the situation faced by the Eurozone or the EU as a whole.

In the end, though posited as permitting "a broader application of the clause than in the past", this *investment clause* suffers from the same fundamental problem as the

[5] According to the MIP Scoreboard 2013 in the *Alert Mechanism Report 2015*.

original clause – it presents public investment as merely an emergency tool to deal exclusively with *severe economic downturns* and, thus, fails to take into consideration its transformative power.

As regards the *structural reforms clause*, the Commission clarified the notion of "major structural reforms which have direct long-term positive budgetary effects" featured in article 5(1) of the preventive arm (and article 9(1) for non-eurozone EU member states). While the legal text only gave examples of "long-term positive budgetary effects" stemming from budgetary saving ("[p]articular attention shall be paid to pension reforms (…)"), the Communication also stresses, and gives examples of, the possibility of "increased revenues drawn in the medium to long-run from a more efficient economy with a higher potential output (e.g. due to lower structural unemployment or an increased labour force)". Furthermore, the Commission will deem these reforms to be fully implemented, as long as the member state provides a detailed, comprehensive, and quantified medium-term structural reforms plan. The temporary deviation from the MTO (or path towards it) is also quantified in this Communication – it must not exceed 0.5% of GDP.

In this Communication, it is acknowledged that, although not explicitly enshrined in the legal texts, structural reforms should also be considered in the corrective arm of the SGP as "relevant factors", in line with article 2 of Regulation 1467. Therefore, the implementation of structural reforms may not only prevent the triggering of an EDP, but also warrant a multiannual path for the correction of the excessive deficit (instead of the usual one-year deadline). This represents an extension of the *structural reforms clause*, originally peculiar to the preventive arm (articles 5(1) and 9(1)), to the corrective arm by considering these structural reforms to be "relevant factors".

However, this consideration introduces a paradox into the interpretation of the rules of the SGP expressed in this Communication. In the legal text of the preventive arm, there is no difference between the foundation of the *investment clause* and the foundation of the *structural reforms clause* – both are based on the same articles (5(1) and 9(1)), since, as the Commission recognises in its Communication, the investments which fulfil the criteria of the *investment clause* are "deemed to be equivalent to structural reforms".

Yet, while structural reforms are henceforth considered to be "relevant factors" in line with article 2 of Regulation 1467, and, thus, the *structural reforms clause* is extended to the corrective arm of the SGP, the "investments deemed to be equivalent to major structural reforms" which underpin the *investment clause* are not regarded as "relevant factors", impeding the extension of the *investment clause* to member states under EDP.

This is the paradox: "investments deemed to be equivalent to major structural reforms" are, in fact, not equivalent to major structural reforms. For, whereas structural reforms (whether "major" or not) warrant flexible treatment to countries in both the preventive and the corrective arms, the flexible treatment of "investments deemed to be equivalent to major structural reforms" is restricted to countries in the preventive arm.

Moreover, this asymmetry, which curbs the benefits of the EFSI, the Structural and Cohesion policy, the Trans-European Networks, and the Connecting Europe Facility to countries under EDP, may ultimately go against the goal of convergence stressed in the legislation (as seen above, articles 5 of the preventive arm, and 17(a) of the corrective arm, in line with the TFEU), since the countries which are under EDP are usually the ones that need these investments the most.

To resolve this paradox, the Commission should allow the "investments deemed to be equivalent to major structural reforms" to be actually equivalent to major structural reforms, and, therefore, also be regarded as "relevant factors", according to article 2 of the corrective arm.

The last section of the Communication concerns the flexibility of the rules regarding cyclical conditions. In the corrective arm, there are few changes. Although the difference between fiscal consolidation actions and fiscal consolidation outcomes is acknowledged, it is stressed that by assessing the fiscal efforts of countries under EDP according to the annual change in the structural budget balance, most *unexpected adverse economic events* are, by definition, already taken into account. The concept of *severe economic downturn in the euro area or the Union as a whole* is also acknowledged in this section, while it is emphasized that "[t]he use of this [never officially applied] provision should remain limited to exceptional, carefully circumscribed situations to minimise the risk of moral hazard".

Therefore, the only noteworthy feature in this last section is the new quantitative matrix that intends to clarify how the fiscal adjustment requirements in the preventive arm should accommodate the economic cycle and the debt level. This matrix provides details on how the Commission will guarantee that the fiscal adjustment effort is higher during "economic good times" and more limited in "economic bad times" and that the required fiscal effort is higher than the 0.5% of GDP benchmark in structural terms for member states "faced with a debt level exceeding 60% or with pronounced risks of overall debt sustainability", in line with article 5 of Regulation 1466.

The required adjustment effort towards the MTO should depend on two elements: the stock of public debt of the member state (whether it is considered "debt below 60% and no sustainability risk" or "debt above 60% or sustainability risk") and the cyclical condition faced by the member state (whether it qualifies as "exceptionally bad times", "very bad times", "bad times", "normal times", or "good times" – all defined in terms of the output gap or the real growth rate –, and also whether its real growth is above or below the potential growth rate).

