DUTCH VERSUS SWEDISH BUDGETARY RULES: A COMPARISON

Willem Heeringa[*] *and Yngve Lindh*[**]

1. Introduction

After the negative development of public finances in many European countries in the 1980s and the early 1990s, some countries introduced reforms of their budget processes. So did for instance the Netherlands and Sweden. The Netherlands adopted a trend-based budgetary policy in 1994, after a period of budgetary consolidation which had started in the early 1980s. Sweden implemented new budgetary procedures in 1997, after having suffered the most severe fiscal crises of the 20th century. In both countries, the introduction of multiyear expenditure ceilings were important features of the reforms. In the Netherlands, these ceilings are formulated in real terms, while in Sweden they are nominal. Real-expenditure ceilings, together with a cautious macroeconomic scenario and income reference levels, constitute the pillars of the current budgetary framework in the Netherlands. In Sweden, a medium-term target for the budget surplus has also been adopted as part of the system.

The new budgetary rules have now been in use for some years in both countries and at least some tentative conclusions can be drawn about their qualities and effects on economic development. This paper focuses on the interaction between the two systems of budgetary rules and the macroeconomic development. Have the systems been helpful in supporting macroeconomic and budgetary developments? To what extent do the budgetary rules allow the budget to act as an automatic stabiliser? How do they cope with different types of shocks? For that purpose, this paper starts in Chapter two with a short presentation of the two systems, their history and their main properties. In the third Chapter a descriptive analysis is given of recent macroeconomic and budgetary developments in the two countries. The fourth Chapter sheds light on some specific problems of

---

[*] De Nederlandsche Bank.

[**] Ministry of Finance - Sweden.

The views expressed are the personal opinions of the authors and do not necessarily reflect the opinions of De Nederlandsche Bank or those of the Swedish Ministry of Finance. The authors are grateful for comments from Ron Berndsen, Ted Reininga, Job Swank, Urban Hansson-Brusewitz and Tomas Nordström.

both systems. In the Dutch case, the consequences of the use of a cautious macroeconomic base scenario and the problems related to the use of the GDP deflator to transform real ceilings into nominal equivalents are discussed. In the Swedish case soft uncertainty margins are the main problem. The fifth Chapter provides an assessment of the stabilising properties of the current Dutch and Swedish budgetary rules. Especially tendencies towards pro-cyclical behaviour are analysed. The sixth Chapter concludes with a comparison between the two systems of budgetary rules.

2. Budgetary rules in the Netherlands and Sweden

2.1 Current Dutch budgetary rules

The current Dutch budgetary framework has been introduced in 1994, when the first, so-termed "purple" coalition cabinet of Social Democrats (PvdA), Liberals (VVD) and Democrats (D66) took office. By introducing a trend-based budgetary policy, the Minister of Finance followed the advice of the 9th Study Group on Budgetary Margin[1]. In its second term (from 1998), the purple coalition has – apart from some minor modifications – basically maintained this budgetary framework. The current trend-based budgetary policy rests on three pillars: a cautious macroeconomic scenario, real net expenditure ceilings and (since 1998) real income reference levels combined with a formula stipulating how windfalls and shortfalls are to be treated. The revenue and expenditure sides of the budget are strictly separated in this budgetary framework. This implies that decisions concerning expenditures and revenues should in principle be made independently and should not interfere with each other.

2.1.1 Cautious macroeconomic scenario

The coalition agreement is based on a cautious baseline macroeconomic scenario for four years in advance. The adoption of a cautious scenario implies *inter alia* that economic growth underlying the budgetary projections in the coalition agreement is assumed to be 2 per cent per year. In order to capture the favourable economic effects of sound

[1] This group ("Studiegroep Begrotingsruimte") consists of the highest-ranking civil servants of the financial and economic ministries, an executive director of the central bank and the director of the Netherlands Bureau for Economic Policy Analysis (CPB). See Studiegroep Begrotingsruimte (1993).

budgetary and economic policy, another ¼ percentage points of economic growth were added in the past and current cabinet term, resulting in an assumed 2¼ per cent economic growth per year. This is about ¼ percentage points below the trend economic growth calculated as the average over the past 20 years. Economic and budgetary developments in this cautious scenario are calculated by the independent Netherlands Bureau for Economic Policy Analysis (CPB). CPB's calculations of the *ex ante* budgetary room for the cabinet term play a pivotal role in the set-up of the coalition agreement. Obviously, the adoption of cautious macroeconomic assumptions implies that *ex ante* the new budgetary room created by the endogenous growth of revenues is rather limited. The adoption of the cautious macroeconomic scenario does not only assume relatively low economic growth, but also relatively moderate wage increases and low interest rates. However, this is offset by a relatively unfavourable development of the number of social security benefit recipients in the cautious scenario. All in all, autonomous growth in expenditures in the cautious scenario is not very different from a more favourable scenario[2].

The cautious assumptions imply an asymmetry in unexpected budgetary developments: the probability of budgetary windfalls is in theory greater than the probability of setbacks. This is especially the case for government revenues. The asymmetry reduces the need for additional measures during the cabinet term once the coalition agreement has been settled. It also facilitates an orderly execution of the budget. From an administrative point of view, this gives the Minister of Finance a comfortable and strong position in the cabinet. However, from an economic point of view, it could be argued that a true *trend*-based budgetary policy should be based on *trend* economic growth. Obviously, every trend estimate is surrounded by significant uncertainties, especially for an open economy like the Netherlands. Apparently, the two purple cabinets have chosen to minimise the chance of unexpected negative economic and budgetary developments by taking the lower range of expected economic growth as the baseline scenario. This choice was mainly motivated by a desired reduction of the government deficit and debt rate.

---

[2] CPB (1997).

