

## SPECIAL ANALYSIS

# The Surplus Target for General Government Finances

According to the NIER's assessment, fiscal policy has been conducted in accordance with the surplus target since 2000, when the target was introduced. The surplus target has contributed to structural improvement of public finances. An increased proportion of the elderly in the population, however, will put pressure on the expenditure of the general government sector. At the same time, reduced saving in the old-age pension system means that net lending in central government must increase for the surplus target to be achieved. In order to reach the targeted level of 1 percent of GDP for the average net lending of the general government sector over an economic cycle, fiscal policy should take into account the fact that economic cycles are typically asymmetric. Consequently, fiscal policy should be adjusted so that cyclically adjusted net lending will be 1.2 percent of potential GDP when the economy is in cyclical balance.

This special analysis is devoted to the surplus target for general government finances. The first part presents the reasons for the surplus target. Also dealt with is the level of the target, 1 percent of GDP, in view of the increased proportion of the elderly in the population. The second part discusses how fiscal policy should take into account the typically asymmetric character of economic cycles -- in other words, the fact that recessions are longer than periods of an expanding economy -- in meeting the surplus target. The third part is devoted to the NIER's assessment of target achievement since the surplus target was introduced.

## Why a Surplus Target?

### SEVERAL REASONS FOR THE SURPLUS TARGET

Since 2000 the surplus target for the net lending of the general government sector has been a central element of Sweden's fiscal policy framework.<sup>33</sup> The current target is for net lending to

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<sup>33</sup> The surplus target was introduced in 1997 but was phased in over a three-year period. The fiscal policy framework also includes the ceiling on central government expenditure and the requirement of a balanced budget in the local government sector. See "The Swedish fiscal policy framework", [www.government.se](http://www.government.se), (English translation of the Government letter "Ramverk för finanspolitiken", skr 2010/11: 79).

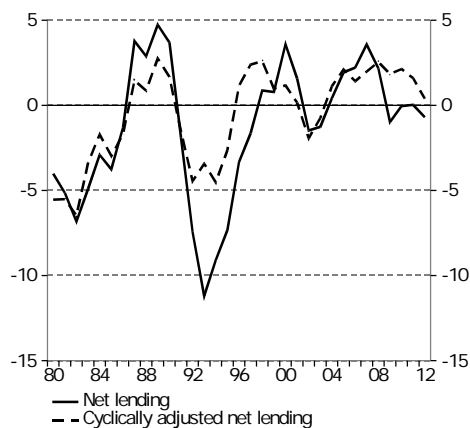
average 1 percent of GDP over an economic cycle.<sup>34</sup> Setting the target to cover an economic cycle is appropriate for reasons of stabilization policy. It enables the Government to follow a countercyclical fiscal policy, which is expansionary in an economic downturn and contractionary in an upturn. If the surplus target had been expressed as a target for net lending in particular years, it would have been necessary to tighten fiscal policy when the economy entered a recession and to give fiscal policy an expansionary stance in a booming economy in order to counteract the automatic stabilizers.<sup>35</sup>

One of the original reasons for the surplus target was to reduce the net debt of the general government sector.<sup>36</sup> Another consideration was demographic variations and intergenerational fairness. By saving and paying off central government debt during a period with a relatively favourable demographic profile, the needs of a rising proportion of older persons in the population could be met more easily in the future. When demographic pressure on public finances increased, the surplus target could be adjusted downward to provide room for greater expenditure. A surplus target that responds in this way to changes in the demographic composition of the population would improve fairness between generations.

In addition, the Government is currently justifying the surplus target on the ground that it creates buffers in public finances in preparation for economic downturns. If general government finances show surpluses at the outset of a recession, there will be less risk of a large accumulation of debt, and it will be easier to give fiscal policy an expansionary stance. The view that the surplus target is a kind of saving buffer conflicts to some extent with the thinking that the surplus target can vary for demographically related motives. The Government takes note of this in "The Framework for Fiscal Policy": "As the surplus target is motivated in several ways, its appropriate level may have to be adjusted in the light of the relative importance that is attached to the various motives."<sup>37</sup>

**Diagram 50 General Government Net Lending**

Percent of GDP and of potential GDP, respectively



Sources: Statistics Sweden and NIER.