Figure 1: Quantitative matrix for fiscal adjustment requirements

		Required annual fiscal adjustment	
	Condition	Debt below 60% and no sustainability risk	Debt above 60% or sustainability risk
Exceptionally bad times	real growth < 0 or output gap <-4	no adjustment needed	
Very bad times	-4 ≤ output gap < -3	0	0.25
Bad times	-3 ≤ output gap < -1.5	0 if growth below potential, 0.25 if growth above potential	0.25 if growth below potential, 0.5 if growth above potential
Normal times	-1.5 ≤ output gap < 1.5	0.5	> 0.5
Good times	output gap ≥ 1.5	> 0.5 if growth below potential, ≥ 0.75 if growth above potential	≥ 0.75 if growth below potential, ≥ 1 if growth above potential

Note: All figures presented as a percentage of GDP.

Source: European Commission (2015a)

Although this quantitative matrix is clearly the most concrete element of flexibility put forth in this Communication, it also considerably reinforces the over-reliance of the SGP on the fragile and intricate concepts of *potential output* and *potential output growth rate*, which underpin the notion of *output gap* and, thus, the notion of *structural budget balance*. The following section of this paper focuses precisely on these problematic concepts and on the perils of using the structural budget balance as an indicator for policy-making.

Lastly, it is worth noting the little reference made throughout the Communication to both the debt reduction benchmark (non-compliance with which may warrant the triggering of an EDP), and the role of the SGP in promoting "sustained and real convergence" within the Eurozone and between member states of the EU.

3. On the ubiquity of the output gap and the structural budget balance

The *structural budget balance* was first introduced into the Stability and Growth Pact in its 2005 revision and has since become a pervasive feature thereof. It is defined in the SGP legislation as the cyclically-adjusted balance, net of one-off and other temporary measures, that provides a clear picture of the underlying budgetary position which results from the government's discretionary fiscal policies.

When calculating the structural budget balance, many elements must be considered: the *potential GDP growth* estimates and the *actual GDP growth* estimates (which, together, are used to calculate the evolution of the *output gap*), the estimated sensitivity (or *elasticity*) of the budget balance to variations of the output gap, and predictions of *one-off measures*. Thus, there are plenty of *variables* to be predicted before we can calculate the structural budget balance.

The *Medium-Term Objectives*, the *expenditure benchmark*, the definition of *severe economic downturn* and the required fiscal effort under the EDP are all based on the structural budget balance and, therefore, dependent on the concepts of *output gap* and *potential output*, and, thus, estimates of these *variables* play a central role in the Stability and Growth Pact. Therefore, the *effectiveness* of the current SGP is contingent on both the solidity of these concepts and the reliability of their estimates.

First and foremost, it should be stressed that the solidity of these concepts and the reliability of their estimates, although related, are nevertheless irreducible to each other. The reliability of the estimates may be attributed to the existence of a consensus regarding the method of calculating (i.e., the existence of a particular model generally deemed appropriate for the task), and/or the concrete values (at a given moment and for a particular country) of, these *variables*, and, thus, requires some consistency in the estimates. The solidity of the concepts refers to their correspondence to real economic structures and the precision of their definition, i.e., if the concepts are 'realistic' and well-defined. Clearly, one does not imply the other: there may be consensus regarding a particular model (reliability of the estimates) to estimate something that does not exist (non-solidity of the concept), and something that exists and is clearly defined (solidity of the concept) may be regarded as impossible to estimate or calculate (unreliability of the estimates).

Although the assertion that the economic cycle has an impact on the budget balance is hardly disputable, it does not follow that there is a *potential GDP* from which the actual GDP deviates throughout its cycles (thus creating *output gaps*). The most recent literature on this subject tends to criticise existing predictive models and, while it often puts forward new such models, rarely provides an in-depth reflection on the concepts of *potential GDP* or *output gap* (see Bouthevillain et al. (2001), Forni and Momigliano (2004), Kiss and Vadas (2005), Lee et al. (2009), Darvas (2013), Tereanu et al. (2014)). These have been regarded as valid from the outset and no clear reflection on them has

been fostered. The crucial conceptual and practical questions regarding their nature and interpretation (see below for a brief discussion) remain unaddressed and should not be overshadowed by the unanimity (or lack thereof) in the estimates of these *variables* obtained through some ad-hoc refinements of the existing models (i.e., the solidity of the concepts should not be reduced to the reliability of the estimates). This means that deciding that only a particular model and a particular dataset can be used for prediction purposes (hence, ensuring the reliability of the estimates) does not resolve any of the conceptual and practical issues about these concepts.

Congdon (2008) distinguishes between two concepts of output gap: the original 'Keynesian' concept (developed by Okun) and the 'monetarist' concept (introduced by Friedman), which displaced the former as the dominant one. Whereas in the 'Keynesian' concept the potential output relative to which the gap is measured is the 'full employment level of output', in the 'monetarist' concept the potential output relative to which the gap is measured is the 'natural rate of output', which in turn is the level of output consistent with the 'natural rate of unemployment'. Therefore, understanding the 'output gap' entails understanding what are the 'full employment level of output', the 'natural rate of unemployment', the 'natural rate of output', and the relationship between the (un)employment level (whether 'full employment' or 'natural unemployment') and the output level (whether 'full employment output' or 'natural output') that is associated with it.