2.1.2 Real fixed net expenditure ceilings

Expenditure ceilings form the second pillar of the trend-based budgetary policy framework. The ceilings apply to net expenditures i.e. gross expenditures minus most non-tax revenues (for example, gas revenues). They are defined in real terms, i.e. in constant prices and set for four years in advance in the coalition agreement. In the spring of every budgetary year, they are transformed into nominal ceilings by multiplying them with the most recent estimate of the GDP deflator. Separate ceilings exist for three budgetary sectors: the central government, social security and health care. Any overspending of the ceilings must in principle be compensated immediately within the sector in which the overspending occurs. General compensation by transfers from any other budget to the budget under consideration can only be decided by the cabinet. The budgetary rules allow for a limited carry-over facility: ministries can advance or postpone 0.25 per cent of the total budget to the current or following year. When the second purple coalition took office in 1998, it was agreed that expenditure windfalls stemming from a favourable macroeconomic development should be set apart to compensate for possible terms-of-trade losses. Furthermore, it was agreed that these expenditure windfalls could be used to offset setbacks in other sectors. Although officially not allowed in the first cabinet term, in actual practice it had happened already quite often. At the same time, an overall expenditure reserve of approximately € 0.1 billion per year was created for unforeseen expenditures. The main reason for the introduction of these ceilings seemed to be a desired reduction in government expenditures (measured as a percentage of GDP). Furthermore, the ceilings give the Minister of Finance a strong position from a political point of view as they provide him with a control device over the development of government expenditures. Thus, from an administrative point of view, real-expenditure ceilings are the cornerstone of the trend-based budgetary policy. The 11th Studiegroep (2001) advised to maintain the system of real net expenditure ceilings for the next cabinet term with some minor modifications (see Chapter 4.1).

2.1.3 Real income reference levels

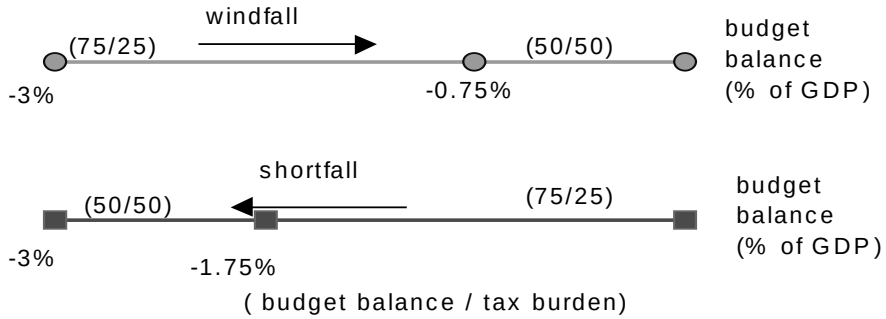
The real income reference levels as introduced in 1998 form the third pillar of the current trend-based budgetary policy. The real reference levels are projected for four years in advance in the coalition agreement and, just like the expenditure ceilings, are based on the cautious

macroeconomic scenario. In order to be transformed into nominal equivalents, they are annually multiplied with the expected GDP deflator for year t. This is done in September of year t-1 when the Budget Memorandum for year t is presented to Parliament. The main function of the reference levels is to estimate expected income windfalls or setbacks. More specifically, these are determined by comparing the projection of nominal government revenues for year t with the nominal reference levels for year t. This takes place in August of year t-1, when the Budget Memorandum for the next year is drafted. Thus, the determination of the revenue windfalls or setbacks is forward-looking by nature. Under the first purple coalition (1994-1998) it was already agreed that expected windfalls should be used for either a reduction of the deficit or a reduction of the tax burden, but not for extra expenditures, reflecting the disconnection of the revenue and spending side of the budget. However, as it was not exactly specified how windfalls should be distributed over the deficit and the tax burden, this was a rather loose agreement. In practice, this led to a bias to tax reduction in the first purple cabinet term. The coalition agreement of the second purple cabinet stipulated exactly how windfalls and setbacks on the revenue side were to be treated. The strict rule was maintained that revenue windfalls were not be used for extra expenditures and that revenue setbacks must not compel additional cutbacks. As for income shortfalls and windfalls, it was decided that three-quarters of any *expected* revenue windfall would be absorbed by the budget balance and one quarter by tax changes, as long as the budget balance would be less than -0.75 per cent of GDP. Windfalls are distributed equally among the deficit and the tax burden, if the budget balance exceeds -0.75 per cent of GDP. *Expected* revenue setbacks are absorbed for three-quarters by the budget balance and for one quarter by additional taxes, as long as the budget balance is not lower than -1.75 per cent of GDP. The distribution is adjusted to 50/50, if the budget deficit is more than -1.75 per cent of GDP (see Figure 1).

Moreover, it was also agreed that the rule would not be applied if the deficit were to surpass the 3 per cent limit. The tax changes resulting from this income windfall/shortfall formula come on top of the relief of the tax burden already agreed by the coalition agreement (*ex ante*). However, any *unexpected* additional deviation from the reference levels occurring *during* the budgetary year, but not foreseen in the budget memorandum, is absorbed in the budget balance and does not lead to tax changes. Thus, the income side of the budget is allowed to operate fully as an automatic stabiliser only during the budgetary year. Obviously, the windfall/shortfall-formula *ex ante* restricts the functioning of the budget as an automatic

Figure 1

Distribution of revenue windfalls and shortfalls between budget balance and tax burden



stabiliser: windfalls are partly returned to taxpayers, while shortfalls are partly offset by tax increases (see also Chapter 5). Hence, the formula is a compromise between a desire for budgetary macroeconomic stabilisation, on the one hand, and the desire to reduce the deficit or to lower the tax burden on the other. Apparently, the second purple coalition considers tax reduction more important and automatic stabilisation less important the more the deficit is reduced. In addition to interfering with the operation of automatic stabilisers, it should also be noted that the formula is at variance with Barro's tax smoothing theorem[3]. According to this theorem, the distortionary impact of taxes is minimised when tax rates are held constant over time, which is not the case under the windfall/shortfall-formula.

2.2 Current Swedish budgetary rules[4]

After the pronounced weakening of the Swedish public finances both in the early 1980s and in the early 1990s, with the latter episode witnessing the most severe fiscal crisis in the country during the whole 20th century, reforms of the budget process were introduced. The Swedish authorities believed that the earlier, rather loose process, was one of the factors behind

---

[3] See Van Ewijk en Reininga (1999).

