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STUDIECENTRUM VOOR ECONOMISCH EN SOCIAAL ONDERZOEK

THE CYCLICALLY NEUTRAL BUDGET AND BELGIAN STABILIZATION POLICY IN THE SEVENTIES

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1. INTRODUCTION

In recent years the Belgian central government budget shows considerable deficits. From this it is often concluded that fiscal policy is actively engaged in thrusting the slow performance of the economy through demand management. This conclusion will be questioned in the present study.

As a preliminary remark it should be noted that the handling of the Belgian budgetary data is seldom correct.
Policy-makers still tend to refer only to the balance on the current account of the budget. Activities, registered on the capital account, are often neglected. However, since 1975 a new budget design was introduced, the so-called unified budget, with the explicit ambition to draw attention to the total budgetary posture.

Historically the Belgian fiscal system inherited a high degree of centralisation. Few activities are assigned to lower levels of government and they are primarly financed by grants-in-aid. Political and fiscal decentralisation, as in federal nations, relieves to a considerable extent the central budget. For international comparisons it is therefore necessary to rely on the consolidated budgetary posture : i.e. all activities of all levels of government, including the social security system.
As consistent budgetary data for the lower levels of government are not always readily available, biases often emerge in international comparisons, simply due to a different coverage of the government sector.

Assuming that the problems of a correct data sampling can be solved, the basic question remains to what extent the actual budgetary posture provides a valid indicator of the countercyclical effect of fiscal policy. It is a standard first approach to refer to changes in the actual budget balance. However this procedure is misleading.

Variations in budgetary items can be the result either of discretionary actions or automatic (induced) budget changes (1). The distinction between active and passive elements in fiscal policy is not always clearcut. Otherwise stated, the budgetary posture influences the economy and vice versa.

Changes in actual budget balances are calculated from total levels of the expenditure and revenue side of the budget.
This procedure thus neglects a weighting of the different budgetary items and in fact reduces to a muliplicand analysis.

Focussing on aggregate demand, it is also quite common to ignore the budgetary incentive effects, e.g. with respect to labor supply, household saving, risk-taking, export and import acitivities ... These can be the result of selective measures such as employment subsidies, savings premiums, depreciation allowances ... It is even more intricate to identify the possible dis-incentive effects.

To capture these deficiencies it is recommended to work with large scale econometric models. However, operational macroeconomic models are not always available, not even in all of the industrialised countries. Moreover, this approach is time consuming and

the results are often difficult to interpret.

As a shortcutthere has been a constant search for rather simple - but theoretically founded - summary measures to assess the stabilization impact of fiscal policy. This interest has been particularly vivid with the practitioners of demand management as there are : the various expert councils to national governments, the secretariat of the OECD (2), the offices of the European Common Market ...

The present paper studies in some detail the German concept of the cyclically neutral budget (CNB). This summary measure was selected for its interesting theoretical background (section 2) and its operational format (section 3). Starting from a long term structural budgetary norm (the CNB) the short term cyclical effect of the budget (CEB) is derived (section 4).
Within the same formal framework the German concept can readily be compared with two of the more familiar summary measures : the U.S. full employment budget and the Dutch structural budget margin (section 5).

It is our main objective to apply the CNB-concept to Belgian data and assess fiscal policy as it was pursued during the last decade (section 6).

Finally, some remarks conclude the paper (section 7).

2. THE CNB : THEORETICAL BACKGROUND

The concept of the CNB has been elaborated by the Geman Sachverständigenrat (SVR). This highly influential Council of Economic Experts presents a yearly report (Jahresgutachten) on overall economic stabilization, both with policy recommendations and more theoretical statements. Although the CNB has been refined in subsequent years (3), the basic characteristics have been maintained (4).

The CNB responds to a long (or medium) term and a short term aim. For the long term assessment of budgetary policy it specifies a norm which is consistent with and supportive of a steady growth path of output at full capacity utilization.
For the short term evaluation it provides a hypothetical yardstick against which the adequacy of the actual budget can be measured. In this section the long term framework is explored. The implications for short term policy analysis are examined in section 4.

The CNB-norm can best be explained using a (strongly) simplified model of the real sector of the economy (5). Starting from the supply characteristics of the economy the expansion path of potential output can be forecasted. On the other hand, given the behavior of private sector demand, one can calculate the 'fiscal gap' to be absorbed by public sector demand.
Combining the required public spending levels with the existing tax structure the CNB can be derived. Each of these steps is now further clarified.

The aggregate production function relates potential output Y_p to only one input i.e. the size of the capital stock K.
It is argued that the supply of labor is highly elastic due to the availability of foreign labor. Furthermore potential output is set proportional to the capital stock with a ratio k, being the inverse of the capital-output-ratio. This leads to the relation :

/1/ $Y_p = k\ K$

Net investment I is also considered to be proportional to potential output with a parameter a, to be interpreted as the propensity to invest :

/2/ $I = a\ Y_p$

The characteristics, as incorporated in equation /1/ and /2/, allow to calculate the expansion path of Y_p.
It follows that :

$$\frac{d\ Y_p}{dt} = k\ \frac{dK}{dt} = k\ I = k\ a\ Y_p$$

or

$$\frac{1}{Y_p}\ \frac{d\ Y_p}{dt} = k\ a$$

Which gives the expansion path of potential output

/3/ $Y_p = Y_{po}\ e^{kat}$

Starting from potential output in the base year Y_{po}, the rate of growth of potential output is determined by the productivity of capital k and the investment rate as summarized by a.