As Congdon (2008) observes, Okun associated the notion of 'full employment' to an unemployed rate of 4 per cent without any clear justification which led to it being criticised as "entirely arbitrary". On the other hand, the 'natural rate of unemployment' is, according to Friedman (1968), "the level that would be ground out by the Walrasian system of general equilibrium equations, provided there is imbedded in them the actual structural characteristics of the labor and commodity markets, including market imperfections, stochastic variability in demands and supplies, the cost of gathering information about job vacancies and labor availabilities, the costs of mobility, and so on". Hence, acceptance of the 'natural unemployment rate' entails at least acceptance of the Walrasian general equilibrium, of the stochastic nature of variability in demands and supplies, and of the possibility of determining information and mobility costs.

Following on from these influential currents of thought, the most common definitions of *potential output* that one might come across vary from "the maximum amount of goods and services an economy can turn out when it is most efficient—that is, at full capacity. Often, potential output is referred to as the *production capacity* of the economy"[6], to "the level of output that an economy can produce at a constant inflation rate"[7], "*what an economy can produce* when all its resources such as workforce, equipment, technology, natural resources and others are fully utilized; or the GDP that the economy can attain

[6] http://www.imf.org/external/pubs/ft/fandd/2013/09/basics.htm, emphasis in the original
[7] http://stats.oecd.org/glossary/detail.asp?ID=2094

upon *proper application of its resources*. (…) Potential output can also be defined as the level of economic activity at which aggregate demand and aggregate supply are consistent with a stable inflation rate"[8], "the output that could *be produced if all resources were employed at their long-term sustainable levels*"[9], or "the best composite indicator of the *aggregate supply side capacity of an economy* and of its scope for sustainable, non-inflationary, growth"[10].

Hauptmeier et al. (2009) contrast two main types of methods of estimating *potential output* (and *potential growth*): univariate methods and multivariate methods. Univariate methods consist of applying statistical filters (eg. Baxter-King filter, Christiano-Fitzgerald filter, Hodrick-Prescott filter) to an observed time-series in order to extract a 'trend' from this historical values of output. Hence, when calculated through univariate methods, *potential output* is understood as a trend, and not the explicit result of operating structural economic foundations, for these methods are purely statistical and, thus, do not require many theoretical considerations.

On the other hand, multivariate methods imply the construction of a (typically Cobb-Douglas) 'production function'. The *potential output* is then calculated as a function of a set of variables, namely: (1) total gross value added for the private and public sector, (2) potential labour input in the private and public sector, (3) potential capital input in the private sector, (4) development of total factor productivity, and (5) partial factor elasticities. The main shortcoming of this method is that it relies mostly on unobservable variables which require the adoption of further assumptions or have to be estimated using some of the statistical filters associated with univariate methods (see Hauptmeier et al. (2009) for a more detailed discussion of the existing methods and their limitations).

There are many conceptual and practical problems with, respectively, the *potential output* and methods of calculating it (whether purely statistical, or a 'production function') which have been emphasised in literature. However, more fundamental and systematic research on this subject (of which Hauptmeier et al. (2009) is a good example) is needed. Contributions to this inquiry have also been made outside academic fora, for instance, in opinion articles in newspapers and blog posts.

Firstly, while all of the definitions above emphasise the idea of the *capacity* of the economy, it is difficult to understand how we could *define* and *measure* the capacity of the whole economy – it is hard to conceive of the economy as a container to be filled by varying amounts of 'economic activity'. Does even such thing as clearly defined *production capacity* exist in the real economy?

In an article published in the Financial Times, Chris Giles (2012) argues that "[m]easuring output is difficult enough in a modern economy. Distinguishing changes in

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[8] http://macroeconomicanalysis.com/macroeconomics-wikipedia/potential-output/, emphasis added

[9] http://www.bruegel.org/nc/blog/detail/article/1170-mind-the-gap-and-the-way-structural-budget-balances-are-calculated/, emphasis added

[10] D'Auria et al. (2010)

the value of many services from changes in their volume is even harder. It is impossible to know the sustainable volume of goods and services that the economy can produce".

In an article tellingly entitled "The so-called 'output gap': another piece of economic mumbo-jumbo", Paul Ormerod (2014) observes the following, while citing a study by Hendel and Spiegel (2014) which concludes that "capacity is not well defined, even in a batch-oriented manufacturing.":

> *"The economy is not a physical object and cannot, say, be placed on a pair of scales and weighed. (…) We can count how many Ford Model Ts have been built. It is much less clear what the outputs of Google or Facebook are. The problems are even more acute with the concept of potential output. Many internet-based services incur substantial fixed costs in order to have just a single customer. But the additional cost of servicing the second customer, and all subsequent ones, is effectively zero. Potential output does not have much meaning in these contexts, it is not obvious what the limit might be."*

Secondly, in some theories of the business cycle, the 'trend' and the 'cycle' are not clearly separable. In fact, there are substantial problems in the task of separating the 'cycle' from the 'trend': (1) business cycle fluctuations may stem from 'supply shocks', (2) GDP growth is not independent of the cyclical developments of demand, and (3) the occurrence and intensity of cycle-generating 'supply shocks' is not independent of the pace of economic growth (for a more detailed account of how different theories of the business cycle perceived the separation of the 'trend' and the 'cycle', as well as the problems with this separation highlighted above, see Hauptmeier et al. (2009))

Thirdly, there is no such thing as an *optimal deterministic allocation of factors* in a complex economy like the one we live in (as suggested in some of the definitions above: "proper application of its resources", and "if all resources were employed at their long-term sustainable levels"). The construction of such predictive-models implies that the *proper application of resources* or the *long-term sustainable levels of all resources* is given. The possibilities are potentially unlimited since the capability of people to make decisions and to come up with creative proposals which transform the economy can never be discarded. When economists engage in this sort of 'production function' modelling they implicitly regard the economy as a given body of universal, empirical and deterministic *laws* which are independent of human action, instead of a constantly evolving reality which facilitates, constrains, and is continuously transformed by, human action and social interaction – and it is not clear how clinging to such a false conception of social reality may help illuminate social reality.