[4] The description of the budget process is based on Molander (2000), OECD (1998), and the Swedish Ministry of Finance (1999).

the crises. Central features of the new budget process, implemented in January 1997, are a ”top-down” budgetary process, multiyear expenditure ceilings and a medium-term target for general government’s net lending**.**

Parliament has endorsed the government’s medium-term goal of a surplus in general government net lending corresponding to an average of 2 per cent of GDP over the business cycle. The general government includes the central government, the local governments (counties and municipalities) and the old age pension system. According to the *Budget Bill for the year 2000*[5]*,* the targets, after a phase-in period, came into effect in the year 2000 and the targets for 2001 and 2002 were to remain unchanged at 2 percent of GDP[6]. However, it was underlined that, if for cyclical reasons growth were to be significantly stronger or weaker than expected, an equivalent deviation for general government net lending would be tolerated. In the *Budget Bill for the year 2001*[7] the *medium-term goal* is still 2 percent of GDP. However, a short-term target for the year 2001 was announced and set to 2½ per cent of GDP with the motivation that the economy approaches a situation of full utilisation of productive resources and that there is some risk of unduly high wage increases in 2001. As has been pointed out by Fischer and Reitano (2001) a potential problem with medium-term surplus target is monitoring. Structural indicators are notorious difficult to measure and the Swedish authorities have earlier been reluctant to publish such a measure. In connection to the Spring Bill 2001 a first step is taken to develop a comprehensive framework for analyses of fiscal policy including a measure of structural surpluses.

The ”top-down” budgetary process assigns a clearer role to the Ministry of Finance in drawing up the budget compared to the earlier process. In the first phase it is the Ministry’s responsibility to update the multiyear framework. This update contains forecasts for the current budget year and calculations of key macroeconomic figures related to the trend development of GDP for the two next years[8]. Parallel to these macro figures, forecasts of the consolidated governments revenues under current

---

5 Swedish Ministry of Finance (1999).

6 *Ex ante,* the targets were set to –3.0 in 1997, 0.0 in 1998, 0.5 in 1999 and 2,5 in 2000. *Ex post,* the outcomes were –1.6, 2.1, 1.7 and 4.1.

7 Swedish Ministry of Finance, (2000).

8 In the Spring Bill for 2001 presented in April 2001 forecasts applies to the years 2001 and 2002 and projections to the years 2003 and 2004.

tax rules are carried out. The three-year framework also includes *nominal expenditure ceilings* for the coming three years. For the years t+1 and t+2 these ceilings are already laid down in decisions of earlier years. The ceilings are guideline decisions. However, there is a strong commitment to maintain previously agreed levels unless overriding reasons justify a change. So far, earlier ceilings have been maintained with a few exceptions for purely technical reasons, i.e. typically necessary adjustments dependent on internal transaction changes in the public sector. For the year t+3, the decision is taken on the basis of the revenue forecast for the year t+3 and the necessary surplus fulfilling the medium-term target. Hence, the surplus target can in a sense be seen as being superior to the expenditure ceilings and the ceilings can be seen as operative complements to the surplus target which are more easy to monitor. However, the ceilings also have the independent aim of restricting tax and expenditure ratios.

At a cabinet meeting in March every year the macro and revenue forecasts and nominal expenditure ceilings are laid down. In cabinet meetings, the expenditure ceiling for year t+3 and indicative levels of expenditures for 27 different expenditure areas are also set. These cabinet decisions are based on recommendations by the Ministry of Finance. The sum of these levels of expenditures in the 27 different areas is less than that of the ceilings for total expenditures. The difference constitutes *the budget margin* (*contingency reserve)*, which forms a buffer against forecasting errors and unspecified room for reforms[9]. Thereafter, the allocation between appropriations within each expenditure area is carried out. Thereafter, the framework is discussed and approved by Parliament during its spring session. Opposition parties can propose alternative expenditure ceilings, but the probability that parties of different backgrounds unite over such proposals is low. Hence, the government's position is strong and definitely stronger than under the system before 1997. The new framework constitutes a binding framework for the further budget processes and has probably improved budgetary discipline.

The binding nominal tri-annual expenditure ceilings include central government expenditures and old age pension costs, but not interest costs. The ceilings cover approximately two-thirds of total expenditures and roughly 50 per cent are transfers to households and 20 per cent public consumption and investment. Cyclically sensitive expenditures, such as

[9] When the expenditure ceilings were first set in the Budget Bill for 1997 the margins were set to 1.5, 2.0 and 2.5 per cent of total expenditures for the years 1997 through 1999.

expenditures on active labour market programmes, unemployment benefits and social security are included. The choice of nominal expenditure ceilings implies that inflation is treated as all other factors effecting expenditures without any automatic adjustments. Interest costs of central government are excluded on the argument that they are exogenous factors, unable to be influenced in the short run by the government.

Local government's expenditures are excluded with the motivation of the autonomy of this level of government from central government, for instance in terms of local taxation[10]. For local governments a balanced budget restriction was imposed as of the year 2000. If deficits occur they should be covered within two years. In the aggregate this target was fulfilled with a surplus in 2000[11].

What happens if there are expenditure overruns in any of the expenditure areas? In the system, so-called flexible appropriations would be used for rule-driven expenditures. A limited borrowing possibility is at hand with conditional carry-over to the following budget year. If agencies use the borrowing possibility the credit is automatically deducted from next year's budget appropriation. This possibility has so far not been used in practice.

What are the implications of the new framework? The tri-annual expenditure ceilings seem to impose a kind of inertia in nominal expenditure increases. At each annual decision about the ceiling it is only possible to freely set the level for the last of the three years without political costs. The levels for the first and second years are restricted by earlier decisions. This mechanism seems to have strengthened the current minority government in its budget negotiations with supporting parties and the process is felt to have increased long-term thinking in budget policy.

A full evaluation of the system is not possible after only four years of experience. However, the new budget process with its rules has so far, by and large, worked well. The expenditure to GDP ratio has steadily fallen from 62.6 per cent of GDP in 1996 to 55.4 per cent in 2000 and is in *the Spring Bill for the year 2001* projected to fall to about 53 per cent in 2004.

---

[10] However, ceilings are computed also for this sector and consequently it is possible to calculate ceilings for the total public sector.

[11] Swedish Ministry of Finance (2001).

A few problems with the system have so far been revealed. A first problem is that budget margins (contingency reserves) have been rather small, usually less than 1 per cent of the ceiling for the next year. Originally, in the Spring Budget Bill for 1996, these margins were set to approximately 1.5 per cent of total expenditures for the budget year, and 2.0 and 2.5 per cent for the subsequent years. However, although the ceilings have not been exceeded, in practice the margins have to a large extent been used for discretionary expenditure increases. This problem will be further illuminated in Chapter 4.2. Secondly, there has been a lack of high-quality forecasts in some expenditure areas. The most obvious example has been the forecasts for sick-leave insurance costs. Finally, there has been some vagueness about how to interpret the medium-term surplus target in terms of annual targets. So far, a transparent structural measure has not been forthcoming. In connection with the Spring Bill for year 2001 an indicator for structural balances was introduced along with an indicator for fiscal impact.

