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The petroleum fund mechanism and associated foreign exchange transactions by Norges Bank

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The views expressed are those of the author and do not necessarily reflect those of Norges Bank



### The petroleum fund mechanism and associated foreign exchange transactions by Norges Bank

### by Ellen Aamodt<sup>1</sup>

The Norwegian government receives substantial revenues from petroleum activities, both as revenues in NOK from oil taxes and revenues in foreign currency from the government's own petroleum activities via the State's Direct Financial Interest (SDFI). The government spends a portion of total petroleum revenues every year via the central government budget. The remainder is transferred to the Government Pension Fund Global (GPFG) and is invested in foreign securities.

To date, government petroleum revenues in NOK have been higher than annual spending of petroleum revenues. Norges Bank, on behalf of the government, has converted the surplus in NOK into foreign currency and transferred the foreign currency to the GPFG. In the years ahead, government spending of petroleum revenues is expected to exceed revenues in NOK. The government will then have to draw on the foreign exchange in the SDFI to finance petroleum revenue spending. Norges Bank will be tasked with converting SDFI foreign exchange to NOK on behalf of the government, in the same way as the Bank has previously converted the government's NOK surplus from oil taxes into foreign currency.

The fact that Norges Bank will switch from buying to selling foreign exchange as part of the petroleum fund mechanism will not in itself have any impact on the krone exchange rate. Over time, it is the size of the non-oil budget deficit that is important for the krone exchange rate. The breakdown of the government's net cash flow from the petroleum sector into NOK and foreign currency has no bearing.

### The petroleum fund mechanism and government net revenues from the petroleum sector. The petroleum fund mechanism is the system that channels government revenues from

The petroleum fund mechanism is the system that channels government revenues from petroleum activities on the Norwegian continental shelf to spending via the central government budget and saving in the GPFG, with the capital in the GPFG being exclusively invested in instruments in foreign currency. Norges Bank is responsible for transferring the government surplus from petroleum activities to the GPFG and the foreign exchange transactions that are required in connection with the transfers.

The government spends oil money by covering a planned annual central government budget deficit, called the "non-oil budget deficit".<sup>2,3</sup> The portion of government petroleum revenues that is not used for government spending is transferred to the GPFG. Government revenues from the petroleum sector, also referred to as the government's net cash flow from the petroleum sector, consists of net revenues from sales of government-owned petroleum via the SDFI, oil taxes from oil companies and dividend income from Statoil.<sup>4</sup> This means that

<sup>&</sup>lt;sup>1</sup> Ellen Aamodt is adviser in Norges Bank Market Operations and Analysis. The views expressed in this article are those of the author and do not necessarily reflect the views of Norges Bank. I greatly appreciate the valuable contributions from colleagues, in particular Tom Bernhardsen, in the form of discussions, input and comments.

<sup>&</sup>lt;sup>2</sup> The central government budget is initially set up with a deficit with oil revenues excluded, and all of the government's revenues from the petroleum sector are transferred to the accounts of the GPFG. Subsequently, the deficit is financed through an account reversal from the GPFG.

<sup>&</sup>lt;sup>3</sup> The spending of petroleum revenues, or the size of the non-oil budget deficit, is subject to the fiscal rule: On average over time, the structural non-oil deficit on the central government budget shall not exceed the real return on the capital in the GPFG, which is estimated at 4 percent.

<sup>&</sup>lt;sup>4</sup> Changes in government ownership in Statoil will also influence the government's net cash flow from petroleum activities.

The government's net cash flow from petroleum activities = Oil taxes + Net revenues from the SDFI + Dividend from Statoil = Structural non-oil budget deficit + Transfers to the GPFG

The SDFI's revenues are virtually all in foreign currency.<sup>5</sup> The SDFI's foreign exchange revenues are transferred every day via a foreign exchange portfolio in Norges Bank called the "petroleum buffer", where they accumulate prior to transfer to the GPFG. Oil and gas companies pay oil taxes in NOK and convert their foreign exchange into NOK before payment takes place. The government's dividend income from Statoil is also paid to the government in NOK. <sup>6,7,8,9</sup>

To date, the "NOK portion" of government petroleum revenues (oil taxes and dividend income from Statoil) has exceeded the budget deficit (spending of petroleum revenues). The NOK surplus has been transferred to the GPFG together with government foreign exchange revenues from the SDFI. The NOK surplus has been converted into foreign currency through Norges Bank's foreign exchange purchases in the market for an equivalent amount, which has been deposited in the petroleum buffer together with the foreign exchange from the SDFI. At the time of the transfer to the GPFG, Norges Bank has sold the foreign exchange to the government (GPFG) by drawing on the government's NOK account and crediting the equivalent amount to the GPFG. The petroleum fund mechanism, as it has functioned to date, is illustrated in Chart 1.