Finally, the validity of the 'production function' and the quantification of aggregate capital it requires were put in question during the 'Cambridge controversies in the theory of capital' (Martins, 2014) – an academic debate between Cambridge, UK (notably, Joan Robinson and Piero Sraffa) and Cambridge, Massachusetts (notably, Robert Solow

and Paul Samuelson). For Joan Robinson (1953-4) the 'production function' had been "a powerful instrument of miseducation". Robinson (1953-4) exposed the circular reasoning implicit in the level of aggregate capital used in the 'production function', as follows:

> *"(…) we can value the capital good as a discounted stream of future profit which it will earn. But to do so, we have to begin by taking the rate of interest as given, whereas the main purpose of the production function is to show how wages and the rate of interest (regarded as the wages of capital) are determined by technical conditions and the factor ratio."*

As Nuno Martins (2014) puts it:

> *"[I]n marginal theory the interest rate is obtained through the production function (by calculating its first derivative with respect to capital), and so we would have to know the level of aggregate capital, and thus the interest rate, in order to obtain the interest rate".*

Consequently, the proponents of the 'production function' approach (Cambridge, Massachusetts) "admitted that the concept of a macroeconomic production function could not be considered as universally valid" (Hauptmeier et al., 2009).

However, even if, for a while, one could ignore these conceptual and practical problems and focus merely on the estimates, plenty of reason for worry may also be found. Unsurprisingly (although not necessarily, as stressed above), given the flaws of these concepts, their estimates have not been faring very well.

As emphasised in a recent paper (Tereanu et al., 2014), "[s]uccessful implementation of structural targets relies on the assumption that both actual and potential growth can be accurately estimated. In practice, however, this assumption rarely holds." "[T]he magnitudes of output gap revisions have been significant on average. They averaged about 1½ percent of potential GDP in absolute terms (…)"

Even among researches who engage in this sort of predictive-modelling (see Forni and Momigliano (2004)) it is recognised that "the misjudgements of cyclical conditions have been significant in many countries and may have induced a systematic bias in fiscal policies for several years."

The "seemingly impossible task of estimating a country's position in the economic cycle" is also addressed in Caudal et al. (2013), pointing out that "frequently there are wide discrepancies between the two estimates [output gap estimates in real time and revised output gap estimates], sometimes even with opposite signs".

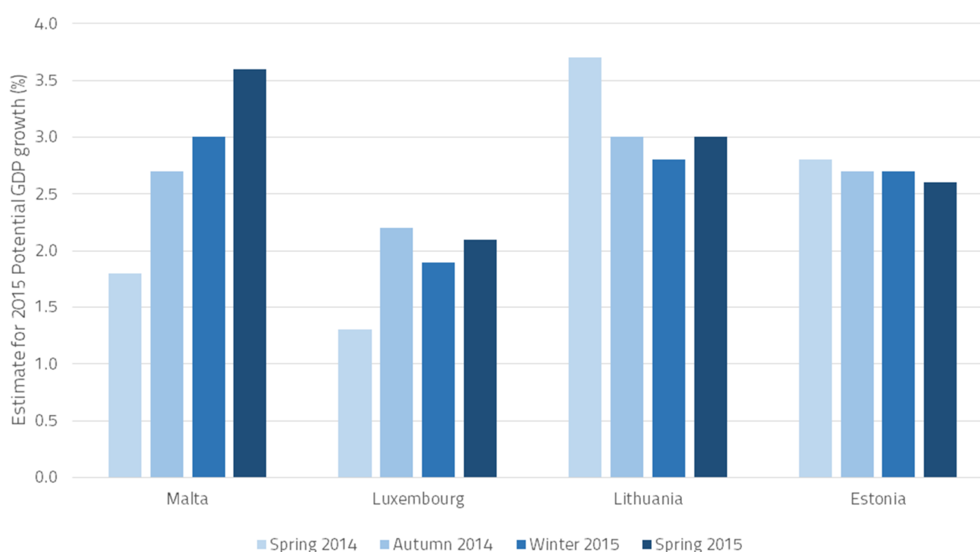
Also, Hers and Suyker (2014) note that even if the large downward revision for 2009 that followed the outbreak of the financial crisis in 2008 is ignored, "the average absolute forecasting revision over 2007-2013 was 0.5% of GDP. This is as large as the yearly improvement of the structural balance required by the preventive arm. (…) The result is that it is possible for a government to undertake additional fiscal consolidation

of 0.5% of GDP in order to meet its MTO, only to be confronted with a structural balance that does not change at all, because of revisions in potential growth."

Naturally, instead of comparing different estimates of the structural budget balance (or the output gap), emphasis should be placed on the divergent estimates of each of the elements of the structural budget balance, since it might be the case that the structural budget balance estimates from different predictive models, or from the same predictive models but computed at different moments in time, coincide just because the differences between the estimates of each of the elements of the structural budget balance (potential growth, actual growth, cyclical-sensitivity, and one-off measures) happen to offset each other. Hence, focusing only on the structural balance estimates and ignoring the estimates for each of the elements that comprise it is bound to provide us with an inaccurate picture of the inconsistencies in these estimates.

