Gábor P. Kiss:[1] One-off and off-budget items: An alternative approach

Fiscal analysis requires a set of indicators. For calculating the structural deficit, it is examined whether measures have permanent or temporary budgetary impacts, if any (creative accounting). For measuring fiscal impulse, it is examined when a given measure has a 'true' economic impact, if ever (creative accounting). For example, capital transfers to cover the losses of quasi-fiscal activities do not spread to the actual ('true') period of time by accrual recording. It is important to remove such illusory items from statistical expenditures and revenues, but in order to account for the 'true' effect, expenditures must be augmented, e.g. by quasi-fiscal losses and PPP investment. This type of analytical indicator has been employed by the central bank of Hungary for a decade. According to our experience, this 'true' measure is consistent in a macroeconomic sense and methodologically more robust than the statistical deficit, which often requires a subsequent upward revision. This kind of analytical methodology allows flexibility supported by expert judgement, and at the same time it requires transparency of methods and data.

1. INTRODUCTION

'No simple and single indicator can answer many complex questions…' (O. Blanchard)

Central banks in different countries assess fiscal positions in several ways (Mihajlek, 2007). There are also new proposals for improving the way in which central banks can analyze the risk-adjusted balance sheets of the key sectors, including the government (Gray et al., 2007). In this paper, I present the analytical background of the fiscal indicator which has been employed by the central bank of Hungary for the last decade.

Since the situation of public finances can be examined from many aspects, there is no indicator which can answer every question. Depending on the aim of the analysis, different corrections are required (Blanchard, 1990; Chalk 2002; P. Kiss 2002; P. Kiss and Vadas, 2006).

One of the questions revolves around how large a part of the deficit can be considered permanent and structural. Thus, all *temporary* fiscal items are to be eliminated from the deficit – not only exogenous factors (economic cycle, effect of price and yield fluctuations), but one-off measures as well.

It can be examined what part of the change in the fiscal position is attributable to discretionary measures, which may be either permanent or one-off. In this case, however, the definition of the measure causes difficulties (for example, in the case of expenditures how to determine a 'no-policy-change' scenario serving as a basis for comparison).

One may also ask what magnitude of demand impulse a change in fiscal position represents. In this case, it is justified to ignore those fiscal items which *do not have a significant economic effect,* for example creative accounting operations and, under certain conditions, the inflation compensation included in interest.

The fiscal impulse and its impact on the economy differ. The fiscal impulse indicates first-round impacts, while the different spending and revenue components affect demand and supply in different ways. Fiscal impact depends on public spending multipliers; the sensitivity of investment to changes in the user cost of capital; taxes and transfers weighted by the propensity to consume, and, finally, whether fiscal measures were or were not anticipated.

Addressing these various questions requires different corrections of statistical revenues and expenditures. On the one hand, for example, in the case of cyclical adjustment, different elasticities are required (P. Kiss and Vadas, 2006), while on the other, differences are also justified when defining one-off measures. When the fiscal impulse is calculated, within the sphere of one-off measures a

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distinction must be made between those with and those without an impact.

First, I provide an overview of why corrections are needed for analytical purposes. Then, the concept of true deficit is introduced and the conceptual framework is determined. Subsequently, the types of corrections are reviewed and illustrated by simple numerical examples. Finally, I draw some conclusions.

2. MOTIVATION

'European governments are hiring private sector banks to help them disguise the scale of budget deficits…' (J. Almunia)

Underlying the problems of statistical recording there are 'natural' reasons, such as nominal interest expenditure is higher due to inflation, while the compensation of the inflationary loss could be treated as amortisation, in other words it is a financing rather than a deficit-increasing item.