Private sector demand consists of consumption expenditures C, net investment I as already defined in /2/, and foreign demand X.

The consumption function, as written in /4/ is of the simplest linear form with c being the marginal and average propensity to consume. Consumption levels are related to disposable income after taxes T.

However, also here potential output is used :

/4/ $C = c(Y_p - T)$

The treatment of the foreign sector is somewhat peculiar. Imports M are not further specified. Rather net foreign demand (X -M) is related to potential output by a structural parameter f, henceforth referred to as the trade-balance ratio :

/5/ $f = \frac{X - M}{Y_p}$

The required level of public spending G can now be derived by solving the problem using the equilibrium condition /6/

/6/ $Y_p = C + I + G + X - M$

Substitution of /2/, /4/ and /5/ in /6/ and division by Y_p gives :

$$1 = c - c\frac{T}{Y_p} + a + \frac{G}{Y_p} + f$$

and after re-arranging the terms :

/7/ $\frac{G - cT}{Y_p} = 1 - c - (a + f)$

Equation /7/ lies at the heart of the CNB. It states that the weighted budget balance, expressed as a proportion of potential output, should be determined in response to the structural behavior of the private sector of the economy as summarized by the parameters c, a and f. Otherwise stated : as a long term reference the neutral budgetary posture should adjust to the fundamental overall deficiency (or strength) in the private sector of the economy. If the relevant structural parameters remain reasonably stable in the process of growth over the planning period the CNB is consistent with and supportive of the steady growth path of the economy.

Proceeding from the conceptual to the empirical level the CNB can be approached in two distinct ways. First the relevant structural parameters or 'great ratios', i.e. the right-hand side of equation /7/, can be estimated from econometric models. It is evident that larger and more complete macroeconomic models should be helpful. Predominantly the constancy of the great ratios should be investigated. Second, as a practical shortcut, one can search for some past base year during which (i) actual output coincided with potential output and (ii) the private sector components showed a 'normal' behavior. It is then concluded that the budgetary balance (deficit or surplus) which existed in that base year was indeed the appropriate budgetary posture, which should be maintained during the planning period.

Accordingly equation /7/ is transformed into :

$$/8/ \quad \frac{G - cT}{Y_p} = \frac{G_o - c\,T_o}{Y_{po}}$$

where G_o and T_o respectively refer to the level of government

spending and taxes in the base year.

The German SVR favors the second approach, which (needless to say) requires some 'leap of faith' but has definite operational advantages as will be shown in section 3.

3. THE CNB : TOWARDS AN OPERATIONAL MEASURE

Starting from the theoretical framework presented in the preceding section, a set of operational rules is derived.
This set encompasses (i) a selection rule for the choice of the base year; (ii) an expenditure rule; (iii) a tax revenue rule; (iv) a marginal balanced budget rule and (v) a price rule.

The selection of the base year requires an empirical investigation. The guiding principles have been explained in the preceding section. The actual level of public spending and tax revenue in the base year is considered to sustain the overall equilibrium of the economy and is therefore labelled cyclically neutral. Neutrality does not imply that the budget itself should be balanced. The required budgetary posture can result either in a deficit, or a surplus or a balance, depending upon the structural forces in the private sector of the economy.
In operational terms the base year ratio of government expenditure g_o and tax revenue t_o is calculated against the actual (i.e. also the potential) output.

For subsequent years the expenditure rule states that the expenditure side of the budget is cyclically neutral when its percentage increase is equal to the growth rate of potential output. Consequently, the relative share of government expenditure to potential output remains the same as in the base year.

On the other hand the tax revenue rule prescribes that taxes grow at the same rate as actual output to be cyclically neutral. This leads to a constant ratio of taxes to actual output with respect to the base year.

Formally these rules can be summarized as follows :

/9/ $CNB = G_n - T_n$

where (6) G_n = cyclically neutral government expenditure

T_n = cyclically neutral tax revenue

/10/ $G_n = g_o Y_p$

/11/ $T_n = t_o Y$

and also

/12/ $CNB = g_o Y_p - t_o Y$

The introduction of potential output in the expenditure rule /10/ and actual output in the revenue rule /11/ needs some comment. As long as actual output coincides with potential output there is no problem of interpretation. However, let us assume that actual output falls short of potential output.

If government expenditures were to be equiproportionate not to Y_p but to Y, the expenditure side could not be considered cyclically neutral. In fact, this budgetary posture would be contractionary and prevent a return to the steady growth path of the economy. Moreover, even if the growth rate of G exceeds the growth rate of actual output, this would still not be regarded as expansionary, as long as it does not exceed the growth rate of potential output (7).

If on the other hand tax revenue were to be equiproportionate not to Y but to Y_p, the private sector of the economy would be submitted to an extra-burden during a recession. Indeed, the actual share of national income claimed by the government would not remain constant but increase. Private sector demand would further be depressed and it would become more difficult to return to steady state growth.

Note that the neutrality rule for tax revenue implies a unitary tax elasticity with respect to Y. More than proportional revenue increases as a result of expansion and the global progressiviness of the tax system (fiscal drag) are not regarded as cyclically neutral but have a contractionary effect. This view will be further illustrated in section 4.

The <u>marginal balanced budget rule</u> provides some elbow room for a parallel adjustment of the budgetary ratios or 'state quota'. Thus, a secular freezing of the CNB can be avoided. This comes in handy with respect to the fiscal drag. In a growing economy

excess revenues due to the progressiviness of taxation can be channelled either into an overall tax cut or into an equivalent expenditure increase. In the latter case the base year ratios are increased.