<sup>34</sup> The Government is required by the Budget Act to submit to the Riksdag a proposed target for the net lending of the general government sector.

<sup>35</sup> The automatic stabilizers are discussed in greater detail in the section "The Surplus Target and the Asymmetric Economic Cycle".

<sup>36</sup> See "Utvärdering av överskotts målet" ("Evaluation of the surplus target"), government report Ds 2010:4.

<sup>37</sup> See "The Swedish fiscal policy framework", [www.government.se](http://www.government.se), (English translation of the Government letter "Ramverk för finanspolitiken", skr 2010/11:79), p. 21.

### INCREASED NET LENDING AND DECREASED DEBT RATIO

Since the fiscal policy framework was introduced, there has been a structural reinforcement of net lending in the general government sector. During the period 1980–1999 cyclically adjusted net lending averaged –1.5 percent of potential GDP (see Diagram 50).<sup>38</sup> For the period 2000–2012 the same measure was 1.1 percent. The introduction of a surplus target has probably contributed to this structural improvement in net lending.

The net lending surplus has entailed a reduction in government indebtedness. Central government debt has decreased in proportion to GDP from over 70 percent at the end of the 1990's to just over 30 percent in 2012 (see Diagram 51). The decrease in Maastricht debt, which measures the indebtedness of the entire public sector, has been almost equally great. The net indebtedness of general government, that is, its total financial debt less total financial assets, decreased from about 20 percent of GDP to –20 percent of GDP during the same period. Thus, financial net wealth has been accumulated,<sup>39</sup> principally through a reduction in central government debt.

### THE DEMOGRAPHIC CHALLENGE

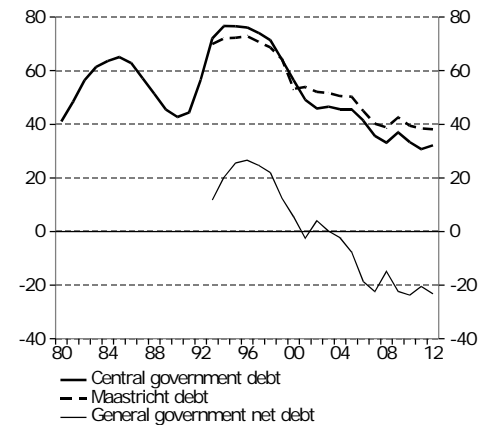
Public finances will be put under increasing pressure in the next two decades from the growing proportion of elderly persons in the population. It is estimated that between 2010 and 2030 the dependency ratio in the economy will rise from 71 percent to 87 percent, according to the population forecast of Statistics Sweden (see Diagram 52).<sup>40</sup> As a consequence, public expenditure, particularly for care of the elderly and handicapped, will have to increase more rapidly than GDP in order to prevent deterioration in the standard of service per recipient (staffing per recipient). Local governments finance most of the care for the elderly and handicapped. In order to meet future needs in consistency with the balanced budget requirement for local governments, there will be growing pressure to increase central government grants and/or the local government tax.

<sup>38</sup> Cyclically adjusted net lending is discussed in more detail below in the section "The Surplus Target and the Asymmetric Economic Cycle".

<sup>39</sup> At the subsector level, only the old-age pension system shows any net wealth – 25 percent of GDP – in the financial accounts. The indebtedness of the local government sector is close to zero, and the central government sector has net indebtedness of 7 percent of GDP. In 2012, the financial assets of general government as a whole, according to the financial accounts, consisted of listed shares (18 percent), other shares and ownership shares (22 percent), bonds and financial derivatives (20 percent), loans (20 percent), unpaid revenue (12 percent), fund shares (4 percent) and other assets (4 percent).

<sup>40</sup> The dependency ratio indicates the relationship between persons who are not of working age and the persons who are of working age. Here the dependency ratio is defined as the number of persons aged 0–19 and 65 or older, divided by the number aged 20–64.