However, most problems of recording are attributable to a behaviour of fiscal policy which aims at reducing transparency and masking the deficit (Alesina and Perotti, 1996; Dafflon and Rossi, 1999). The repeated subsequent upward revision of the actual deficit figures may indicate that the increasingly precisely defined statistical rules cannot succeed without a deeper economic analysis of the operations. Creative accounting plays an important role in the business sector as well, a reaction to which in certain countries has been a tightening of the accounting regulations and of control, while in other countries the emphasis has been on the deeper analysis of content. As opposed to this, the rules and control of government statistics are less strict in certain cases, but in other cases rigid in the sense that there is less emphasis on examining the content of specific operations. All this allows fiscal gimmicks to gain ground. Creative accounting is also facilitated by the fact that in some countries the statistical definition of the deficit is still based on budgetary data, the content of which may, as a matter of course, differ due to the national accounting rules stipulated by budgetary laws. As the criteria laid down in the common statistical rules are very often less strict than business accounting, it may happen in practice that fixed assets created through a public-private-partnership-type (PPP) investment are not included in either the private or the government balance sheets. To quote Joaquín Almunia, ' … in many cases the financial engineering concerned public-private partnerships.'[2] The other problem is that the fixed rules do not allow a flexible correction of the effect of gimmickry in government statistics, as the prescribed corrections are also closer to the budgetary concept than to the economic approach, and the latter relies more on estimations. Consequently, the statistical recording of revenues and expenditures may differ from the economic effect. Therefore, in addition to the statistical deficit, several countries also regularly apply various analytical corrections, a practice which has also been followed by the MNB since 1997 (Mihajlek and Tissot, 2003; Girouard and Price, 2004).

3. THE 'TRUE' DEFICIT

'They are legal operations, but we cannot consider them to be deficit reducing.' (J. Almunia)

For an analytical correction of the statistical deficit it first has to be decided what the aim of calculating 'true' deficit is. If fiscal impulse is estimated, it must be decided whether a given measure has a significant economic effect. If the structural deficit is calculated, it must be examined whether a given measure affects the net worth of the government sector permanently.

Table 1

How to measeure the true deficit

(components in bold)

	With an economic effect			Without an economic effect
Fiscal impulse	**Permanent**	**One-off without self-reversing**	**One-off with self-reversing**	Creative accounting (self-reversing)
	There is an effect on net worth		No effect on net worth	
Structural deficit	**Permanent**	One-off without self-reversing	Creative accounting (self-reversing)	

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[2] Financial Times: EU states accused of 'hiding' deficits, 5 October, 2005.

Table 2

Statistical and true deficit

True deficit / Statistical	With an economic effect	Without an economic effect
Budget	One-off measures; with or without self-reversing effects	Creative accounting; upfront savings and delayed costs (financing QFAs)
Off-budget	Creative accounting; Quasi-fiscal activities (QFAs) + PPP projects	Market components of public credit and guarantee programmes

According to OECD definitions (Koen and van den Noord, 2005), creative accounting operations affect the fiscal balance or public debt but not, or to a far lesser extent, government net worth, since they have self-reversing effects. In contrast, one-off measures affect general government net lending or borrowing in a given year or for a few years, but not permanently. They have no self-reversing effects.

In the following part of the paper, we use the narrow definition of creative accounting; these are operations which are likely to prove economically insignificant. For example, the US Congressional Budget Office (CBO) routinely publishes an adjusted budget measure, the standardized-budget surplus or deficit, which excludes the effects of such operations. Some self-reversing measures can have insignificant effects on net worth, and prove to be efficient economically at the same time. For example, timing shifts in household transfers can be effective in the case of liquidity constraints. These self-reversing measures can be classified as one-off instead of creative accounting.

The statistical deficit is basically distorted by two kinds of operations. On the one hand, items with insignificant economic effect appear in the budget, while on the other, items which have significant economic effect are excluded (off-budget).

Off-budget activities include quasi-fiscal activities and public investment outsourced into private-public partnership projects.

PPPs may be justified on efficiency grounds, but from the perspective adopted by the OECD their main feature is that they initially reduce the general government deficit and debt for a given level of investment in publicly-used infrastructure (Koen and van den Noord). With this, the profile of the deficit can be altered by switching from traditional government investment to PPP, which holds true even for infrastructure which can profitably be operated by collecting a user fee.

Quasi-fiscal activities are defined by the IMF as: 'Activities (under the direction of government) of central banks, public institutions, and non-financial public enterprises that are fiscal in character – that is, in principle, they can be duplicated by specific fiscal measures, such as taxes, subsidies or other direct expenditures, even though precise quantification can in some cases be very difficult. Examples include subsidized bank credit and non-commercial services provided by an enterprise' (p. 76 in the manual on Fiscal Transparency, IMF).

The statistical deficit includes one-off measures which reduce the deficit and deficit increasing items which are related to the self-reversing effects of creative accounting, for example instalments of PPPs or financing QFAs by capital transfers to public enterprises. Temporary shifts in the timing of taxes or spending can distort not only the cash recording, but also the time adjusted cash recording. In other cases, cash transactions can have an immediate economic effect, while imputed accrual transactions have no impact.