Table 1 gives an overview of the main characteristics of the current Dutch and Swedish budgetary rules, as discussed above.

3. Macroeconomic and budgetary developments in the Netherlands and Sweden

3.1 Recent macroeconomic and budgetary developments in the Netherlands

Table 2a provides an overview of the economic and budgetary developments in the Netherlands under the trend-based budgetary policy pursued in the previous and current cabinet terms. For both periods, the first column denotes the development of the variable under consideration in the cautious scenario (i.e. *ex ante*). The second column gives the (expected) realisation (i.e. *ex post*). In general, in both periods, economic development (so far) turned out more favourable than assumed in the cautious scenario. Consequently, budgetary developments were also much more favourable in both periods. In the first period, especially lower interest rates and lower unemployment contributed much to a favourable development of Dutch public finances. However, oil prices were lower than expected and, consequently, gas revenues fell short of expectations. As a rule of thumb, a decrease in the oil price of one dollar per barrel means a revenue loss of approximately € 0.3 billion (0.07% of GDP) for the Dutch government.

Table 1

Main characteristics of Dutch and Swedish budgetary rules

	Netherlands	Sweden
Multi-annual budgetary framework		
Length in years	4	3
Coverage	Central government, social security and health sectors	Central government plus old age pensions
Commitment	Political	Legal
Base economic scenario	Cautious	Realistic (t+1) and trend (t+2) and (t+3)
Budget balance target	No	Surplus 2 per cent of GDP on average over the cycle
Revenues		
Targets	No, reference values	No
Revenue windfall	T+1: Partly budget balance, partly reduction tax burden T: budget balance	Ad hoc
Revenue shortfall	T+1: Partly budget balance, partly increase tax burden T: budget balance	Ad hoc
Expenditures		
Ceiling	Real	Nominal
Transformation real -> nominal	GDP deflator	-
Subdivision	Central government, social security and health sectors	Central, local and old age pension system, 27 expenditure areas
Expenditure windfall	Extra expenditures	Ad hoc
Expenditure setback	Cutbacks if ceiling is surpassed	Laid down by law
- due to inflationary differences	Compensation by expenditure reserve and cutbacks	

Wage developments in the market sector were more or less in line with the cautious scenario in the first cabinet term. Contractual wages are an important variable for government expenditures, since social security benefits are as a rule linked to contractual wages. Overall, the general government budget deficit was much lower, while the tax burden had been reduced more than envisaged in the coalition agreement. Due to the favourable economic and budgetary developments, government debt decreased more than expected in the first period.

Table 2a
Economic and budgetary developments in the Netherlands under the trend-based budgetary policy

	1994-1998		1998-2001	
	Ex ante	Ex post	Ex ante	Ex post*
Economic growth (in %, annual average)	2¼	3.2	2¼	3.7
Long-term interest rate (in %)	7	5	6	5.0
Unemployment (change in 000)	23	-182	-23	-32
Oil price ($ per barrel)	17	15	14	23.8
Dollar/euro exchange rate	1.10	1.22	1.07	0.90
Contract wages (average increase in %)	2¼	2.1	1½	3.3
Gen. govt. balance (end of period, % of GDP)	-2.1	-0.7	-1.1	0.5
Gen. govt. debt (end of period, % of GDP)	80¾	66.6	65½	51.8
Reduction of tax burden (billion)	2.0	7.7	1.9	3.6
Net extra expenditures (billion)	-5.5	-5.5	1.7	6.4

* Expected realisations 1999-2001 based on Spring Budget Bill 2001.
Source: Coalition agreements, Budget Memoranda, CPB (1998) and Brits and De Vor (1998).

Up to now, the second period has been characterised by buoyant economic growth, low unemployment rates and high oil prices. Moreover, the higher than expected exchange rate of the dollar has had a positive effect on gas revenues. On the other hand, wage developments have so far been less favourable than initially expected. This has an upward pressure on government expenditures as social security benefits are linked to wage developments in the market sector. Overall, the Netherlands currently has a budget surplus instead of an expected deficit due to the favourable macroeconomic development. As a consequence, government debt rate will in 2001 already undershoot the level expected in the coalition agreement for 2002. Moreover, the tax burden has been decreased more than expected while windfalls due to lower interest rates and lower unemployment rates allowed for extra expenditures under the expenditure ceiling.

3.2 Recent macroeconomic and budgetary developments in Sweden

The deep recession in the early 1990s resulted in substantial deficits in general government finances. In 1993 the deficit in the general government sector amounted to 11 per cent of GDP and general government debt grew rapidly to 78 per cent of GDP in 1994, the same year the new budgetary process was introduced. The sharp increase in unemployment led to a significant expansion in general government expenditures. In the period from 1995 to 1998 the aim of budgetary policy was to eliminate the deficit. By means of a consolidation programme, general government finances improved and reached a surplus of 4.1 per cent of GDP in 2000 with an even stronger cyclical adjusted surplus.

In the period 1998 to 2000 the Swedish economy developed favourably, and more favourably than expected at the beginning of the period. Generally, the new economic policy framework, with the inflation target and the stable general government finances, has both internationally and in Sweden been assessed to have contributed to this favourable development.

From 1998 through 2000 growth moved within a range 3.0 to 4.1 per cent annually. Employment was up and open unemployment was almost halved between 1996 and 2000 and it has been possible to reduce the volume of labour market programmes (see Table 2b). This development has been reinforced by favourable international economic conditions which have contributed to robust growth in Swedish exports.

Inflation, measured alternatively as changes in CPI or in the Riksbank's underlying measure UND1X, has constantly been below the target of 2 percent since 1996. In the March 2001 forecast by the Riksbank, it would stay slightly below target in 2001 and 2002 as well, although with some risk of higher inflation. Wages have also developed favourably in recent years. After high increases of hourly wages both in private and public sectors in 1996, in total around 6 per cent, hourly wages have in the period thereafter developed in line with the inflation target and with productivity improvements taken into account, i.e. in the range of 3.5 to 4 per cent annually. *Ex post,* due to low inflation, real wages have grown steadily. For the coming years, wage increases following wage negotiations in 2001 are seen as the single most important domestic risk to the favourable inflation prospects.