This can be illustrated by looking at the potential GDP growth figures regularly published by the European Commission in its winter, spring, and autumn economic forecasts. Even if we limit our analysis to a very short (and stable) period, for instance, the forecasts released over the last complete year of publications for euro area countries (Spring 2014, Autumn 2014, Winter 2015, Spring 2015), some cases of substantial variability may be found in the estimates for 2015 potential GDP growth. Figure 2 shows that while the estimates for Estonia were quite stable (actually, the second-most stable, after Portugal), the estimates for countries such as Lithuania, Luxembourg, and particularly Malta were subjected to not inconsiderable revisions. This variability inevitably hampers the ability of the governments of these countries to prepare their budgetary plans and, thus, it is rather questionable whether these estimates should inform fiscal policy decisions. Table 1 shows that revisions in autumn 2014 (relative to spring 2014) were quite significant in some member states.

Figure 2: The evolution of estimates for 2015 Potential GDP growth



Source: European Commission Economic Forecasts

Table 1: Difference between estimates for 2015 Potential GDP growth (Autumn 2014 and Spring 2014 forecasts)

Member state	Spring 2014	Autumn 2014	Absolute difference
Malta	1.8	2.7	0.9
Luxembourg	1.3	2.2	0.9
Ireland	2.0	2.8	0.8
Lithuania	3.7	3.0	0.7
Italy	0.1	-0.5	0.6
Greece	-2.8	-2.2	0.6
Austria	1.5	1.0	0.5
Cyprus	-1.8	-1.4	0.4
Latvia	2.9	2.6	0.3
Belgium	1.0	0.8	0.2
France	1.1	0.9	0.2
Finland	0.4	0.2	0.2
Spain	-0.1	-0.3	0.2
Germany	1.5	1.3	0.2
Slovakia	2.5	2.6	0.1
Netherlands	0.5	0.4	0.1
Slovenia	0.5	0.6	0.1
Estonia	2.8	2.7	0.1
Portugal	-0.3	-0.3	0

Source: European Commission Economic Forecasts

Particularly large were also the revisions of potential output estimates for the pre-crisis period made after the 2008 financial crisis and ensuing period of recession (see Hers and Suyker (2014), Darvas (2015), and Wolf (2014)), which eloquently reflect our inability to perceive and identify underlying structural problems using this indicator. As Martin Wolf (2014) points out[11]:

> *"In the 2008 estimates [therefore, after the event] the IMF declared that Ireland had run a healthy average structural surplus of 1.3 per cent a year between 2000 and 2007. (...) Spain was believed to have enjoyed an average structural surplus of 0.5 per cent a year over this period. (...) Then, four years later, the IMF decided that (...) over that period [2000-2007] Ireland had been running an average structural fiscal deficit of 2.7 per cent of GDP. For Spain, (...) the earlier surplus has turned into an average structural deficit of 1.2 per cent of GDP."*

[11] Wolf (2014), p. 77

Although these inevitable inconsistencies are acknowledged by the modellers, they are simply regarded as an *unfortunate* "fact of life" and the question of the ultimate usefulness of such estimates is completely put aside, as it is evident in D'Auria et al. (2010):

"[P]otential growth and output gap revisions, due to, for example, forecast & data uncertainties, will inevitably remain a fact of life for policy makers to grapple with. In addition, distinguishing cyclical from structural factors in real time will continue to be prone to error, with a large element of judgement always being needed in assessing underlying potential output trends."

Concerns over the reliability of the *potential output* (and the *output gap*) to underpin economic policy-making were also expressed in the meetings of the ad-hoc Working Group on Output Gaps created in 1999 "to review and assess the various existing methodologies used to evaluate potential growth"[12]. Regarding the debate over the most adequate methodology to apply in the task of estimating the potential output – a purely statistical approach or a 'production function' approach –, the Economic Policy Committee (2001) reports that "members of the group agreed that the lack of economic foundations is a serious limitation to the HP [Hodrick-Prescott] filter" and that "some members of the group expressed concern that potential output and output gaps estimates from the production function approach (…) would reflect questionable assumptions and judgements". In a following meeting, the Economic Policy Committee (2004) reports, "Germany and Austria put forward that 'they also valued the production function method as an analytical tool but, as with all other methods for assessing the output gap, saw fundamental problems in deriving policy assessments' ".

Besides proposing an ad-hoc refinement of the predictive model and emphasising that there should always be "some explicit room for judgement in assessing fiscal policy", Hers and Suyker (2014) do put forward an alternative to curb the implications of unstable structural budget balance estimates for fiscal policy:

"The required policy effort could initially be determined by the Council as a structural budget balance adjustment. (…) This could be operationalized by translating this required change as a percentage of GDP into a required (additional) policy effort in billions of euros, and then keeping this target unchanged afterwards [i.e. regardless of further revisions of the estimates initially made]."

However, this simple arithmetic does not solve the problem of having policy decisions and recommendations based on unreliable foundations. Hers and Suyker (2014) just assume that any estimate, as long as it is not subject to any revision and, thus, is not disproved, becomes *truthful* (in the sense that it corresponds to reality) and, therefore, *adequate* for policy purposes.