4. CORRECTIONS BETWEEN THE STATISTICAL DEFICIT AND THE 'TRUE' DEFICIT

'Adjustment in these countries was at least partly an illusion.'
(W. Easterly)

There are two ways to estimate the 'true' deficit – directly, through statistical deficit correction (Dafflon and Rossi, 1999; Koen and van den Noord, 2005), and according to the balance sheet approach, considering changes in net financial assets or debt (Easterly, 1999; Kharas and Mishra, 2003; Milesi-Ferretti and Moriyama, 2004; Buti et al., 2006). The latter, aggregated solution is easier to follow in practice, although it is incomplete and does not show the revenue and expenditure structure of the analytical corrections, which is necessary for estimating the fiscal impact.[3] The former, disaggregated solution, in turn, requires detailed estimations. The estimated range of one-off measures has been prepared

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[3] As it evades both deficit and debt, PPP is not shown in the value of the stock-flow-adjustment (SFA) either, which reflects the difference between the two categories. Therefore, the SFA usable for the balance sheet side estimation of creative accounting does not show this item.

Table 3

Sale of future income, budget effect of upfront recording of concession fees

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
One-off revenue	10									
Lost revenue	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

Table 4

The budget effect of real estate sales and lease-back

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Sale of real assets	10									
Fee payment (instalment)	1	1	1	1	1	1	1	1	1	1

for some years in only a number of EU countries (Koen and van den Noord, 2005; Public Finances in EMU, 2004; Kremer et al., 2006). Estimations typically have focused on the revenue side, and therefore, this issue is examined first. Following this, the question of timing of expenditures and tax refunds is reviewed. PPP investment and quasi-fiscal activities are dealt with later and finally their delayed appearance in the statistical deficit is also addressed.

One-off revenues which improve statistical deficit

Various OECD studies (Girouard and Price, 2004; Koen and van den Noord, 2005) have dealt with revenues which improve the deficit only temporarily, and later result in revenue losses or additional expenditure. These types of revenues may include mobile phone concession income, extraordinary payments by state-owned companies, sales of tangible assets and lump-sum revenues which involve long-time disbursement (e.g. taking over the liabilities of a corporate pension fund from a state-owned company, securitisation).

For the sake of simplicity, we assumed that the upfront operation is equal to the outspread effect, but this is not necessarily true in the case of compensations for the transfers to the government of pension liabilities from companies (L.

Paul and C. Schalck, 2007). If these two amounts are identical, then nothing else happens, but the pattern of deficit changes (see the three examples below). A transaction of this nature can typically be considered as a financing operation, and thus, presumably, its economic effect is not significant. Therefore, when calculating the 'true' deficit, it is justified to correct the statistical deficit with it. Accordingly, in its own methodology the MNB has spread the lump-sum revenue of telecommunications concessions over the contract period.

Similarly, one can spread the lump-sum revenue from real assets over a lease-back period.

One-off revenue from transferring the liabilities of corporate pension funds to the government should be also removed. According to our assumptions it would be consistent with a correction with the related pension payments as well.

The effect of timing of individual items

The previous examples show that the statistical time of recording should be corrected by reclassifying capital revenue as a flow of current items. However, problems with the statistical time of recording are more general. In practice, by timing individual expenditure and revenue items, the government can reschedule the deficit between years without an economic effect. In order to eliminate this, the analytical

Table 5

Budget effect of taking over expenditure liability (e.g. corporate pension fund)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
One-off revenue	10									
Expenditure liability	1	1	1	1	1	1	1	1	1	1

Table 6

Time of recording and the economic effect

	Cash basis	Accrual basis
Fiscal impulse	First-round effect	Not applicable
Fiscal impact	Participants with liquidity constraint, OR unexpected measure	Not applicable
	Not applicable	Participants without liquidity constraint, AND expected measure

methodology applied by the CBO corrects the deficit with such measures. It can also be observed that certain EU countries improve the deficit through inconsistent recording of the accrual- and cash-basis approach (Buti et al., 2006).

There are various possibilities to record transactions. Recording on a cash basis is the simplest and fastest, and it is consistent with changes in debt. Recording on an accrual basis is much more complicated. But the question is: which approach is justified in terms of economic effect?