Table 2b

Economic and budgetary developments in Sweden under the new budgetary process

	1998-2000*		2001	2002-2003
	Ex ante (1)	Ex post	Ex ante (2)	Ex ante (3)
Economic growth (in %)	2.9	3.9	3.5	2.1
Open unemployment plus labour market programmes (annual change, pp) (4)	-3.9+0.1	-3.8-1.7	-0.8-0.0	0.2-0.6
Long-term interest rate	6.2	5.1	5.4	5.3
SEK, TCW-index (5)	119.2	123.7	121.9	120.0
Wages (average increase in %)	3.5	3.6	3.5	3.5
Inflation, CPI	1.8	0.7	1.7	2.0
Gen. govt. balance (end of period, % of GDP)	1.5	3.4	3.5	4.0
Gen. govt. debt (end of period, % of GDP)	67	59	53	48
Tax rate (end of period, % of GDP)	51.8	52.0	50.9	50.3
Expenditures (end of period, % of GDP)	58.4	55.5	53.7	52.9

* Expected realisations for 2000 in the Budget Bill for 2001.
(1) Forecasts in the Budget Bill for 1998, September 1997.
(2) Forecasts for 2001 in the Budget Bill for 2001, September 2000.
(3) Projections for 2002 and 2003 under the assumption of potential growth and unchanged policy.
(4) Change (per cent) of labour force. Annual average 1997 to annual average 2000 are used.
(5) Trade Weighted Index. A lower value measures a stronger exchange rate.

Sources: Budget Bills for 1998 and 2001. Konjunkturinstitutets analysunderlag, (National Institute of Economic Research: Analytical Support), November 2000.

The more favourable than expected developments in growth, consumption, employment and prices have resulted in higher than expected tax receipts[12]. Lower than expected costs for unemployment and labour market programmes and lower inflation have led to lower than expected expenditures for unemployment related costs. Together, these factors have resulted in larger surpluses and a faster amortisation of the consolidated gross debt compared to what was planned in the 1998 Convergence Programme. The general government's net lending was marginally below 2 per cent of GDP in 1998 and 1999, while the targets were *ex ante* set to 0 and 0.5 per cent of GDP, respectively. In 2000 net lending was 4.1 percent of GDP while the target was 2.0 per cent of GDP. Gross debt was 72 per cent of GDP in 1998 and decreased to below 60 per cent in 2000 and is calculated to fall to about 48 per cent in 2003[13]. The tax ratio fell from 52.7 per cent of GDP in 1998 to 52.0 per cent in 2000 and is projected to fall to around 50 per cent of GDP in 2003. The expenditure ratio fell during the same period from 58.7 to 55.5 per cent of GDP and is calculated to fall to around 53 percent of GDP in 2003.

4. Some specific problems

4.1 Current Dutch budgetary rules - some problems

4.1.1 Windfalls and shortfalls: asymmetric probability for revenues and expenditures and intertemporal pattern

From an administrative point of view, the disconnection of the revenue and the expenditure side forms a key element in the current Dutch budgetary strategy. Under this separation, revenue windfalls are not allowed to be used for extra expenditures. Thus, in principle, the separation facilitates the free operation of automatic stabilisers. However, the probability of overall windfalls and shortfalls is not the same for the revenue and expenditure side, respectively. On the revenue side, positive real and nominal shocks tend to reinforce each other, while on the expenditure side they tend to be offsetting[14]. For instance, if real economic growth and inflation are higher than expected, this has a positive effect on

---

12 In recent years tax receipts on capital gains realisation has increased substantially.

13 The fast fall in the gross debt ratio is partly due to the fact that privatisation receipts have been used for amortisation.

14 CPB (2000).

nominal revenues. However, on the expenditure side higher real economic growth and higher wages and inflation have opposite effects on nominal expenditure. This asymmetry is especially relevant when starting from a cautious scenario with relatively low assumptions concerning growth and inflation, as in the Dutch case. This asymmetry is also relevant from an intertemporal point of view in conjunction with the business cycle. Suppose that the upturn of the business cycle follows its typical textbook pattern: increasing real GDP growth in the first stage and higher inflation in the second. This means that nominal revenues tend to rise over time in conjunction with an upturn of the business cycle, initially mainly due to real economic growth, later in the cycle due to nominal growth. However, on the expenditure side, windfalls occur in the first stage of the upturn due to *inter alia* lower social security expenditures, while setbacks due to higher wages and nominal interest rates materialise in the second stage.

The current Dutch budgetary framework has three provisions to deal with the aforementioned asymmetric and intertemporal pattern of windfalls and shortfalls. First of all, inflationary shocks are in principle absorbed since both the revenue reference values and the expenditure ceilings are set in real terms and transformed into nominal equivalents by means of the actual GDP deflator. Secondly, it was decided in the second coalition agreement to initially reserve expenditure windfalls stemming from more favourable macroeconomic conditions. This "savings" facility could in principle be used to overcome the intertemporal pattern of nominal and real shocks in relation to the business cycle. However, despite this agreement, in the past years expenditure windfalls stemming from a favourable macroeconomic development were mainly used for new expenditures (see Table 2a). Thirdly, the expenditure reserve can be used for specific inflationary shocks. However, this reserve is currently fairly small in size (approximately 0.25 per cent of the overall budget in 2002) and thus not a very effective provision to absorb specific price shocks under the ceiling.

4.1.2 Dealing with inflationary shocks: economy wide versus government specific shocks

As mentioned above, the government is compensated for economy wide inflationary shocks due to the use of the GDP deflator to transform real ceilings into nominal ceilings. Real-expenditure ceilings can thus be considered as a compromise between volume ceilings on the one hand and nominal ceilings on the other hand. The advantage of *volume* expenditure