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<sup>&</sup>lt;sup>5</sup> Transfers are made in practice as follows: Norges Bank purchases SDFI's *gross* foreign exchange revenues and pays with NOK, which is transferred to government's account in Norges Bank. See annex for further explanation of the effects of petroleum fund mechanism transactions on Norges Bank's balance sheet items. The SDFI's revenues in NOK are transferred from Petoro's (the state-owned petroleum company that manages the SDFI portfolio) account in one of the Norwegian banks to the government's account with Norges Bank. The SDFI's operating and investment expenses are appropriated via the central government budget, and are financed primarily by drawing on the government's account with Norges Bank. When the SDFI has expenses in foreign currency, the exchange is made by Petoro's bank.

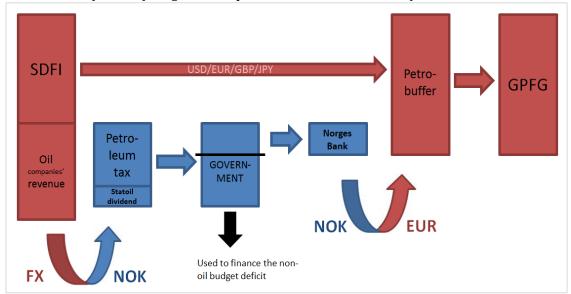
<sup>&</sup>lt;sup>6</sup> Oil taxes and government dividend income from Statoil are hereafter referred to collectively as "oil taxes (in NOK)".

<sup>&</sup>lt;sup>7</sup> Most of oil and gas companies' net income is transferred to the government in the form of taxes. Oil and gas companies' profits after tax represent only a small portion of income. Oil and gas companies have substantial gross revenues in foreign currency and gross expenses in NOK, which entail an exchange need in addition to tax payments, but this is not a part of the exchange of foreign currency associated with the petroleum fund mechanism.

<sup>&</sup>lt;sup>8</sup> Amounts of oil tax payable by oil and gas companies are transferred from these companies' accounts in Norwegian banks to the government's account with Norges Bank. Oil tax is payable six times a year: 1 February, 1 April, 1 June, 1 August, 1 October and 1 December. Dividend payment from Statoil is a direct transfer in NOK from Statoil's account in one of the Norwegian banks to the government account with Norges Bank.

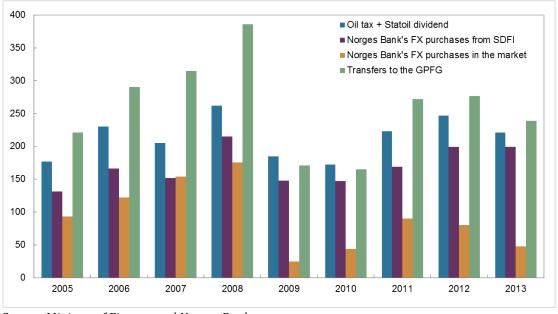
<sup>&</sup>lt;sup>9</sup> See "The petroleum fund mechanism and Norges Bank's foreign exchange purchases for the GPFG", *Economic commentaries* 14/2012 by Ellen Aamodt for a further description.

Chart 1. The petroleum fund mechanism, where Norges Bank has to date converted the government's NOK surplus from petroleum activities into foreign currency, which is then transferred to the GPFG together with foreign exchange revenues from the SDFI. The red columns illustrate cash flows in foreign currency and the blue columns cash flows in NOK.



The size of the cash flows in the petroleum fund mechanism varies from one year to the next (see Chart 2). Government revenues from petroleum activities are influenced by both oil and gas prices and by oil and gas production. Government spending of petroleum revenues depends on economic developments. Historically, spending has increased in bad times and declined in good times.

Chart 2. Oil taxes, foreign exchange revenues from the SDFI, Norges Bank's foreign exchange purchases and transfers to the GPFG. 2005-2013. In billions of NOK.