[12] Economic Policy Committee (2004)

Tentative proposals as the one just mentioned result from a misplaced focus on the instability of the estimates (reliability of the estimates), while ignoring the fundamental conceptual and practical flaws of these concepts stressed above (solidity of the concepts) which render them inadequate to underpin economic policy. As Chris Giles (2012) concludes in his article: "[a]t the centre of economic policy we therefore have a concept that cannot be measured, one whose estimates are subject to massive revisions and one that has an extremely tenuous relationship to concurrent proxies. It is useless."

So, to sum up, the SGP (in particular its preventive arm, but also the corrective arm) is largely dependent on the calculation and assessment of the progress of the structural budget balance. Some concerns regarding the role of the structural budget balance in the SGP have been expressed on the basis of the instability of its estimates (and estimates of its components, such as the output gap or the potential output growth rate). However, it should be stressed that it is not because their estimates are unreliable that these concepts are put into question – the solidity of the concepts does not depend on the reliability of the estimates. A sensible approach that would take the fundamental flaws of these concepts into account would inevitably lead to a major revision of the SGP – without the *structural budget balance*, there would be no *Medium-Term Objectives* (nor path towards them), no *expenditure benchmark*, no *quantitative matrix* to define *good* and *bad economic times*, no definition of *severe economic downturn*, no *required fiscal effort in structural terms*, and the criteria of the *investment clause* would also have to be reconsidered. This reflects how much the SGP hinges on these problematic concepts.

4. How to overcome the gap – a shift in the character of the SGP

The claim made in the previous section that the structural budget balance is an inadequate tool to assess the evolution of discretionary fiscal policy (for it presupposes the existence and calculation of a *potential GDP*) does not suffice to contribute to an improved European fiscal framework. For, as acknowledged above, although the existence of a *potential GDP* from which the actual GDP deviates (thus, generating *output gaps* which, hence, may be interpreted as the measure of cyclical deviations) is questionable, the impact of cyclical fluctuations on the budget balance is hardly deniable.

It follows that simply dropping all the rules that depend on the structural budget balance (thus, moving closer to the original SGP) and relying just on the headline deficit limit would be an ill alternative to the current framework, since cyclical influences on the budget balance would be ignored. After all, the revisions that the SGP has undergone since its inception were at least partly motivated by the need to take this factors into account.

Therefore, in order to improve the SGP, dropping some of its rules would have to be only part of a substantial reconfiguration of its design. Improving the SGP inevitably requires a shift in its *character* and, thus, a shift in the *rationale* for, and criteria for assessing the *effectiveness* of, its content. In fact, the prime example for such (apparently ambitious) reformulation is already present in the European economic governance framework: the Macroeconomic Imbalances Procedure *Scoreboard*.

The Macroeconomic Imbalances Procedure (MIP) was introduced in 2011 to identify, prevent and correct macroeconomic imbalances across member states, and just like the SGP it is comprised of a preventive and a corrective arms. Potential macroeconomic imbalances are identified by the MIP Scoreboard, which consists of eleven indicators covering different macroeconomic domains. For each indicator, a threshold has been decided upon so that breach of such threshold by a member state indicates a potential imbalance in that particular domain. However, the distinguishing characteristic of the MIP is that breaches of thresholds do not automatically entail the triggering of an Excessive Macroeconomic Imbalances Procedure, instead these are followed by in-depth reviews to understand the situation of the member state concerned, before any policy recommendation or corrective action is contemplated.

Given the considerable destabilising effects and self-reinforcing dynamics within a monetary union (that lacks a federal structure, such as the euro area) of both fiscal and macroeconomic imbalances alike, differential treatment of these two inseparable realms is hardly warranted. In fact, macroeconomic imbalances (namely, current accounts deficits), have fared much better in explaining the patterns of the Eurozone crisis than fiscal imbalances (see Wolf (2014), chapter 2).

Furthermore, there are compelling reasons why the SGP should evolve into a *Fiscal Scoreboard* that would complement the MIP Scoreboard. By evolving into a Fiscal Scoreboard the SGP would encompass a wide range of fiscal indicators that would cover different domains where latent problems could be revealed. This would provide a more detailed picture of the actual fiscal situation of member states than just relying on the headline deficit and debt indicators, and, if a set of cyclically-sensitive indicators were chosen, would facilitate the assessment of discretionary fiscal policy developments, without resorting to the calculation of some *potential GDP*.

Such a reconfiguration of the SGP would reflect a shift in its *character*. For as a Fiscal Scoreboard the SGP would be redefined positively as an inquiry into the (latent) fiscal imbalances of member states, their origins and how to solve them, instead of being perceived negatively as a *one-size-fits-all* instrument for ensuring "sound government finances" (as enshrined in Regulation 1466), without a clear commitment to understanding where the imbalances lie and why and how these have developed, insofar as governments comply with global headline limits and (rather problematic) structural budget balance targets.

As observed above, this change in the *character* of the SGP would inevitably imply a change in the *rationale* for, and criteria for assessing the *effectiveness* of, its content. First, the content of the SGP would go beyond rules and be comprised of a set of fiscal indicators and thresholds to help identify imbalances in a variety of domains. Second, the *effectiveness* of this content would then be assessed in terms of whether it helped identify, understand and correct (latent) fiscal imbalances in a series of domains, instead of whether it enforced compliance. Consequently, the *rationale* for choosing these indicators would be their potential for intelligibly reflecting the existence, and development of, fiscal imbalances in different domains, instead of the rules' potential for ensuring that, when respected, government finances are rendered 'sound'.