ceilings is that specific price increases in government expenditures are compensated for by a parallel increase in the nominal ceiling. This contributes to an orderly execution of the budget. However, this has the disadvantage that nominal expenditures (and thereby the deficit) can fluctuate quite heavily, which makes it difficult for example to adhere to a deficit target. Moreover, there is no incentive for the government to limit increases in government wages and prices (moral hazard). The advantage of *nominal* expenditure ceilings is that government expenditures are fixed in nominal terms and hence do not fluctuate. They are simple to understand and not easy to manipulate. Moreover, the government has a strong interest in limiting increases in government wages and prices. The disadvantage is that nominal ceilings may call for cutbacks whenever the price of government expenditures is higher than initially expected. From an administrative point of view, this does not contribute to a smooth execution of the budget. *Real* ceilings are somewhere in the middle on a scale with nominal and volume ceilings as extremes. Government expenditures share in the overall nominal economic development due to the use of the GDP deflator as price deflator. However, it also implies a terms-of-trade loss for the government if the price development of certain government expenditures exceeds the overall price development of the economy, for example, if government wages increase faster than the GDP deflator. These terms-of-trade losses are not compensated for and can thus call for additional cutbacks if the ceilings are about to be exceeded. From an administrative point of view, this is clearly a disadvantage of the system of real-expenditure ceilings. On the other hand, terms-of-trade gains allow for extra expenditures under the ceilings, which can fuel inflationary developments even more. This is clearly a disadvantage of the system of real-expenditure ceilings from a macroeconomic point of view. Donders et al. (1999) have proposed to combine a volume ceiling with an alternative deflator. This deflator would be a weighted average of wage increases in the market sector (70 per cent weight) and the deflator for private consumption (30 per cent weight). The authors claim that this combination would reduce the probability of terms-of-trade losses for the government and thus the probability of required cutbacks. The disadvantage is that external terms-of-trade losses are reflected in the GDP deflator but not necessarily in the alternative one. Hence, under the alternative system, the government does not always share in unfavourable terms-of-trade shocks, which are relevant for an open economy such as the Netherlands. Moreover, one could argue that the administrative problem of terms-of-trade losses can easily be dealt with by increasing the expenditure reserve under the expenditure ceiling. This would solve the problem of terms-of-

trade losses within the existing budgetary framework. The 11th Studiegroep Begrotingsruimte (2001) advises to maintain the system of real-expenditure ceilings in the next cabinet term (2003-2006), but to replace the GDP deflator by the deflator for national expenditures. The latter would be less vulnerable to forecasting errors.

4.2 Macroeconomic shocks and the Swedish system – some problems

4.2.1 An unusually favourable macro shock: Higher growth and lower inflation than expected

In the period 1998 to 2000, immediately after the new budget process was introduced, Sweden experienced an unusually favourable macroeconomic shock. In this period, GDP grew 1.0 per cent faster per annum compared to what was expected in the *Budget Bill for 1998.* Employment increased more rapidly than expected and inflation turned out 1.3 per cent lower per annum. All together, the economic development affected revenues positively, and they grew faster than expected. As a consequence, the medium-term target of 2 per cent surplus over the cycle was approached faster than expected and was exceeded in 2000.

In this period the budget process must by and large be assessed to have worked well. Expenditure to GDP ratios decreased steadily: from 60.3 per cent in 1997 to 55.2 per cent in 2000 and the expenditure ceilings were met. The tax ratio started to diminish in 1999. However, after having implemented a reasonably large uncertainty margin to the ceiling in 1997, in later years the margins decreased substantially and were forecast to be smaller than 0.1 per cent of GDP in 2001. Expenditures have exceeded expectations since 1998. Also the *ex ante* budget margins for 2002 and 2003 are smaller than safe margins for uncertainty.

Since automatic changes in expenditures are negative in situations with larger than expected GDP growth and lower than expected inflation, it is clear that discretionary changes in expenditures were fairly substantial in the period 1998 to 2000 and larger than the "expenditure room" given by unexpected favourable macroeconomic developments[15]. For instance, this was obviously the case in 1999 when positive forecast errors automatically

[15] However, the output gap was negative during the period according to the government's assessments.

decreased expenditures, but still the budget margin was small. Hence, discretionary increases were larger than the windfall.

How can the behaviour as described above be explained? One interpretation is that the budget margin is a weak part of the new budget system in the sense that it is not sufficiently safeguarded by law and hence vulnerable to political pressure. When growth and inflation develop more favourably than expected, higher than expected revenues and surpluses infuse a sense of extra room for further expenditures, behaviour which is typical of "good times". This mechanism also strengthens the pro-cyclical tendency already at hand with a nominal ceiling when inflation is lower than expected.

A Commission given the task to evaluate the budget process has pointed out this weakness of the system[16]. The Commission recommends "that the expenditure ceiling should be supplemented by an expenditure target, which would be set lower than the expenditure ceiling. The level for the expenditure target should be set so that changes in the expenditure ratio, tax ratio and the balance should fall within the targets set for economic policy in the medium-to-long term[17]." Further, the Commission recommends "that the concept budget margin should be replaced by two concepts – contingency reserve and planning reserve. The contingency reserve is the margin between the ceiling and the target and should be around 3 per cent of expenditures, to allow for consequences of any short-term deviation in economic fluctuations from the longer-term trend." No decisions about changes in the status of the budget margin have so far been taken (in April 2001) but it seems necessary to somehow improve the robustness of the margins to strengthen the budget process and to diminish the embedded tendency to pro-cyclicality.

4.2.2 A stagflation scenario

So far the new Swedish system has not been tested in a recession or in a stagflation scenario when GDP growth is low and inflation is relatively high. Such a situation could be the result of an international raw material (commodity) shock or a domestically induced wage cost shock, typical of

---

16 Swedish Ministry of Finance, "Utvärdering och vidareutveckling av budgetprocessen". Stockholm (2000b).

17 Swedish Ministry of Finance (2000b), p. 14.

Sweden in the 1970s and 1980s. A recession or stagflation seems to be a potential threat to the expenditure ceilings.

Under the assumption that GDP growth is lower than expected, inflation higher than expected and that budget margins are smaller than what is needed for this type of combined shock, the expenditure ceilings could come under pressure. Price-indexed expenditure items and cyclically sensitive expenditures such as unemployment insurance, costs for labour market measures and other social security costs would increase automatically. In order to maintain the ceilings, it would be necessary to reduce these or other types of expenditures. This would again strengthen the pro-cyclical tendency in the system. In situations when the budget margin is insufficiently large, necessary adjustments to maintain the ceilings tend to counteract automatic stabilisers. To hamper stabilisers at supply shocks could be supportive to monetary policy by somewhat mitigating the inflation pressure[18], but could be politically problematic, especially in a recession. Again, this example demonstrates the need to reform the system to secure the robustness of the uncertainty margins.