Finally the price rule introduces some notion of a cyclically neutral price increase to convert real values into nominal values. In a first approximation price increases are regarded as neutral when they are 'unavoidable' i.e. when they are already determined by last year's developments (e.g. wage negotiations). Additionally a small 'unescapable' increase is accounted for. It is clear that to a large extent these are judgmental values.

4. THE CYCLICAL EFFECT OF THE BUDGET

In real economic life the degree of capacity utilization fluctuates and actual output often deviates from the potential level. For consecutive years over the cycle the CNB can be calculated according to the rules summarized in equation /12/.
These normative CNB-computations provide a measuring rod against which the adequacy of actual budgetary postures can be evaluated.

It should be understood that an actual budget balance, which is equal to the CNB, is atthe same time cyclically adequate only when the economy growths along its steady path and the desired level of capacity utilization is maintained. When the economy tends to move in the direction of an over- or underutilization of capacity,

cyclical adequacy requires the actual budget to prevent this movement. Moreover if already arisen the deviation should be corrected. In these cases cyclical adequacy implies that the actual budget balance should be different from the CNB.

The cyclical effect of the budget CEB is calculated as the difference between the actual budget balance B and CNB :

/13/ $CEB = B - CNB$

A positive CEB indicates an expansionary budgetary posture; a negative CEB is associated with a contractionary posture. For short term analysis the sign and magnitude of the CEB provide an appropriate indicator to assess the cyclical adequacy of actual budgets against the background of prevailing capacity utilization.

It is instructive to rewrite equation /13/ as

/14/ $CEB = G - T - (g_o Y_p - t_o Y)$

or

/15/ $CEB = (G - g_o Y_p) - (T - t_o Y)$

To-the extent that the actual level of expenditure G exceeds the neutral level G_n the expenditure side of the budget contributes to a positive or expansionary cyclical effect.
However, if the actual tax level T exceeds the neutral level T_n the CEB is reduced. It also follows that a sharp drop in actual tax revenue, e.g. during a recession, below the neutral level contributes positively to the CEB and has an expansionary effect. This issue is further illustrated in figure 1. Let us consider

an economy in equilibrium with actual output being equal to potential output Y_{po}. Let tax revenue be depicted in A with a tax level T_o. Due to the global progressiviness of the existing tax system, actual tax revenue T is curvilinear whereas neutral tax revenue T_n should be drawn linearly. Assume next a recession with a drop in actual output to Y_1.

Actual tax revenue is reduced to T_1. The tax shrinkage $T_o - T_1$ consists of two parts : (i) a proportional reduction $T_o - T_{n1}$ which is considered cyclically neutral; (ii) a more than proportional reduction $T_{n1} - T_1$, due to a tax elasticity greater than 1, which results in a lower effective tax rate. This second part is not regarded as cyclically neutral but has a positive counter-cyclical effect.

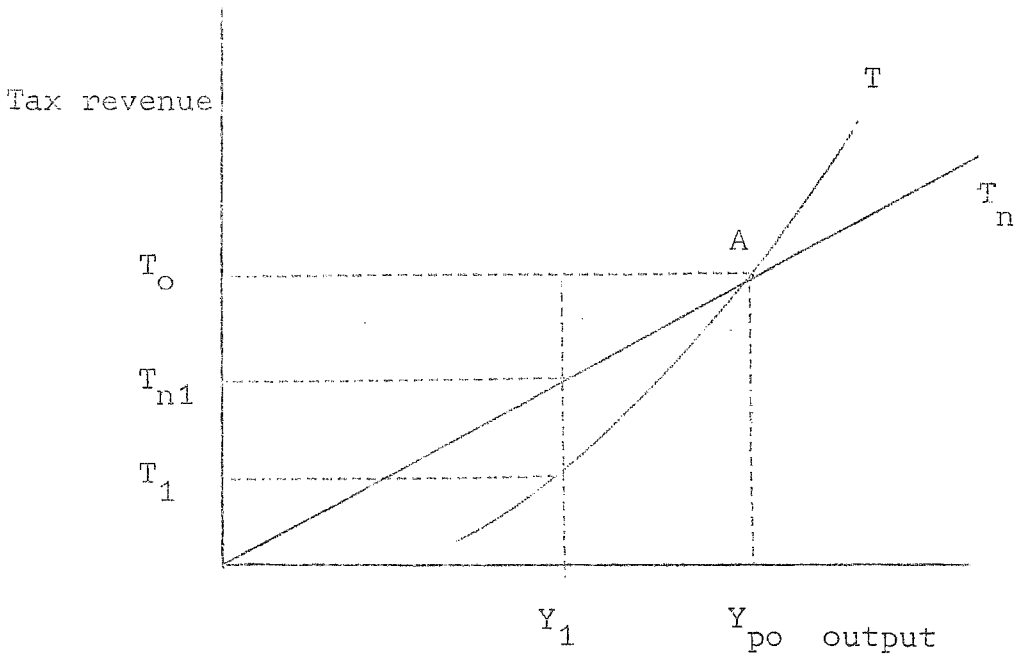


Figure 1

5. THE CNB COMPARED WITH THE FULL EMPLOYMENT BALANCE AND THE STRUCTURAL BUDGET MARGIN

It should be reminded that the CEB does not discriminate between active and passive fiscal policy, i.e. discretionary budgetary measures and income-induced changes in the budgetary levels, as is done by the U.S. full employment balance (FEB). It rather distinguishes between an expansionary and a contractionary budgetary posture. This can be the result of discretionary actions but also parts of the built-in-stabilizers are included.