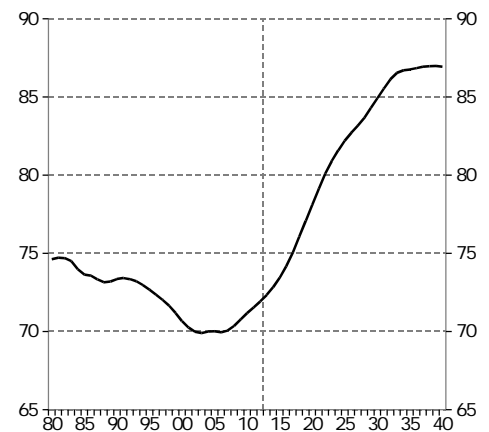
**Diagram 51 General Government Debt**  
Percent of GDP



Sources: Statistics Sweden and NIER.

**Diagram 52 Dependency Ratio**

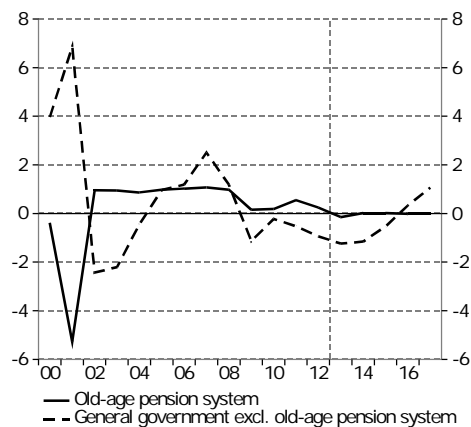
Number of persons aged 0–19 and 64+, divided by number of persons aged 20–64, percent



Sources: Statistics Sweden and NIER.

**Diagram 53 Net Lending**

Percent of GDP



Sources: Statistics Sweden and NIER.

The old-age pension system is part of the general government sector and is subject to the surplus target. In 2002–2008 the net lending of the old-age pension system averaged 1 percent of GDP. With increasing pension disbursements due to a greater number of elderly people, the net lending of the old-age pension system had dropped to about 0 percent of GDP in 2012 and is expected to remain there for an extended period. To compensate for this development while still observing the surplus target, it will be necessary to increase central government net lending (see Diagram 53). Thus, the higher proportion of older people will mean increasing pressure on central government finances in regard to both saving and expenditure, primarily in the form of central government grants to local governments.

The NIER has previously calculated the long-term sustainability of public finances.<sup>41</sup> These calculations show that small deficits in net lending through about 2040, which would be the consequence of unchanged tax rates and maintenance of the public-sector commitment, would not result in unsustainable public finances. The net assets of the general government sector are expected to decrease during this period but will stabilize thereafter. The calculations thus indicate that a lower surplus target for a period would not jeopardize the long-term stability of public finances. Admittedly, however, the calculations are subject to considerable uncertainty, and the findings should be interpreted with caution.

## The Surplus Target and the Asymmetric Economic Cycle

### AUTOMATIC STABILIZERS

The net lending of the general government sector normally varies with GDP. In an economic downturn the development of tax bases thus diminishes, as does tax revenue. For example, a decrease in employment leads to lower tax revenue from households. At the same time, expenditure increases, particularly that related to unemployment. The automatic stabilizers thus help to stabilize the economy even in the absence of active fiscal policy measures.

The NIER distinguishes two kinds of changes in net lending: changes that depend on active political decisions and changes that depend on the state of the economy (automatic stabilizers).

<sup>41</sup> See "Konjunkturinstitutets beräkning av långsiktig hållbarhet i de offentliga finanserna" ("The NIER's Estimate of the Long-Term Sustainability of Public Finances"), fördjupnings-pm (brief paper) no. 20, NIER, 2013.

In Diagram 54 it is shown how net lending varied together with the output gap because of automatic stabilizers in 2007–2017.<sup>42,43</sup> The slope of the curve shows how much a one-percent change in the output gap automatically affects the net lending of the general government sector. For the period 2007–2012 this budget elasticity is calculated to be 0.4. Budget elasticity has decreased by comparison, for example, with the period 1995–2006, when it was calculated at 0.8 (see Diagram 55). Thus, public finances have become less sensitive to fluctuations in the economic cycle. The explanations for this development include, above all else, a lower tax ratio in the economy, primarily due to the tax credit on earned income (jobbskatteavdraget), but also a lower effective replacement rate before taxes in the unemployment insurance system.