Recording on a cash basis can be considered an approximation of the first-round effect. This estimation of the fiscal 'shock' overestimates the actual impact, as in certain cases at the moment of payment it has no effect or a much less significant effect than the much smoother recording on an accrual basis. However, recording on an accrual basis underestimates the impact, since it smoothes the shock even when it is not justified, for example in the case of households with liquidity constraint *or* when faced with a surprise situation. Accrual recording is justified only where the revenue and expenditure of the current period do not determine the behaviour of the private sector (Levin, 1993) *and* there are no unexpected measures.

A solution in between the two types of recording is needed. In practice, statistical recording also follows a mixed solution, taking as a basis the cash-basis approach or its mechanical adjustment by some months *(time adjusted cash)*. As a consequence of that, it has remained as vulnerable as cash accounts, moreover, these distortions are less easy to identify by monitoring data from the Treasury. Another problem is that it is not a simple statistical issue to decide when recording on a cash basis or on an accrual basis is

justified – that depends on when a liquidity constraint or a surprise can be assumed.

With regard to estimating the fiscal impact, it is necessary to take into account the heterogeneity of the population (Hayashi,1987; Mankiw, 2001; Matsen et al., 2005). In small, open economies the result of involving heterogeneous income groups in the models is that a fiscal shock changes relative prices as well, and even a temporary shock can have a permanent effect on the real exchange rate and the real economy.

While the fiscal impulse which measures the first-round shock could be based on the changes in expenditures and revenues on a cash basis (Philip and Janssen, 2002), the CBO's practice shows that it is worthwhile to perform certain analytical corrections, which are necessary for the assessment of the fiscal impact, immediately at this first level. The MNB has also opted for this approach, correcting the revenue on a cash basis with the effect of the timing of the VAT refund. From the aspect of temporarily bringing the refund forward or postponing it, it is not the effect on the budget balance which matters, but whether this affects the recipient's behaviour, or it can merely be considered as extending or receiving a short-term loan. A delay of some days or weeks apparently has not affected companies' investment decisions, although this is not necessarily true in the event of a several-month delay. In Hungary, this meant distortions in the cash deficit at the end of the year, when this was the only official indicator. By introducing the concept of the accrual deficit the simple time adjusted cash recording was applied. Since this method adjusts cash-basis figures by one or two months, the ESA deficit could also be manipulated by the scheduling of refunds.

Table 7

With unchanged underlying developments (e.g. investment activity) the timing of submitting the invoice and of payment changes

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Decelerating of expenditure	-1		-1		-1		-1		-1	
Accelerating of expenditure		1		1		1		1		1

Table 8

Postponing the fixed settlement day of tax refund, regular subsidy and operational cost by some days (from the end of the year to the beginning of next year)

Change	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Postponement of spending	-1									

Two numerical examples are presented below for the case when settlement on a cash basis (and sometimes on an accrual basis) does not have an economic effect, as it only involves general government borrowing. The first table provides an example for discretionary (ad-hoc) changes in the date of payments. These measures have self-reversing effects, but cannot be corrected by time adjusted cash recording.

The next table gives an example for a one-off improvement, which has no self-reversing effect due to a permanent legislative change in the settlement day of payments. It can be corrected by time adjusted cash recording only if time adjustment is extended e.g. by one month.

Outsourcing public investment into the PPP form

Certain countries use PPPs for circumventing fiscal rules (as well as the deficit and debt at the same time), results in temporary saving (Milesi-Ferretti, 2003; Milesi-Ferretti and Moriyama, 2004; Koen and van den Noord, 2005). The perverse incentives which arise from using long-term contracts in a short-term budgetary framework should be controlled (Monteiro, 2007). The problem related to PPP was already recognised in the United States earlier, thus the CBO follows stricter principles in accordance with business accounting when classifying PPP-type projects outside or within general government. One of the underlying reasons is that if business accounting does not allow certain fixed assets to be accounted for at the private partner, then they must be included in general government. In order to decide on the classification, the final risk is also examined – whether these fixed assets are general purpose assets or they are for the specific purpose of general government, and if they have a private market, i.e. whether they can easily be sold if necessary. According to the World Bank (Irwin, 2003), it is worth moving from the direction of binary classification, i.e. completely private or completely general government classification, towards a continuous classification. Under this approach, both partners may share economic ownership of the asset, recognizing all relevant rights and obligations as assets and liabilities to the extent of those rights and obligations.