In this section the differences between the CNB and the FEB-concept are pointed out in a more formal way. It is also interesting to make a comparison with the Dutch concept of the structural budget margin (SBM) and the affiliated budget impulse (BI) measure. To this end both budgetary concepts are reduced to their fundamental characteristics and 'translated' in the usual symbols (8).

The FEB-concept can be expressed as

/16/ $FEB = G - T_p$

Government expenditure G is considered exogenous, whereas T_p refers to tax revenue at potential or full employment output. T_p is further calculated as

/17/ $T_p = T + \tau(Y_p - Y)$

where τ = marginal tax rate

Substitution of /17/ in /16/ gives

/18/ $FEB = G - T - \tau(Y_p - Y)$

or

/19/ $FEB = B - \tau(Y_p - Y)$

The FEB-measure thus corrects the actual budget balance B for tax revenue loss due to underutilization.

Comparison of CEB /15/ and FEB /18/ yields after some re-arrangements :

/20/ $CEB - FEB = (\tau - g_o)Y_p + (t_o - \tau)Y$

Dividing /20/ by Y_p and introducing u for the degree of capacity utilization ($u = Y/Y_p$) gives :

/21/ $\frac{CEB - FEB}{Y_p} = (\tau + g_o) + (t_o - \tau)u$

It follows that if $t_o = \tau$, i.e. the tax system has the unitary elasticity, the difference between the two measures will be constant. Thus one calculated series can readily be converted into the other. However, as this assumption does not hold in most industrialized economies, the difference varies depending upon the deviation from potential output u.

The Dutch <u>structural budget margin</u> is essentially related to the medium term structural development of the economy (9). To assess the short term cyclical policy it is supplemented with a budget impulse measure.

The relative budget impulse (RBI) captures the increase in government expenditures with respect to the previous year. Tax increases are deducted to the extent that they exceed a proportional growth

rate. The algebraic sum of these impulses is related to the expenditure level in the previous year.
This percentage is then compared with the medium term growth rate of output. Formally expressed :

$$/22/ \quad RBI = \frac{(G - G_{-1}) - (T - T_{-1} - \overset{\circ}{y}\, T_{-1})}{G_{-1}} - \overset{\circ}{\bar{y}}$$

where : $\overset{\circ}{y}$ = actual growth rate of output

$\overset{\circ}{\bar{y}}$ = medium term growth rate of output

the subscript -1 refers to the preceding year

Whether RBI is positive, zero or negative, the budgetary impulse is considered to be expansive, neutral of contractive.

When RBI in /22/ is multiplied by the expenditure level in the preceding year G_{-1} the absolute budget impulse (ABI) is derived. Re-arranging the terms this yields

$$/23/ \quad ABI = G - T - \left[(1 + \overset{\circ}{\bar{y}})\, G_{-1} - (1 + \overset{\circ}{y})\, T_{-1} \right]$$

or

$$/24/ \quad ABI = G - T - (g_{-1}\, Y_p - t_{-1}\, Y)$$

Expression /24/ echoes the CEB measure in /14/ with the difference that the state quota do not refer to the selected base year but to the preceding year. This difference is rather fundamental. The ABI measures the cyclical effect with reference to the performance in the preceding year. The CEB measures the cyclical effect with reference to a stable target performance (the CNB) calculated for each year separately. Otherwise stated, with

the ABI the reference point rolls on, whereas the CEB is anchored to a fixed point determined by the overall equilibrium in the base year.

6. THE CNB APPLIED TO BELGIUM

For an assessment of Belgian stabilization policy during the last decade 1970 is selected as the base year. This year corresponds to a peak, according to the business cycle indicator published by the Kredietbank (10). In that year the annual growth rate of real GNP was 6,5 pct.; the inflation rate (implicit GNP-deflator) was limited to 4,6 pct. Unemployment oscillated around 70.000 which is 2 pct. of the civilian labor force. The balance of payments was satisfactory..

For the base year calculation of the state quota yields :

$$g_o = 25{,}00 \text{ pct.}$$
$$t_o = 23{,}23 \text{ pct.}$$

Data for actual government expenditure G are on cash-basis as recorded by the Treasury (11). G includes ordinary and extraordinary expenditures. However, expenditures for the amortization of the consolidated debt are deducted to be consistent with the format of the unified budget, which is the new budget design since 1975. Actual tax revenue T is also on cash-basis and adds direct to indirect taxes. Moreover a limited amount of non-fiscal revenue is included.