### ASYMMETRIC ECONOMIC CYCLES

The surplus target is formulated as one for the average net lending of general government over an economic cycle. If the expected value of the output gap in the period ahead is not zero, it is important for fiscal policy to consider this in order not to deviate systematically from the surplus target. In addition, the Government has noted that asymmetry in the business cycle poses a risk for target achievement.<sup>44</sup>

Since the early 1980's Sweden has suffered two severe recessions, one in connection with the crisis of the 1990's, the other with the financial crisis of 2008 and its aftermath in Europe. In the NIER's analysis, the output gap averaged  $-1.0$  percent during the period 1980–2012 (see Diagram 56). If the analysis is limited to a period of completed economic cycles, the average output gap is somewhat less negative. In the period 1980–2006, three completed economic cycles can be defined, beginning with peak year 1980 and ending just before peak year 2007. Similarly, there is the period 1983–2008, beginning in trough year 1983 and ending just before trough year 2009. The average of the NIER's calculated output gap for these two periods is roughly  $-0.8$  percent and  $-0.7$  percent, respectively.

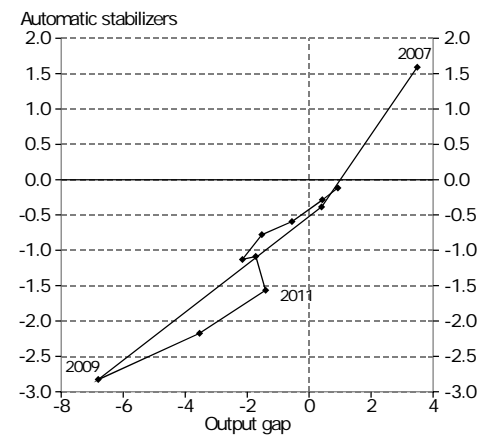
<sup>42</sup> The output gap is a measure of resource utilization in the economy. The output gap is defined as the percentage deviation between the actual level of output and the potential level of output (output with full resource utilization). Potential output is based on assessments of the potential levels of hours worked and productivity.

<sup>43</sup> Automatic stabilizers are calculated as the difference between actual net lending and cyclically adjusted net lending as a share of potential output. The correlation between automatic stabilizers and the output gap does not pass through the origin of the graph. This is explained by the fact that the unemployment gap often closes later than that output gap, with the result that expenditure related to unemployment is still at a cyclically high level.

<sup>44</sup> See "The Swedish fiscal policy framework", [www.government.se](http://www.government.se) (English translation of the Government letter "Ramverk för finanspolitiken", skr 2010/11: 79).

**Diagram 54 Automatic Stabilizers and Output Gap 2007–2017**

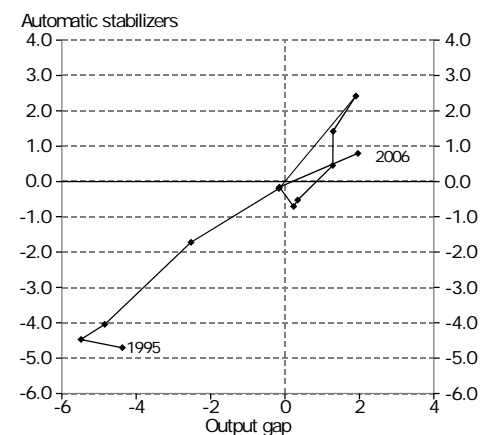
Percent of GDP and of potential GDP, respectively



Note. Automatic stabilizers are calculated as the difference between net lending and cyclically adjusted net lending, in percent of potential GDP  
Source: NIER.

**Diagram 55 Automatic Stabilizers and Output Gap 1995–2006**

Percent of GDP and of potential GDP, respectively



Note. Automatic stabilizers are calculated as the difference between net lending and cyclically adjusted net lending, in percent of potential GDP  
Source: NIER.

**Diagram 56 Output Gap**

Percent of potential GDP



Sources: Statistics Sweden and NIER.

One argument for an asymmetric business cycle is that the relationship between prices and resource utilization, the so-called Phillips curve, is not linear. A positive demand shock that pushes unemployment down below equilibrium will tend to drive up the rate of increase in earnings and inflation. If the Riksbank responds symmetrically to deviations of inflation, unemployment will then exceed equilibrium unemployment, on average, even when the future cyclical shocks are symmetric. This will contribute to a negative output gap on average.