Source: Ministry of Finance and Norges Bank.

# Revised National Budget for 2014 and the future path of government petroleum revenues and spending

The Revised National Budget for 2014 implies an increase in government spending of petroleum revenues from NOK 116.5 billion in 2013 to NOK 146.3 billion in 2014 (close to 3 percent of the

GPFG). The budget is based on an estimated fall in government net revenues from petroleum activities from NOK 345.2 billion in 2013 to NOK 326.3 billion in 2014, with an associated reduction in transfers to the GPFG to NOK 180 billion (see Chart 3).

450 Govt. net cash flow from petroleum activities 400 ■ Petroleum revenue spending (budget deficit) Transfer to GPFG 350 300 250 200 150 100 50 0 Fiscal budget 2014 with Revised fiscal budget amendment

Chart 3. Key figures from the central government accounts 2011-2013 and the central government budget and Revised National Budget for 2014. In billions of NOK.

Source: Ministry of Finance. \*Estimates from Revised National Budget for 2014.

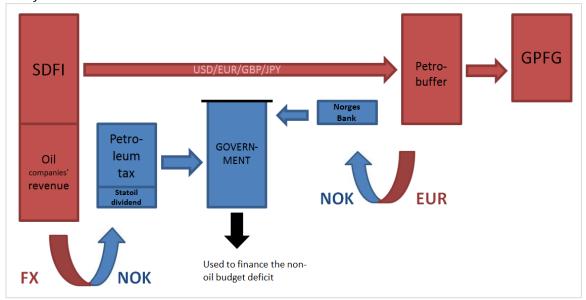
Given a simple assumption that the government's net cash flow from petroleum activities broken down into NOK and foreign currency follows the average path for the past few years, the government's gross foreign exchange revenues from the SDFI will be sufficient to cover transfers to the GPFG in 2014, eliminating the need for Norges Bank to purchase foreign exchange in the market on behalf of the government for the GPFG in 2014. Sustained spending of 3 percent of the GPFG and a constant path for the government's net cash flow from petroleum activities in NOK and foreign currency further indicate that the government must in the near future sell foreign exchange from the foreign exchange revenues from the SDFI to cover spending of petroleum revenues. This implies a conversion of foreign exchange in the SDFI into NOK because the government's NOK revenues from the petroleum sector do not alone suffice to cover the non-oil budget deficit.

#### Petroleum fund mechanism and Norges Bank's sale of foreign exchange from the SDFI

Norges Bank is tasked with selling foreign exchange from the SDFI on behalf of the government. In practice, Norges Bank will purchase all of the SDFI's gross foreign exchange revenues and deposit the amount temporarily in the petroleum buffer portfolio. Norges Bank then sells the foreign exchange to the government equivalent to the amount, as stipulated by Ministry of Finance, to be transferred by Norges Bank to the GPFG. The remainder will be sold in the market in the same way as when Norges Bank purchased foreign exchange for the GPFG. This means that the sales are planned and smoothed over the year and announced ahead of each month so that market operators know the amounts to be converted. The petroleum fund mechanism as it will appear when Norges Bank sells foreign exchange in the SDFI is illustrated in Chart 4.10

<sup>&</sup>lt;sup>10</sup> In the short term, the petroleum mechanism also affects bank liquidity, or reserves in the banking system. Oil tax payments and Statoil's dividend payment represent a substantial withdrawal of reserves from the banking system (reserves are transferred from banks' accounts with Norges Bank to the government's account with Norges Bank). Revenues from the SDFI are transferred directly to the government in foreign currency and for that reason do not affect reserves in the banking system. When Norges Bank starts selling foreign exchange from the SDFI, this will represent a withdrawal of reserves, as

Chart 4. The petroleum fund mechanism, where Norges Bank will sell foreign exchange from the SDFI in the market. The red columns illustrate cash flows in foreign currency and the blue columns cash flows in NOK.