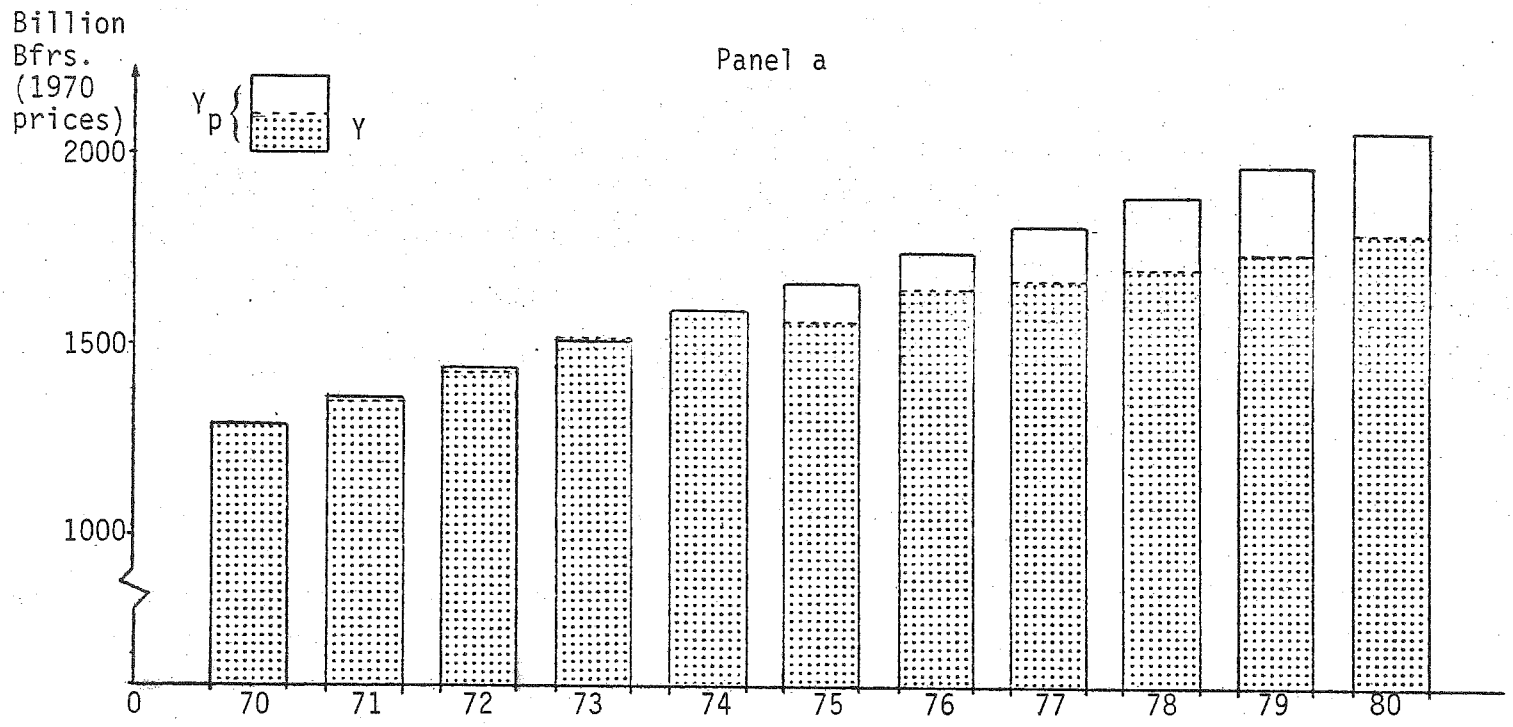
For the consecutive years potential output Y_p is calculated through the linked-peaks-method. It is somewhat difficult to locate the next cyclical peak. The year 1973 shows the highest growth rate (again 6,5 pct.) but the Kredietbank-series indicates 1974 as the peak-year. Selecting 1974 as the peak-year gives an annual growth rate of potential output of 5,36 pct. for the interjacent years.

It is debatable whether this relatively high growth rate can be projected into the future. As in most other Western economies the crisis was perceived from 1975 on.
It can be argued that the energy crisis and the deterioration of the terms of trade reduce the secular growth of the industrialised economies (12). Therefore a more moderate growth rate of 4,4 pct. was calculated on the basis of output expansion over the whole period 1953-1974. To some extent the golden sixties are thus weighted against the slow performance of the 'ancient' fifties.

Estimates of potential real GNP (at 1970 prices) are presented in figure 2 panel a, together with the data for actual real GNP. For further comparisons with budgetary series in nominal terms, it is useful to convert the real values into nominal values, multiplying by the index of the GNP- deflator. This will be indicated by the postscript n; Y_{pn} stands for potential nominal GNP.

In table 1 the actual budget deficit B (line 3) is calculated from actual government expenditure G and tax revenue T. Applying the government expenditure rule /10/ and tax revenue rule /11/ the

Figure 2.