In the NIER's assessment, the expected value of the output gap in the period ahead will be somewhat less negative than the historical averages noted above. One argument for this contention is that the Swedish economy underwent comprehensive structural change during the 1990's that included a change of fiscal policy regime and consolidation of public debt. The average output gap since 1980 has been affected both by the overheating in the final years of the 1980's and by the crisis of the 1990's. Admittedly, Sweden will face structural change and severe crises in the future as well, but probably not quite as often as in the last 30 years. The NIER's assessment is that the target level for cyclically adjusted net lending should be adjusted for a future output gap averaging  $-0.5$  percent.

#### THE SURPLUS TARGET AND ASYMMETRIC ECONOMIC CYCLES

Given an average output gap of  $-0.5$  percent and a budget elasticity of 0.4, the automatic stabilizers will contribute an average of  $-0.2$  percent of GDP to net lending in the period ahead. It is therefore the NIER's assessment that cyclically adjusted net lending must reach 1.2 percent of potential GDP with the economy in cyclical balance in order to make it more likely that net lending in the future will amount to 1 percent of potential GDP over an economic cycle.

### Evaluation of Target Achievement

In order to determine whether the fiscal policy followed is in line with the surplus target, continued monitoring will be required. The fact that the surplus target is applied as an average to an economic cycle makes evaluation of target achievement more difficult, as the economic cycle is not directly measurable.

## THE GOVERNMENT'S INDICATORS

The Government has chosen two indicators for the forward-looking analysis of the surplus target: the seven-year indicator and structural net lending.<sup>45</sup> For the retrospective analysis the 10-year indicator is used.<sup>46</sup> According to the Government, these average indicators should be supplemented by an analysis of the corresponding averages for the output gap, for there is a risk that the indicators will be based on years characterized chiefly by recessions or an expanding economy.<sup>47</sup>

## THE NIER'S PRINCIPLE FOR EVALUATION OF TARGET ACHIEVEMENT

The NIER views the surplus target primarily as a forward-looking net target, not as an implied debt target. With an active fiscal policy, cyclically adjusted net lending will temporarily deviate from the level considered compatible with the surplus target in the longer term. Temporary deviations should not be adjusted procyclically, that is, in a way that will amplify fluctuations in the economic cycle. If cyclically adjusted net lending deviates from the level of 1.2 percent of potential GDP, the deviation should be corrected at the same rate as the development of the economic cycle. This is also consistent with the Government's interpretation of the surplus target as primarily a forward-looking target.

The NIER's principle for the fiscal policy forecast normally means that cyclically adjusted net lending, if it initially deviates from 1.2 percent of potential GDP, will gradually be adjusted and reach the long-term target level at the same rate as the output gap gradually closes and the economy reaches cyclical balance.<sup>48</sup> This principle means that the forecast fiscal policy is normally considered to be in line with the surplus target. The NIER's fiscal policy forecast follows the principle in the absence

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<sup>45</sup> The seven-year indicator is a centred seven-year mean for the net lending of the general government sector. Structural net lending is a measure of the net lending of the general government sector when the economy is in cyclical balance. Structural net lending takes into account resource utilization in the economy via budget elasticity. The calculation is performed at a more aggregated level than the NIER's calculation of cyclically adjusted net lending, which also takes into account the composition of the tax bases, but both have the same purpose.

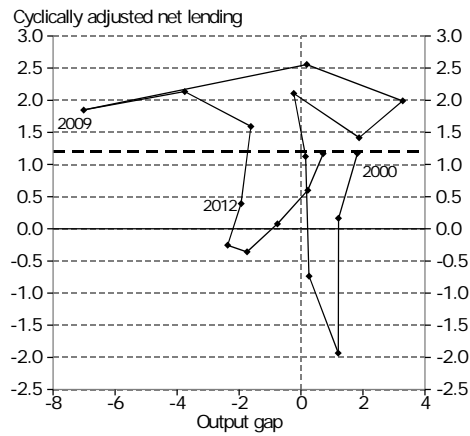
<sup>46</sup> The 10-year indicator is a 10-year moving average for net lending.