When assessing the fiscal impulse or impact, what the MNB examines is whether the government demand results in the creation of new fixed assets. PPP projects exert the same effects as traditional public fixed investment does: they boost domestic demand and deteriorate external equilibrium, irrespective of the extent of risk transfer. However, if the structural deficit was examined, it is the existence of a private market of the given fixed assets based on which it could be decided whether the given PPP is private investment or it can still be classified as general government investment (P. Kiss, 2007).

Quasi-fiscal activities, which circumvent statistics, and appear only subsequently

ESA statistics classify a part of state-owned companies under the government sector and another part under the corporate sector. However, this binary classification is not strict. The

Table 9

Comparison between traditional and PPP investments, if there is no user fee income

Difference	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Investment cost	-10									
Fee payment (instalment)	1	1	1	1	1	1	1	1	1	1

Table 10

Comparison between traditional and PPP investments, if there is user fee income

Difference	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Investment cost	-10									
User fee income	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

loss-making railways, for example, typically remain in the corporate sector. All in all, the general aspect underlying the various criteria of statistical classification into the government sector is whether the given organisation's activities are market-based or non-market-based, as in the background of sectors created in a statistical sense there is an assumption in terms of economics that the economic behaviour of these units is similar. The behaviour of the market sector is determined by the maximizing net worth, i.e. profitability considerations, while the behaviour of the public sector is determined by the objective of maximizing social welfare. Overall, this is what allows us to distinguish between market production, on the one hand, and non-market production as well as redistribution of income and wealth, on the other.

According to the IMF: 'Two separate motivations have been given for separating enterprises into the groups identified as public and private, even though enterprises could very well be categorized as public for one purpose and private for another. One motivation, based on the behaviour of enterprises, is for predicting an economy's reaction to policy changes and external shocks. The second reason, based on the consequences of enterprise operations, is for measuring the distribution of wealth and income within the economy.' (Stella, P. 1993). Quasi-fiscal operations relating to bank assistance should be included in the augmented balance… Bank assistance operations that have substantially divergent cash and economic impacts should, in principle, be recorded in the fiscal balance when the policy affects the economy (Daniel J. and M. Saal: "Macroeconomic Impact and Policy Response", in: *Systemic Bank Restructuring and Macroeconomic Policy,* IMF, 1997).

In 2001, the IMF extended its definition of quasi-fiscal activities to the central bank and non-financial public corporations, and proposed strict criteria for the classification of state-owned companies in 2004: 'This paper proposes nine criteria, falling into four broad categories: managerial independence, relations with government, financial conditions, and governance structure… Requiring that all the criteria be met would minimize the risk of errors in excluding enterprises from coverage, but would probably be too restrictive. It is therefore proposed that all four criteria related to managerial independence and relations with government, plus at least one of the criteria related to each of the financial conditions and governance structure, would have to be met for an enterprise to be considered commercially run.' (Public Investment and Fiscal Policy, IMF, 2004).

Examining the government sector was not considered sufficient in the United Kingdom either. Hence, in 1998 this was complemented by all public corporations, and the indicator of the net borrowing of the public sector was defined. The figures for net borrowing cover the entire public sector, whereas the Maastricht deficit criterion relates only to general government and excludes net borrowing by public corporations.

The analytical correction of quasi-fiscal activities can be performed by reclassifying either companies or their financing transactions. For example, the MNB augments the deficit with the loss-making companies, including the loss-making railways and the capital's public transport, by reclassifying the various forms of financing under government expenditures. This means that financing, credit and guarantees provided by the privatisation organisation and the state-owned development bank are reclassified as imputed current subsidy, removing subsequent capital transfers in a consistent way. It can be seen as a kind of "spreading" technique mentioned by S. Momigliano (S. Momigliano, 2007).