#### Effect of spending of government petroleum revenues on the krone exchange

Over the short term and on a daily basis, oil and gas company purchases of NOK and Norges Bank's foreign exchange transactions related to the GPFG may have an influence on the krone exchange rate, especially when large amounts are converted. In the longer term, it is the size of the non-oil budget deficit, or spending of petroleum revenues, that affects the krone exchange rate. The breakdown of the government's net cash flow into foreign exchange revenues from the SDFI and oil taxes in NOK does not have an impact, which is readily illustrated by the fact that all government revenues from petroleum activities accrue directly in foreign currency. The government must sell foreign currency to buy NOK in an amount equivalent to the budget deficit. It is this transaction that in isolation implies an appreciation of NOK, i.e. it is not the phasing in of petroleum revenues into the Norwegian economy to finance the budget deficit that will have an impact on the krone exchange rate. A further description is provided in an annex to this article, where the relationship between the budget deficit and the krone exchange rate is presented under various assumptions concerning the composition of oil taxes in NOK and foreign exchange from the SDFI. The annex also illustrates how the transactions in the petroleum fund mechanism affect Norges Bank's balance sheet items.

The fiscal rule provides a framework for the non-oil budget deficit. The GPFG stood at a good NOK 5.1 trillion as at May 2014, which is over 200 percent of GPD for mainland Norway. According to projections from the Ministry of Finance, GPFG capital will amount to about NOK

do the oil tax payments and dividend from Statoil. On balance, withdrawal of reserves from the banking system in connection with oil tax and dividend payments to the government is liquidity neutral when the government spends petroleum revenues via the government budget and reserves are returned to the banking system. As has been the case until recently, if the spending of petroleum revenues is smaller than the NOK portion of the government's net cash flow from petroleum activities, the reserves have also been returned to the banking system when Norges Bank has purchased foreign exchange the GPFG (and sold NOK). For a further description, see "The petroleum fund mechanism and Norges Bank's foreign exchange purchases for the GPFG", *Economic commentaries* 14/2012 by Ellen Aamodt and "Norges Bank's balance sheet and earnings", Norges Bank *Staff Memo* 9/2013 by Ellen Aamodt and Marie Norum Lerbak. The effect of transactions between banks and the government/Norges Bank on reserves in the Norwegian banking system is discussed in Norges Bank *Economic commentaries* 9/2013 by Ellen Aamodt and Kristian Tafjord.

7.4 trillion around the beginning of 2020.<sup>11</sup> A fiscal rule that implies annual spending of 4 percent of GPFG capital via the government budget entails spending of petroleum revenues of more than NOK 200 billion today and more than NOK 295 billion in 2020, i.e. a "large" fund provides room for a "large" deficit. If the fiscal rule is applied, a fund that grows over time will provide room for a steadily rising budget deficit.

Up to 2014, the non-oil deficit has been lower than the government's net cash flow from petroleum activities in NOK. Norges Bank has thus converted the NOK surplus into foreign currency for transfer to the GPFG. In 2014, Norges Bank will not purchase foreign exchange for the GPFG because the budget deficit is approximately equal to oil taxes in NOK, i.e. the foreign exchange revenues from the SDFI are sufficient to cover the transfer to the GPFG. As from 2015, the budget deficit is expected to be larger than the government's NOK surplus from petroleum activities, entailing a need to convert portions of the foreign exchange in the SDFI into NOK to cover spending of petroleum revenues. In the longer term, the government's net cash flow from petroleum activities will approach zero so that the entire budget deficit must be financed by reversing funds from the return on the GPFG. Nonetheless, as shown by the examples in the annex, it is the *level* of the non-oil deficit that determines the amount of foreign currency that is converted into NOK, which in turn may have an impact on the krone exchange rate, and not the breakdown of the government's cash flow from petroleum activities into NOK and foreign currency.

#### **Conclusion**

The government's foreign exchange revenues from the SDFI will likely be sufficient to cover transfers to the GPFG in 2014. This means that the budget deficit is approximately equal to the NOK portion of the government's revenues from the petroleum sector. In that case, Norges Bank will not purchase foreign exchange for the GPFG in 2014. Somewhat further ahead, the budget deficit will become larger than the government's revenues in NOK from the petroleum sector so that the government will need to sell foreign exchange and purchase NOK to cover petroleum revenue spending. Norges Bank will be tasked with selling the foreign exchange in the same way as it has been tasked to date with purchasing foreign exchange, on behalf of the government, for the GPFG.

It is the size of the non-oil budget deficit that determines the amount of foreign exchange to be converted into NOK. The breakdown of the government's net cash flow from the petroleum sector into NOK and foreign currency has no influence on long-term developments in the krone exchange rate.