<sup>47</sup> The Government emphasized that the surplus target should be viewed primarily as a forward-looking target, since considerable importance is attached to the target as a kind of buffer saving. The Government sees a need to look backward in order to identify any systematic deviations from the target. Corrections, according to the Government, should not be made mechanically so that fiscal policy becomes procyclical, that is, reinforces cyclical variations.

<sup>48</sup> In case of extremely large deviations from the target level, however, a forecast where cyclically adjusted net lending reaches 1.2 percent of potential output with the economy in cyclical balance would be unrealistic.

**Diagram 57 Cyclically Adjusted Net Lending and Output Gap**

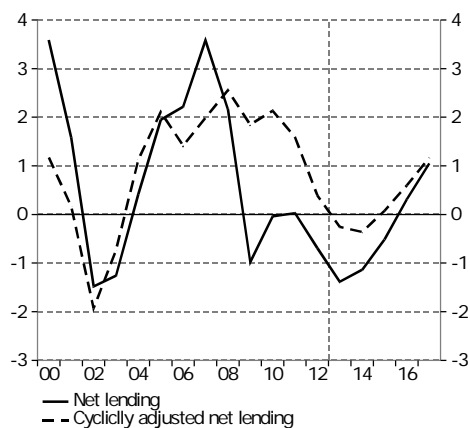
Percent of potential GDP



Source: NIER.

**Diagram 58 General Government Net Lending**

Percent of GDP and of potential GDP, respectively



Sources: Statistics Sweden and NIER.

of strong evidence that fiscal policy will be given a stance that deviates from this path.

#### ASSESSMENT OF TARGET ACHIEVEMENT

Since the surplus target was introduced in 2000, cyclically adjusted net lending has deviated temporarily from the long-term level. Net lending has been both higher and lower than the long-term level (see Diagram 57). Two periods are evaluated: the entire period since the target was introduced (2000–2012) and the period since the Alliance government took office (2007–2013). The shorter period also includes forecast year 2013 since the Government's latest Budget Bill is then included in the evaluation.

Net lending averaged 0.9 percent of GDP during the period 2000–2012, that is, close to the level of the surplus target. The output gap averaged  $-0.7$  during the period, a level near the long-term expected value of  $-0.5$  percent. Cyclically adjusted net lending during the same period averages 1.1 percent, which is also close to the long-term target level of 1.2 percent. All factors considered, the NIER finds that fiscal policy has been conducted in consistency with the surplus target during the period 2000–2012.

**Table 16 Average General Government Net Lending**

Percent

	2000–2012	2007–2013
Cyclically adjusted net lending <sup>1</sup>	1.1	1.5
Net lending <sup>2</sup>	0.9	0.4
Output gap <sup>1</sup>	$-0.7$	$-2.2$

<sup>1</sup> Percent of potential GDP. <sup>2</sup> Percent of GDP.

Sources: Statistics Sweden and NIER.

Net lending during the period 2007–2013 averaged 0.4 percent of GDP, or less than 1 percent. The output gap however, averages  $-2.2$  percent. Thus the state of the economy has been considerably weaker than the estimated expected value of  $-0.5$  percent, and net lending has been low because of large automatic stabilizers. Cyclically adjusted net lending during the same period is 1.5 percent of potential GDP and thus above the target level of 1.2 percent. A certain deviation from the target is indicated by the fact that cyclically adjusted net lending exceeds the target level at the same time as the output gap has been less than its expected value. One interpretation is that the Government has followed an excessively tight fiscal policy on average since 2007 in relation to the surplus target.



However, it is primarily up until 2010 that cyclically adjusted net lending has been relatively high. This is accounted for, in part, by the rapidly declining expenditure for ill health. Since 2011 fiscal policy has been clearly expansionary, and cyclically adjusted net lending is expected to drop below zero in 2013. (see Diagram 58). This means a relatively large deviation from the long-term target level. For the long-term target level to be reached again will require that fiscal policy be tightened as the economy improves. The NIER's forecast is that fiscal policy will be given a contractionary stance beginning in 2015 and that cyclically adjusted net lending will reach 1.2 percent of potential GDP in 2017 (see Diagram 58).