Billion
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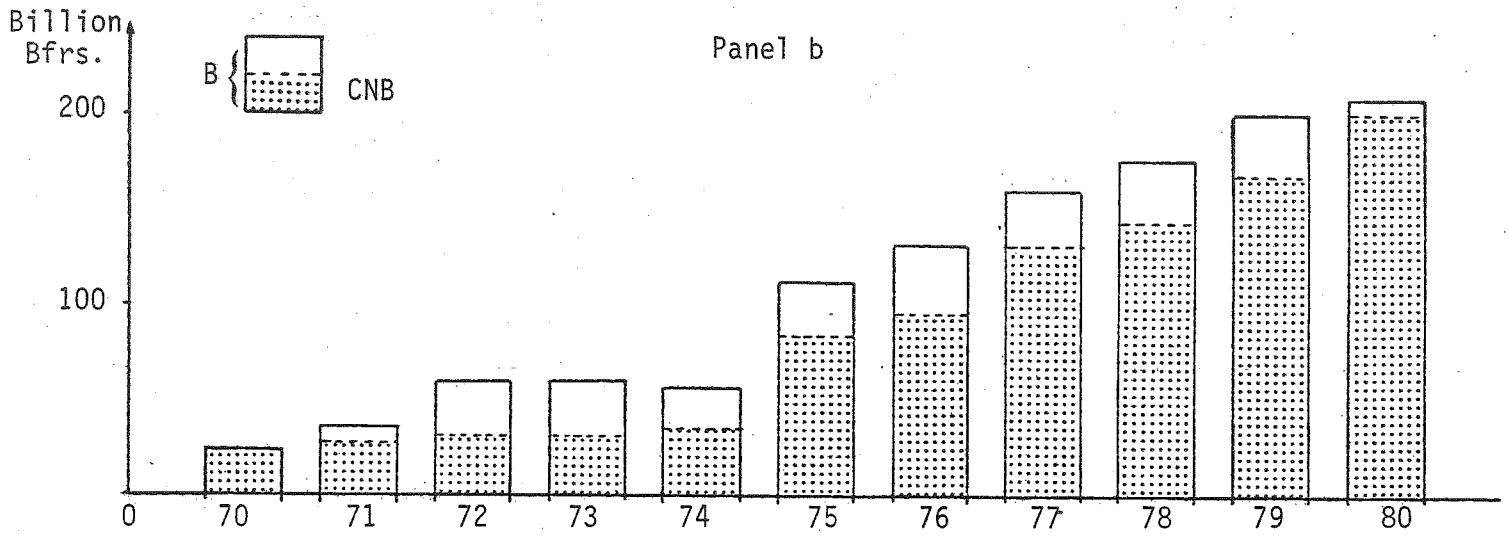
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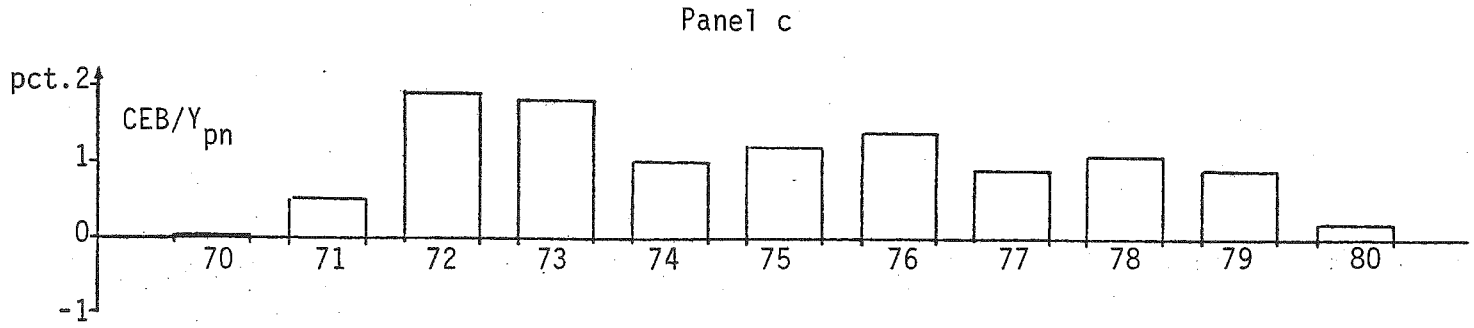
Panel c
pct.2
CEB/Ypn
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73
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78
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80

Table 1. The CNB applied to Belgium

	1970	1971	1972	1973	1974	1975	1976	1977	1978(e)	1979(e)	1980(e)
(1) Actual government expenditure G	322,9	363,0	432,6	497,9	576,3	736,9	836,1	956,9	1066,4	1145,7	1245,8
(2) Actual tax revenue T	300,1	326,1	372,8	435,8	518,5	617,0	704,5	795,2	887,7	945,1	1036,1
(3) Actual budget balance B (1) - (2)	22,8	36,9	59,8	62,1	57,8	113,9	131,6	161,7	178,7	200,6	209,7
(4) Cyclically neutral expenditure G_n	322,9	357,9	398,3	447,7	529,3	627,9	711,8	801,7	852,2	932,4	1031,9
(5) Cyclically neutral revenue T_n	300,1	328,8	368,1	417,3	491,7	542,7	618,1	668,3	710,1	765,7	831,2
(6) Cyclical neutral budget CNB (4) - (5)	22,8	29,1	30,2	30,4	37,6	85,2	97,3	133,4	142,1	166,7	200,7
(7) Cyclical effect of the budget CEB (3) - (6)	0	7,8	29,6	31,7	20,2	28,7	37,9	28,3	36,6	33,9	9,0
(8) Relative impulse measure CEB/Y_{pn}	0	0,54	1,86	1,77	0,95	1,15	1,36	0,91	1,07	0,91	0,22

Notes : Column(1) trough (7) : billions of BFrs. Column (8) : percentages
(e) = estimates as not all of the required data are yet available. Computations are primarily based on the Budget Massage 1979 (Algemene Toelichting) and its first draft for 1980. Expenditure levels on transaction basis (ordonnanceringskredieten) are converted to cash basis.

Data sources : Statistisch Tijdschrift, Nationaal Instituut voor de Statistiek, Brussels. Documentatieblad, Ministerie van Financiën, Brussels.

neutral G_n and T_n are calculated. The CNB estimates are derived applying /12/ as is presented in line 6. Confronting B with CNB, the CEB, following expression /13/, is calculated in line 7. Finally in line 8, CEB is expressed as a percentage of Y_{pn}. Note that B and CNB are also presented in figure 2 panel b, wereas CEB/Y_{pn} figures in panel c.