Having criticised the deployment of the structural budget balance and argued for a substantial reconfiguration of the SGP (reflecting a shift in its *character*) towards a Fiscal Scoreboard, it follows that possible indicators for such Scoreboard should now be proposed. Before, however, it should be stressed that the purpose of this section is not to endorse a complete and definitive composition of the Scoreboard, but rather to sketch a possible alternative design for an improved SGP, for the choice of the particular indicators requires a much broader debate than can be provided in this paper.

Nevertheless, three generic criteria for the choice of the set of indicators were already advanced above: (1) this set should provide a comprehensive picture of the fiscal realm in a series of domains, (2) each indicator should have the potential for intelligibly reflecting possible imbalances in a specific domain, and (3) some of these indicators should be cyclically-sensitive to facilitate the assessment of discretionary fiscal policy developments.

To illustrate, some examples of possible indicators (level or change) would be:

- Primary budget balance
- Net general government debt
- Non-resident holding of general government debt
- Average interest rate paid on debt stock
- Net borrowing of general government
- Debt payments scheduled for the following year
- Expenditure on social benefits, notably unemployment benefits
- Expenditure on given categories (health, education, interest)
- Total tax burden
- Tax rates on labour income, capital income, and consumption
- Tax evasion estimates

Such set of indicators would shed light and pave the way for further investigation on the (latent) problems which might arise from a variety of sources, such as debt refinancing needs and the consequent high exposure to the *animal spirits* of debt markets, the net outflows of income to non-resident holders of general government debt, the increasing burden of interest payments and other expenditure categories, as well as taxes, on taxpayers, the incapacity of the tax authority to collect tax revenues, or the cyclical fluctuations of expenditure on unemployment benefits. A scoreboard encompassing some of the abovementioned indicators and possibly others would provide a much clearer picture of the actual fiscal situation of member states that the current reliance on headline limits and structural budget balance targets.

Concluding remarks

The demands for greater fiscal space to handle the protracted situation of economic stagnation were met by a Communication putting forward a new interpretation of the existing rules of the SGP to allow for "a more growth-friendly fiscal stance". This document featured three sets of clarifications regarding public investment, structural reforms, and cyclical conditions. On public investment, in spite of a new *investment clause* being devised, its stringent criteria considerably hamper its potential to overhaul the ailing European economy. Furthermore, "investments deemed to be equivalent to major structural reforms" are still discriminated against and not treated as favourably as structural reforms. On structural reforms, the *structural reforms clause* is extended to the corrective arm of the SGP and broadened to include not only reforms that enable budgetary savings, but also reforms which reduce structural unemployment or promote an increased labour force and, hence, increase government revenues. On cyclical conditions, a new *quantitative matrix* is advanced to define quantitatively what is meant by good and bad economic times. Nevertheless, this attempt to provide a quantitative measure of the economic cycle only reinforces the over-reliance of the SGP on the fragile and intricate concepts of *potential output* and *potential output growth rate*, which underpin the notion of *output gap*.

One of the aims of this paper was to provide a preliminary critical account of, and foster further reflection on, these ubiquitous concepts, for the *effectiveness* of the current SGP is contingent on both their solidity and the reliability of their estimates. However, there are several conceptual and practical problems that question the solidity of these concepts, and the unreliability of their estimates is widely acknowledged. Therefore, these concepts should be abandoned as part of a substantial reconfiguration of the SGP that reflects a shift in its *character*. By evolving into a Fiscal Scoreboard, the SGP would be redefined positively as an inquiry into the (latent) fiscal imbalances of member states, their origins and how to solve them, instead of being perceived negatively as a *one-size-fits-all* instrument for ensuring "sound government finances", without a clear commitment to understanding where the imbalances lie and why and how these have developed.

As mentioned above, in addition to the already emphasised over-reliance on flawed concepts, another fundamental problem of the SGP – although beyond the scope of this paper – is one of democratic legitimacy (see, for example, de Grauwe (2013), Maduro (2012), or Alcidi et al. (2014)). Without a federal structure democratically supported by the European citizens (qua *European* citizens), the SGP will remain an arbitrary set of rules imposed from *outside* to each member state and, hence, inevitably regarded as illegitimate. For *legitimacy*, *rationale*, and *effectiveness* reside in different layers (see Introduction), the fundamental issue of *legitimacy* is one that no debate over the flexibility of the SGP can resolve. However, the shift in the *character* of the SGP advanced in the previous section could contribute decisively to ameliorate its democratic *legitimacy*.

References

Regulation (EC) No 1055/2005 of 27 June 2005 amending Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.

Regulation (EC) No 1056/2005 of 27 June 2005 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure.

Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.

Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure.

Regulation (EU) No 1175/2011 of 16 November 2011 amending Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.

Regulation (EU) No 1177/2011 of 8 November 2011 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure.

ALCIDI, C., GIOVANNINI, A. & PIEDRAFITA, S. 2014. Enhancing the Legitimacy of EMU Governance IP/A/ECON 2012-17. *Directorate General for Internal Policies, Policy Department A: Economic and Scientific Policy*.