5. The stabilising properties of the Dutch and Swedish budgetary rules

The theory on optimum currency areas considers budgetary policy as one of the main instruments to compensate for the loss of the exchange rate and monetary policy autonomy in case of the creation of a monetary union. According to this theory, the adoption of a single currency and a uniform monetary policy would potentially increase the need for a stabilising budgetary policy in countries like the Netherlands and Sweden, especially in the form of freely working automatic stabilisers. The stabilising features of budgetary policy form an important element of the underlying philosophy of the Stability and Growth Pact. Adherence to the medium-term goal of a budgetary position close to balance or in surplus over the cycle should allow for the operating of the automatic stabilisers without surpassing the 3 per cent of GPD reference value for the deficit provided for by the Treaty of Maastricht. How should the stabilising features of the

[18] This is a mechanism that potentially could be of importance as long as Sweden has it's own monetary policy. With Sweden inside the monetary union the mechanism could be neglected because of the small size of the Swedish economy relative to the whole union.

current Dutch and Swedish budgetary rules as described above be assessed?

5.1 Budgetary stabilisation under the Dutch trend-based budgetary policy

A few general observations can be made about the stabilising features of the current Dutch budgetary rules. Obviously, the working of the automatic stabilisers on the revenue side is on the whole hindered by the windfall and shortfall formula. By devoting part of an expected revenue windfall for tax cuts or by compensating part of an expected shortfall by tax increases, budgetary policy in general has a pro-cyclical impact. This pro-cyclical impact is biased due to the application of cautious macroeconomic assumptions for the base scenario. Being in the lower range of the expected macroeconomic development, this scenario has a bias to windfalls. However, it could also be argued that using windfalls for new expenditures or additional tax reductions is not pro-cyclical as long as the economy operates below its trend growth rate. Although this seems a matter of definition, it can have important policy implications. On the expenditure side of the budget, real-expenditure ceilings restrict the working of the automatic stabilisers in principle to windfalls, as setbacks have to be compensated for. Moreover, as the ceilings tend to be filled to the maximum even in good times, in practice the expenditure side does not act as an automatic stabiliser at all. Both mechanisms suggest that the trend-based budgetary policy is not as anti-cyclical as it may be in theory. However, in practice, one can make some differentiations concerning the operating of the automatic stabilisers on the revenue side. First of all, the formula is applied to the *expected* windfall or shortfall. Although this expectation is based on the most likely economic development, it is still subject to forecasting errors. For 1999 and 2000, the government significantly underestimated revenues in the Budget Memoranda for those years. As a consequence, the extra tax reduction on top of the tax cuts agreed in the coalition agreement has been limited so far (see table 2a) and hence, budgetary policy has been less pro-cyclical than might be expected at first glance. Secondly, the government decided by discretion last year not to apply the formula for 2001, although a windfall of € 10 billion was expected in the Budget Memorandum for 2001. As a result, only 6 per cent of the (expected) revenue windfalls in the period 1999-2001 have so far been used for extra tax cuts.

The 11th Studiegroep Begrotingsruimte (2001) advised to adopt a cautious trend-based economic scenario for the next cabinet term. This would imply an exogenous economic growth of 2¼ per year, i.e. a ¼ percentage point above the previous two cabinet terms. Hence, the bias towards windfalls would in principle become smaller. Moreover, the 11th Studiegroep advised to abolish the system of real income reference levels and the windfall and shortfall formula. This would allow the automatic stabilisers to work freely on the revenue side of the budget. This would reduce the pro-cyclicality of the current system of budgetary rules.

5.2 Automatic stabilisers and the Swedish system

Given that the Swedish system is equipped with reasonably large margins for purely "normal"[19] GDP-shocks and that unexpected "room" for expenditures is not used, the system would support freely moving automatic stabilisers both on the expenditure and the tax sides and as a consequence of both negative and positive shocks. Such a system would have the properties related to a medium-term target for the budget, in which a structural budget balance is the proper short-term target[20]. At larger shocks than "normal" the system is asymmetric in the sense that automatic stabilisers will be hampered on the expenditure side but not on the income side. In deep recessions, pro-cyclical expenditure cuts may have to be taken to save the targets, which could be politically problematic. However, this mechanism could be mitigated if, at the same time, inflation is falling.

At unexpected inflation shocks, automatic stabilisers could also move freely under the condition that unexpected "room" for expenditures is not used. For instance, lower than expected inflation boosts real incomes and demand and expenditures fall. Again, large positive inflation shocks could induce asymmetric stabilisers.

However, as soon as some part of the unexpected windfall, referred to in the examples above, is used, the system's pro-cyclicality increases. As described in Chapter 4.2, this has in practise been the case in the years 1998 through 2000. Such behaviour also increases the risk for asymmetric

---

[19] "Normal" GDP shock could be interpreted parallel to how it is interpreted in connection with the SGP.

[20] In connection with the Spring Bill 2001 a measure of structural surpluses has been calculated.

stabilisers at negative real shocks and positive price shocks. Furthermore, the budget margins have proved themselves to be soft impediments to expenditure increases which has strengthened the asymmetric property of the system.

6. Comparison and conclusions

Both the Netherlands and Sweden are relatively small open economies vulnerable to negative external economic developments. Recent budgetary developments in the Netherlands and Sweden show strong similarities. Both countries were hit by severe negative economic and budgetary shocks in the early 1980s (Netherlands and Sweden) and early 1990s (Sweden). After a period of budgetary consolidation to adjust for the distortions, both countries introduced a set of more-or-less binding budgetary rules with the aim to strengthen budgetary discipline. In the Netherlands, the budgetary rules are based on political agreements, while in Sweden they are partly founded in the Budget law, which must be seen as a long-term commitment. In both countries, the nature of the political system gives rise to a rules-based budgetary policy as coalition and minority governments have for a long period been typical in both countries, cases where in theory the position of the Minister of Finance could be relatively weak[21]. Currently, the Netherlands has a coalition government and Sweden a minority government with supporting parties. The adoption of budgetary rules could potentially strengthen the position of the Minister of Finance.

In both countries, the introduction of budgetary rules has contributed significantly to the recent favourable budgetary developments. Long-term thinking has been strengthened which has contributed to disciplined expenditure developments. Expenditure ceilings form the cornerstone of the budgetary framework of both countries at the moment. In Sweden, these ceilings are complemented by a medium-term surplus target, in the Netherlands by a cautious macroeconomic base scenario and income reference levels. In the Netherlands, the ceilings are defined in real terms whereas in Sweden they are nominal. The main characteristic of a system of *real-expenditure* ceilings is that the government shares in the overall nominal economic development. The resulting terms-of-trade losses can

[21] Hallerberg et al. (2001).

call for ad hoc cutbacks, which is a disadvantage from an administrative point of view. On the other hand, terms-of-trade gains allow for extra expenditures under the ceilings, which can fuel inflationary developments. The main advantage of *nominal* expenditure ceilings is that government expenditures do not fluctuate, which is a valuable support to the budget process. Moreover, nominal ceilings are easy to understand and are transparent. Finally, the government has an incentive to limit increases in government wages and prices. The disadvantage is that real shocks can necessitate pro-cyclical cutbacks. Both the Swedish and Dutch systems belong to a small group of countries in the EU-area where the medium-term expenditure framework is an explicit part of the multi-annual framework and the budgetary process. Such a framework could be positive for the credibility of fiscal policy[22].