For an assessment of the adequacy of fiscal policy against the prevailing economic conditions we first refer to the relative impulse measure CEB/Y_{pn}. This measure shows a positive sign throughout the decade (the average is 1,054 pct.), which implies that in some years (the booming years) fiscal policy must have been perverse.
This has been particularly the case in the peak years 1973-74 for which the calculations show i) positive signs with ii) high numerical values. Both observations indicate a wrong application of fiscal policy.
For these years a movement towards negative figures recommended.
It thus appears that the policy-makers were unable to curb the macroeconomic fiscal action. Instead, inflationary pressures were exerted. In 1974, for the first time, the inflation rate reached two digits.

It is interesting to note that in an earlier study also the fifties and sixties were covered (13), for which fiscal policy seems to have performed significantly better. Application of the CEB-measure to the period 1953-1970, shows that contractionary and expansionary policies were alternated. The timing and the strength of fiscal action was not always optimal but noticeable errors were avoided.

Let us turn to a brief overview of the short term adequacy of fiscal

policy. After the peak year 1970 the economy slowed down in 1971-72. An expansionary fiscal action, as it was pursued, could thus be defended. In the last quarter of 1972, the recovery was well under way. As already noted from 1973 on a more contractionary policy was needed. Here famous errors were made.

The economic crisis, in 1975 and subsequent years, requires an expansionary policy. Positive figures rightly emerge but the numerical values oscillate around and even below the decade-average of 1,054 pct. Fiscal policy clearly lacks the strength to thrust the retrograding economy. The cyclical effect of the budget is primarily the result of the built-in-stabilizers : expenditures for unemployment allowances soar, tax revenues fall short of the official government forecasts. Few discretionary actions are undertaken.

Let us consider the economic turning point in 1975 in some detail. In that year the actual budget deficit doubled; so did the cyclically neutral budget deficit. As a result the expansionary cyclical effect of the budget was rather limited, compared with the preceding year. If on the other hand the prescribed contractionary policy had been adopted in 1973-74, the 1975 budgetary posture would have produced a much stronger expansionary force. This indeed was achieved by the government budget in Germany for 1975.

It is also interesting to note that in 1975 the ratio of actual tax revenue T to neutral tax revenue T_n increased dramatically, although real output showed a negative growth rate of 2 pct. However, inflation amounted to 12,7 pct. so that nominal GNP - and

also the global tax base - still increased with 10,4 pct.

This development offered an excellent occasion to compensate direct taxes for inflation. The proper amount of the tax reduction should be caculated to capture the combined effects both of inflation and the global progressiviness of the system of direct taxes. Such a tax reduction can be defended on the grounds of equity and is in fact as a rule applied in the Dutch budget.

In Belgium only a fraction of the calculated equitable amount had been released to the tax payers. A reduction of direct taxes for the total amount would again have strengthened the expansionary effect of the 1975-budget. Instead, the net result of a the whole package of discretionary actions amounted to a tax increase of 22 billion BFrs.

In the late seventies, apparently under the pressure of the public opinion, the budgetary posture has become more control - than stabilization - oriented. It thus appears that in 1979-80 the ratio of actual government expenditure G to the neutral level G_n has decreased for two consecutive years. On the other hand, actual tax revenue still grows, even if it falls short of the official government forecasts. As a result the difference between the actual budget deficit and the cyclically neutral balance has narrowed.
For 1980 the actual deficit (209,7 billion BFrs.) is virtually cyclically neutral (the CNB is 200,7 billion BFrs.).

Consequently, the relative impulse measure for 1980 (0,22 pct.) is the lowest of the whole decade. As the economy still performs poorly, a more expansionary budgetary policy can be defended. Theoretically a more expansionary cyclical effect of the budget can be achieved following different policies ranging from an increase in G for a given level of T to a policy where a decrease in G is matched by an even stronger reduction of T.

Inspection of the budgetary posture for 1980 gives some valuable insights to select an appropriate policy. One observes that for 1980, although the budget balance is cyclically neutral, the budgetary levels are well above the neutral levels with an overage of 200 billion BFrs. In proportional terms however T exceeds T_n with 24,6 pct. whereas G is 20,7 pct. higher than G_n. This observation points into the direction of a policy which focusses on a tax reduction. A moderate tax reduction requires the expenditure level G at least to be maintained; a strong tax reduction can be accompanied by some decrease in G.

It should be reminded that these policy recommendations rest on macroeconomic arguments. However, budgetary policy covers a much broader field. This paper has not dealt with the very important aspects of distributional equity and allocative effectiviness of the budget.

7. CONCLUSIONS

The present paper stresses the need for a summary measure to evaluate the macroeconomic adequacy of fiscal action. It is evident that overall stabilization policy covers a broader field and that its practice requires the application of other instruments which come under the traditional headings of monetary policy, foreign-exchange policy, incomes policy and institutional policies. It is also evident that within the framework of fiscal policy itself, a disaggregated demand management may be needed focussing on selective sectoral and/or regional imbalances.

For the theory and practice of fiscal policy it is rather ambitious to summarize a complex fiscal impact in a single figure. However, the standard procedure, limited to an examination of changes in the actual budget balance, is at best a first approximation. This procedure clearly lacks a more substantial theoretical background and may lead to incorrect policy conclusions. It is thus necessary to direct part of the attention of the policy-makers and the general public to a more satisfactory summary measure, be it a hypothetical figure.

The German concept of the cyclically neutral budget serves this purpose. Starting from a long (or medium) term forecast of the equilibrium growth of the economy, the proper role of fiscal action, i.e. the cyclically neutral budgetary posture, is derived. For short term policy evaluation actual budgetary postures are then compared with this hypothetical yardstick.