BOUTHEVILLAIN, C., COUR-THIMANN, P., VAN DEN DOOL, G., HERNÁNDEZ DE COS, P., MOHR, M., MOMIGLIANO, S. & TUJULA, M. 2001. Cyclically adjusted budget balances: an alternative approach. *ECB Working Paper Series*.

CAUDAL, N., GEORGES, N., GROSSMANN-WIRTH, V., GUILLAUME, J., LELLOUCH, T. & SODE, A. 2013. A budget for the euro area. *Trésor-Economics*.

CONGDON, T. 2008. Two Concepts of the Output Gap. *World Economics,* 9.

D'AURIA, F., DENIS, C., HAVIK, K., MCMORROW, K., PLANAS, C., RACIBORSKI, R., RÖGER, W. & ROSSI, A. 2010. The production function methodology for calculating potential growth rates and output gaps. *EC Economic Papers 420 July 2010*.

DARVAS, Z. 2013. Mind the Gap! And the way structural budget balances are calculated - an alternative calculation of the output gap. Available at http://www.bruegel.org/nc/blog/detail/article/1170-mind-the-gap-and-the-way-structural-budget-balances-are-calculated/.

DARVAS, Z. 2015. Mind the gap (and its revisions)! Available at http://bruegel.org/2015/05/mind-the-gap-and-its-revision/.

DE GRAUWE, P. 2013. Design failures in the Eurozone - can they be fixed? *EC Economic Papers 491 April 2013*.

ECONOMIC POLICY COMMITTEE 2001. Report on Potential Output and the Output Gap.

ECONOMIC POLICY COMMITTEE 2004. EPC Report on Potential Output and the Output Gap.

EUROPEAN COMMISSION. 2012. *RE: A blueprint for a deep and genuine economic and monetary union: Launching a European Debate*

EUROPEAN COMMISSION 2013. Vade mecum on the Stability and Growth Pact. *Occasional Papers 151*.

EUROPEAN COMMISSION 2014a. Alert Mechanism Report 2015.

EUROPEAN COMMISSION 2014b. European Economic Forecast: Spring 2014. Available at http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee3_en.pdf.

EUROPEAN COMMISSION 2014c. European Economic Forecast: Autumn 2014. Available at http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee7_en.pdf.

EUROPEAN COMMISSION 2015a. Making the best use of the flexibility within the existing rules of the Stability and Growth Pact.

EUROPEAN COMMISSION 2015b. European Economic Forecast: Winter 2015. Available at http://ec.europa.eu/economy_finance/publications/european_economy/2015/pdf/ee1_en.pdf.

FORNI, L. & MOMIGLIANO, S. 2004. Cyclical sensitivy of fiscal policies based on real-time data. *Banca d'Italia*.

FRIEDMAN, M. 1968. The role of monetary policy. *American Economic Review,* 58.

GILES, C. 2012. Ditch this daft concept. Available at http://www.ft.com/intl/cms/s/0/df3bde22-b479-11e1-bb68-00144feabdc0.html#axzz3Sf75o2P8.

HAUPTMEIER, S., HEINEMANN, F., KAPPLER, M., KRAUS, M., SCHRIMPF, A., TRAUTWEIN, H.-M. & WANG, Q. 2009. Projecting Potential Output. *ZEW Economic Studies (Vol. 42)*. Physica.

HENDEL, I. & SPIEGEL, Y. 2014. Small Steps for Workers, a Giant Leap for Productivity. *American Economic Journal: Applied Economics 2014,* 6, 73-90.

HERS, J. & SUYKER, W. 2014. Structural budget balance: A love at first sight turned sour. *CPB Policy Brief 2014/07*.

JUNCKER, J.-C. 2014. A New Start for Europe: My Agenda for Jobs, Growth, Fairness and Democratic Change. Political Guidelines for the next European Commission, 15 July 2014.

KISS, G. P. & VADAS, G. 2005. Mind the Gap - International Comparison of Cyclical Adjustment of the Budget. *MNB Working Papers*.

LEE, K., GARRATT, A. & SHIELDS, K. 2009. Measuring the Natural Output Gap using Actual and Expected Output Data. *University of Leicester*.

MADURO, M. P. 2012. A New Governance for the European Union and the Euro: Democracy and Justice. *RSCAS Policy Papers*.

MARTINS, N. 2014. Inequality, Sustainability and Piketty's Capital. Universidade Católica Portuguesa Porto - Working Papers.

MICOSSI, S. & PEIRCE, F. 2014. Flexibility clauses in the Stability and Growth Pact: No need for revision. *CEPS Policy Brief No. 319, 24 July 2014*.

ORMEROD, P. 2014. The so-called 'output gap': another piece of economic mumbo-jumbo. Available at http://www.paulormerod.com/the-so-called-output-gap-another-piece-of-economic-mumbo-jumbo/.

ROBINSON, J. 1953-4. The production function and the theory of capital. *Review of Economic Studies,* 21, 81-106.

TEREANU, E., TULADHAR, A. & SIMONE, A. 2014. Structural Budget Targeting and Output Gap Uncertainty. *IMF Working Paper WP/14/107*.

WOLF, M. 2014. *The Shifts and the Shocks: What we've learned - and have still to learn - from the financial crisis*, Allen Lane.

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