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<sup>&</sup>lt;sup>11</sup> Assuming withdrawals from the GFPG equivalent to 4 percent of its capital each year up to 2020. Source: Revised National Budget for 2014.

### Annex: Petroleum fund mechanism, net amount converted from foreign currency to NOK and transaction on Norges Bank's balance sheet

Over time it is the size of the non-oil budget deficit, or spending of petroleum revenues, that influences the net amount converted from foreign currency into NOK and hence the krone exchange rate. If the total of all government revenues from petroleum activities accrued directly in foreign currency, the government would need to sell foreign exchange and buy NOK in an amount equivalent to the budget deficit, which in isolation would imply an appreciation of the krone exchange rate. This means that the breakdown of the government's net cash flow from the petroleum sector into foreign exchange revenues from the SDFI and taxes in NOK from oil and gas companies has no influence on the krone exchange rate. This can be illustrated by a few examples that show the relationship between the budget deficit and net amounts converted from foreign currency into NOK, given various assumptions about the composition of oil taxes in NOK and foreign exchange in the SDFI.

- 1. Assume first that the non-oil deficit is zero, which implies zero spending of petroleum revenues:
  - Foreign exchange revenues from the SDFI are transferred directly to the petroleum buffer/GPFG.
  - Oil and gas companies sell foreign currency and purchase NOK in the market equivalent to the size of oil taxes. In isolation, this leads to a stronger krone.
  - Norges Bank purchases foreign exchange for the GPFG and sells NOK. In isolation, this
    leads to a weaker krone. Because the budget deficit is assumed to be equal to zero,
    Norges Bank purchases the same amount of foreign exchange as the oil and gas
    companies sell. Hence, the overall effect on the krone exchange rate is neutral.
- 2. Assume a non-oil budget deficit that is smaller than petroleum revenues in NOK, so that the entire deficit can be covered by petroleum revenues in NOK (situation to end-2013):
  - Foreign exchange revenues from the SDFI are transferred directly to the petroleum buffer/GPFG.
  - The oil companies sell foreign currency and buy NOK in an amount equivalent to oil taxes. Norges Bank purchases foreign exchange and sells NOK in an amount equivalent to oil taxes less the budget deficit. The net amount converted from foreign currency into NOK will be determined by the central government budget deficit.
- 3. Assume a non-oil budget deficit that is equal to petroleum revenues in NOK, so that the entire deficit can be covered by petroleum revenues in NOK (approximate situation in 2014, given the assumptions in the revised national budget 2014):
  - Foreign exchange revenues from the SDFI are transferred directly to the petroleum buffer/GPFG.
  - The oil companies sell foreign currency and buy NOK in an amount equivalent to oil taxes. Norges Bank does not buy foreign currency and the net amount converted from foreign currency into NOK will still be determined by the budget deficit.
- 4. Assume a non-oil budget deficit that is lower than the government's petroleum revenues, but larger than revenues in NOK, so that the revenues in NOK alone do not cover the deficit (the situation assumed to prevail in the coming years):
  - Foreign exchange revenues from the SDFI are transferred directly to the petroleum buffer/GPFG.
  - As was the case earlier, the oil companies will sell foreign currency and buy NOK in an amount equivalent to oil taxes.
  - Since the deficit is now larger than the government's petroleum revenues in NOK, the government must finance the rest of the budget deficit by converting portions of the foreign exchange revenues from the SDFI into NOK. The remainder of the foreign

exchange revenues from the SDFI is transferred directly to the GPFG. Also in this case, the net amount converted from foreign currency into NOK will be determined by the budget deficit.

- 5. Assume a non-oil budget deficit that is larger than the government total petroleum revenues. The government must then reverse funds from the GPFG return to cover petroleum revenues:
  - Oil companies will sell foreign currency and buy NOK in an amount equivalent to oil taxes
  - The government (Norges Bank) must convert all foreign exchange revenues from the SDFI into NOK.
  - Since petroleum revenue spending is now greater than the government total petroleum revenues, funds will in addition have to be reversed from the GPFG to the government budget. The government must sell foreign currency from the GFPG return and buy NOK in an amount equivalent to the portion of the budget deficit that is not covered by the government's petroleum revenues. Again, the total net amount converted into NOK will be determined by the government budget deficit.
- 6. Assume a non-oil budget deficit combined with zero government revenues from the petroleum sector. The entire deficit must be financed by funds from the GPFG return. This will be the situation prevailing when oil and gas resources on the Norwegian continental shelf are depleted.
  - The government must then sell foreign currency from the GFPG return in an amount equivalent to the budget deficit. Conversion into NOK, and hence the effect on the krone exchange rate, will be determined by the size of the budget deficit.