Two differences stand out when we compare the Dutch and Swedish systems of budgetary rules. The first difference is that the Swedish system seems in a narrow sense more closely compatible with the Stability and Growth Pact due to the inclusion of an explicit quantitative medium-term surplus target. The Swedish medium-term surplus target is clearly in line with the latter part of the "close to balance or in surplus" provision. In the Dutch case, adherence to the medium-term target of the Stability and Growth Pact has so far been a more implicit goal of the system of budgetary rules. However, the 11th Studiegroep Begrotingsruimte advises the next cabinet to strive to a budget surplus of 1¼-1¾% of GPD, with an eye on the upcoming fiscal burden of ageing populations. A second difference is that the Swedish system with its two types of quantitative targets seems less flexible than the Dutch system in case of economic shocks. Especially positive inflationary shocks can be more easily dealt with in the Dutch system with its real-expenditure ceilings from a *budgetary* point of view.

Some problems of pro-cyclical behaviour have been revealed for both systems of budgetary rules. In the Netherlands, the application of a cautious macroeconomic base scenario creates a bias to unexpected positive real and price shocks. On the *revenue* side of the budget, such shocks tend to reinforce each other, thus creating a bias towards revenue windfalls. These windfalls are partly used for additional tax cuts according to the windfall formula, which gives budgetary policy a pro-cyclical bias. On the *expenditure* side of the budget, such shocks tend to mitigate each

[22] Fisher and Reitano (2001), p. 11.

other: positive real shocks lead to lower expenditures, while positive price shocks induce higher expenditures. However, under the system of real-expenditure ceilings, positive price shocks are partly compensated for by a higher GDP-deflator. Hence, all in all, the adoption of a cautious macro-economic base scenario usually creates scope for extra expenditures under the ceilings, thus giving budgetary policy another pro-cyclical bias. The same happens in Sweden when the uncertainty margin is more or less used for new expenditures. However, as long as the contingency margin is maintained, there is only a risk for pro-cyclical policies in case of large negative real shocks or large positive price shocks, the latter with a low probability to occur. However, as was described in section 4.2 the contingency reserves in Sweden have recently to a large extent been used for expenditure increases, even in, or because of, a situation of unexpected buoyant growth and lower than expected inflation. This makes the Swedish system vulnerable even to normal negative real shocks which must be compensated by pro-cyclical policy. However, in textbook cases when normally negative real shocks are correlated to weak price developments, the problem is somewhat mitigated. On the other hand, in a situation of stagflation the problem will be even more aggravated. Hence, in the Swedish case, positive real shocks combined with negative price shocks seem to induce a pro-cyclical behaviour which later may compel the government to introduce pro-cyclical adjustments at negative real shocks.

REFERENCES

Brits, J.H. and M.P.H. de Vor (1998), "Laat het trendmatig begrotingsbeleid niet glippen" (Do not let the trend-based budgetary policy slip away), *ESB*, vol. 4159.

CPB (1994), *Macro economische verkenningen 1995* (Macroeconomic Outlook 1995).

CPB (1997), *Economische verkenning voor de volgende kabinetsperiode* (Economic enquiry for the next cabinet term).

CPB (1998), *De economische gevolgen van het Regeerakkoord* (Economic consequences of the coalition agreement).

CPB (2000), *Macro economische verkenningen 2001* (Macroeconomic Outlook 2001).

Donders, J.H.M., C. van Ewijk and F.K. Reininga (1999), "Het begrotingsbeleid en de reële uitgaven kaders" (Budgetary policy and real-expenditure ceilings), *Openbare Uitgaven*, No. 3.

Fischer, J. and E. Reitano (2001), *EU Budgetary Surveillance and National Budgetary Rules and Procedures: Interactions and Incentives*, Paper presented at Banca d'Italia workshop on Fiscal Rules.

Hallerberg, M., R. Strauch and J. von Hagen (2001), *The Use and Effectiveness of Budgetary Rules and Norms in EU Member States*, Report prepared for the Dutch Ministry of Finance, Institute of European Integration Studies.

Janssen, R. and J. Verduijn (1999), "Koersen op de pBBP van het CPB?" (Steering on CPB's GDP deflator?), *Openbare Uitgaven*, No. 5.

Konjunkturinstitutet (National Institute of Economic Research) (2000), *Analysunderlag*, (Analysis support), Stockholm.

Molander, P. (2000), "Reforming Budgetary Institutions: Swedish Experiences" in R.R. Strauch and J. von Hagen, *Institutions, politics and Fiscal Policy*, Kluwer Academic Publishers, Boston/Dordrecht/London.

OECD (1998), *Budgeting in Sweden, Public Management Service*, PUMA/SBO(98), Paris.

Studiegroep Begrotingsruimte (1993), *Naar een trendmatig begrotingsbeleid* (Towards a trend-based budgetary policy), Sdu publishers, The Hague.

_____ (1997), *Op weg naar begrotingsevenwicht* (Towards a balanced budget), Sdu publishers, The Hague.

_____ (2001), *Stabiel en duurzaam begroten* (A stable and sustainable budgetary policy), Sdu publishers, The Hague.

Swedish Ministry of Finance (1998), *The State Budget Procedure*, Stockholm.

Swedish Ministry of Finance (1997, 1999 and 2000), *Budgetpropositionerna för 1997, 2000 och 2001* (Budget Bills for 1997, 2000 and 2001), Stockholm.

Swedish Ministry of Finance (2000a), *Vårpropositionen för 2000* (Spring Bill 2000), Stockholm.

Swedish Ministry of Finance (2000b), *Utvärdering och vidareutveckling av budgetprocessen* (Evaluation and development of the Budget Process), SOU 2000:61, Stockholm.

Van Ewijk, C. and T. Reininga (1999), "Budgetary rules and stabilisation", *CPB Report*, No. 4.