Application of the CNB concept to Belgium reveals that policy-makers applied the wrong policy in the booming years 1973-74. In the pre-boom-years 1971-72 an expansionary policy could be defended and was in fact pursued. In the crisis-years, from 1975 on, an expansionary policy was recommended. Fiscal policy went into the right direction, but was lacking strength. Gradually, under the pressure of public opinion, the budgetary policy became more control - and less stabilization - oriented.

It thus appears that for policy-makers it is particularly difficult in the booming years to stick to an adequate policy, which then coincides with a stringent fiscal discipline.
Therefore, in the Belgian context, a budgetary norm is strongly recommended.

Any such norm should at least satisfy the three following conditions :

(i) have a solid macroeconomic foundation;

(ii) focus on the balance of the unified budget (i.e. broader then the current account);

(iii) have a compulsory character for the medium term.

The present paper has studied point (i) in some detail. Condition (iii) is very important for the implementation phase. The introduction of a budgetary norm only makes sense to the extent that it has a compulsory power over a sequence of budget-years. Eventually over subsequent legislations, as the political time horizon seems to be rather short.

The norm should be directed towards the balance of the budget (ii) and not to the absolute levels of government expenditure or tax revenue. For the political decisionmakers there remains ample elbow room to adapt the level and composition of expenditures and tax revenue to the preferences of the community, as they are revealed in eventual changing majorities. Otherwise stated, flexibility is guaranteed with respect to the allocative and distributive aspects of the budget, whereas for stabilization purposes the budgetary norm remains coercive (14).

Notes and references

(1) For a distinction between discretionary actions and automatic effects see the seminal article by B. HANSEN, On the Effects of Fiscal and Monetary Policy : a Taxonomic Discussion, American Economic Review, sept. 1973, pp. 546-571.

(2) It is ironic to note that in a recent comprehensive study of the OECD there is no single reference to a Belgian budgetary indicator. See Var. Aut., Budget Indicators, Occasional Studies, Paris, OECD, july 1978, pp. 1-34.

(3) The most comprehensive exposition is presented under the heading "Zu Elementen einer potentialorientierten Konjunkturpolitik" in:Sachverständigenrat, Konjunktur im Umbruch-Risiken und Chancen, (Jahresgutachten 1970/71), Stuttgart and Mainz, Verlag W. Kohlhammer, 1970, pp. 91-102. See also "Methodische Erläuterungen" in : Sachverständigenrat, Gleicher Rang für den Geldwert, (Jahresgutachten 1972/73), ibidem, 1972, pp. 181-183.

(4) Sections 2, 3 and 4 draw heavily on the excellent study by T.F. DERNBURG, Fiscal Analysis in the Federal Republic of Germany : The Cyclically Neutral Budget, IMF Staff Papers, november 1975, pp. 825-857.

(5) For ease of exposition prices are held constant so that variables in nominal terms can be interpreted as real values. This assumption of price constancy will be relaxed further on.

(6) The equilibrium condition /6/ requires that G stands for exhaustive government expenditure. Transfer payments are considered as negative taxes; so T is to be interpreted as net taxes. However for empirical work it is more convenient to add transfer payments to the expenditure side of the budget. The familiar symbol G will be retained but henceforth incorporates government exhaustive expenditure plus transfer payments.

(7) In the late seventies the 'zero-line' (nullijn) principle was introduced in the Belgian budgetary policy. This principle states thatthe annual growth rate of the current expenditure account of the budget (exception made for a few specific items) should not exceed the growth rate of GNP (real growth and price increase combined). Evidently this rule is control-oriented and lacks a theoretical foundation for stabilization purposes.

(8) An analogous comparison is made by D. BIEHL, G. HAGEMANN, K.H. JUETTEMEIER and H. LEGLER, Measuring the Demand Effects of Fiscal Policy, in : H. GIERSCH (ed.), Fiscal Policy and Demand Management, Tübingen,S.C.B. Mohr, 1973, pp. 223-241. See also S.K. CHAND, Summary Measures of Fiscal Influence, IMF Staff Papers, july 1977, pp. 405-449.

(9) See e.g. H. BURGER, Possible Concepts for Better Planning and Evaluating Fiscal Policy-Experiences in the Netherlands, in : H. GIERSCH (ed.), Fiscal Policy and Demand Management, ibidem, pp. 201-222.

(10) Weekly Bulletin, Brussels, Kredietbank, various numbers.

(11) Documentatieblad, Brussels, Ministerie van Financiën, july 1976, pp. 189-205. See also various subsequent numbers.

(12) This point is made by R.H. RASCHE and J.A. TATOM, Energy Resources and Potential GNP, Federal Reserve Bank of St. Louis Review, june 1977, pp. 10-24.

(13) K. COOL and W. MOESEN, Budgetsaldi en de anticyclische bijdrage van de budgettaire politiek in België, 1953-1977, Economisch en Sociaal Tijdschrift, april 1979, pp. 161-176.

(14) In the German literature there has been an interesting debate with respect to the allocative aspects of the cyclical neutral budget. See G. KRAUSE-JUNK, Zum Konzept des Konjunkturneutralen öffentlichen Haushalts, Finanzarchiv, vol. 30, nr.2, 1971, pp. 212-223. K.P. FOX, Noch einmal: Zum Konzept des Konjunkturneutralen öfftenlichen Haushalts, Finanzarchiv, vol. 31, nr.1, 1972, pp. 18-26.