Hidden subsidy in the form of financing is, of course, a wider category; it covers the losses of not only public corporations. While statistical recording does not take into account in the deficit anything from lending by the government as subsidy, the IMF and the CBO divided these items into market (loan) and non-market (grant) components by determining the hidden subsidy included in the loans. 'Because official credit programs offer more lenient terms to borrowers than are available in the market, or in many cases than those at which the government itself borrows, they contain a pure loan component, reflecting the government's role as a financial intermediary, and a pure grant component, reflecting the government's role as a distributional agent (Wattleworth, M. A. 1993). The CBO extended its assessment method to the provision of loan guarantees as well: in the United States, federal offices have been required by law to prepare annual estimations regarding the grants included in the loans and guarantees provided by them. When estimating the fiscal impulse, the method of the researchers of the Treasury of New Zealand sets out from the cash-flow data, but they are corrected by the provision of advances, loans and guarantees (Philip and Janssen, 2002).

The above numerical examples also demonstrate that the financing of quasi-fiscal activities mostly appears as expenditure (debt assumption, PPP instalments) and to a smaller extent as lost revenue (lower user fee, dividend). If the deficit is augmented by the PPP investment, the losses of individual companies and their hidden subsidies, in order to avoid double recording, analytical correction with the expenditure appearing later and with the lost revenue is required as well.

Table 11

Quasi-fiscal activity (under-financed public services, provision of preferential loans and guarantees) with subsequent settlement of debt

Change	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Saving the grant	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Capital transfer					5					5

Table 12

Below-the-line financing of quasi-fiscal activity (e.g. from privatisation)

Change	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Saving the grant	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Lost income from dividend					-0.5	-0.5	-0.5	-0.5	-0.5	-1
Below-the-line financing					*5*					*5*

From this aspect, the analytical correction performed by the MNB so far has remained one-sided in the case of those so-called extraordinary items which typically appeared in the mid-1990s and were mainly related to the subsequent settlement of corporate losses during economic transition (see P. Kiss and Szapáry, 2000). These items have not been taken into account in the augmented deficit, neither at the date of settling the debt nor spread over time. In order to make the true deficit of the early 1990s determinable, these extraordinary debt assumptions should also be attributed to those years when the losses were actually produced. A relevant estimation was prepared earlier (P. Kiss, 2002).

5. CONCLUSION

'Central banks should increase their effort to monitor fiscal policy and to publicly stress the importance of sound fiscal policies' (K. Bernoth and G. B. Wolff)

This paper stressed that the determination of fiscal indicators depends on the aim of the analysis. In the case of structural deficit, for example, it is examined whether a given measure has a permanent impact on the net worth of the government sector or no impact at all (creative accounting), or a temporary effect (one-off measure). As the statistical deficit does not meet the various objectives of examination for natural reasons (e.g. cycle, effect of inflation) and due to creative accounting, it is necessary to create alternative, analytical indicators. This paper has proposed analytical corrections for the assessment of the 'true' fiscal impulse.

In terms of the fiscal impulse, what has to be decided is whether the given measure has an actual economic impact and if so, when. The expenditure can be recorded if and at the date when it is a revenue from the aspect of the *recipient's behaviour*. Similarly, a revenue can be accounted for when it is an expenditure from the aspect of the *taxpayer's behaviour*.

A consequence of examining the 'true' effect is that the recording on an accrual basis cannot be accepted automatically. First, discretionary changes in timing of individual items may distort accrual-basis figures. Second, in certain cases, recording on a cash basis represents a better approximation of the economic impact. Third, recording on an accrual basis does not spread the lump-sum concession payments or delayed capital transfers, which cover the losses of quasi-fiscal activities, to the actual ('true') period of time.

Another consequence of analysing the 'true' effect is that it is not sufficient to remove certain items from statistical expenditures and revenues, it is also necessary to augment them. The subsequent appearance of extraordinary capital transfers also indicates that the government sector's statistical recording does not include all fiscal activities. On the one hand, in order to account for the 'true' effect, expenditures must be augmented by the quasi-fiscal losses. On the other hand, public investment expenditure must be augmented by PPP investment, irrespective of the 'fine tuning' of the risk distribution between the public and private partners, as the short-term demand effect of the traditional and PPP-type public investment is identical.

Finally I summarize our experience regarding this type of analytical indicator. This 'true' measure is consistent in a macroeconomic sense and methodologically more robust than the statistical deficit, which often requires a subsequent upward revision. This kind of analytical methodology allows flexibility supported by expert judgement, and at the same time it requires transparency of methods and data.

Collecting information regarding off-budget items is not a simple task, thus our experts are encouraged to make their own judgements. As a result, the fiscal analysis and forecasts of the central bank are credible and often quoted as a benchmark.

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