The transactions associated with the petroleum fund mechanism have an impact on Norges Bank's balance sheet. The table below shows a simplified version of Norges Bank's balance sheet. The asset side comprises Norges Bank's loans to banks, foreign exchange reserves and foreign currency investments for the GPFG. Foreign exchange reserves primarily consist of a long-term portfolio and a money market portfolio. In addition the petroleum buffer portfolio is part of the foreign exchange reserves. In the table below, the petroleum buffer is for illustrative purposes broken down into Norges Bank's foreign exchange purchases from the SDFI and Norges Bank's foreign exchange purchases in the market. The liabilities and equity side include bank deposits, government deposits, notes and coins, equity and the government's NOK account for the GPFG.

Table: Norges Bank's balance sheet (simplified). Petroleum buffer portfolio is for illustrative purposes broken down into two components: Norges Bank's foreign exchange purchases (FX) from the SDFI and Norges Bank's foreign exchange (FX) purchases in the market.

Assets	Liabilities and equity
Lending to banks	Deposits from banks
Foreign exchange reserves  Long term portfolio	Government deposits
Money market portfolio Petroleum buffer_SDFI-FX	Notes and coins
Petroleum buffer_FX bought in the market	Equity
Foreign currency investments for the GPFG	Government NOK account fo the GPFG

<sup>&</sup>lt;sup>12</sup> See «Norges Bank's balance sheet and results», *Norges Bank Staff Memo* 9/2013, by Ellen Aamodt and Marie Norum Lerbak, for a further description.

<sup>&</sup>lt;sup>13</sup> For more information on foreign exchange reserves, see <a href="http://www.norges-bank.no/eng/pricestabilty/foreign-exchange-reserves/">http://www.norges-bank.no/eng/pricestabilty/foreign-exchange-reserves/</a>

The examples below are presented to illustrate the effect of the transactions associated with the petroleum fund mechanism on Norges Bank's balance sheet. A useful starting point is the formula for the use of the government's petroleum revenues to cover the non-oil budget deficit and transfers to the GPFG:

The government's net cash flow from petroleum activities = Oil taxes + Net revenues from the SDFI + Dividend from Statoil = Structural non-oil budget deficit + Transfers to the GPFG

- 1. The non-oil deficit is zero. The government's entire net cash flow from the petroleum sector comes directly in foreign currency from the SDFI<sup>14</sup> and is transferred to the GPFG:
  - Norges Bank buys foreign currency from the SDFI. "Petroleum buffer\_SDFI-FX" (asset side) and "government deposits" (liabilities and equity side) increase by equal amounts (Norges Bank buys foreign exchange and credits the government's account).
  - The last business day each month, foreign exchange is transferred from "Petroleum buffer\_SDFI-FX" to "foreign currency investments for the GPFG" at the same time as an equivalent NOK amount is transferred from "government deposits" to "government NOK account for the GPFG" (Norges Bank sells the foreign exchange back to the government).
- 2. The non-oil deficit is zero. The government's entire cash flow from the petroleum sector comes from oil taxes in NOK and is to be transferred to the GPFG:
  - Oil companies sell foreign currency, buy NOK and pay taxes to the government (six times per year). The item "banks deposits" on Norges Bank's balance sheet is reduced, while the item "government deposits" increases by the same amount.
  - Norges Bank buys foreign currency and sells NOK in an amount equivalent to the transfer to the GPFG. The items "petroleum buffer\_FX bought in the market" and "bank deposits" increase by equal amounts.
  - The last business day each month, foreign exchange from "petroleum buffer\_FX bought in the market" is transferred to "foreign currency investments for the GPFG" (Norges Bank sells foreign exchange bought in the market to the government)
- 3. The government has a budget deficit, but it is smaller than oil taxes in NOK. For example, oil taxes in NOK are NOK 100, the non-oil deficit is NOK 20 and the SDFI is USD 50 (NOK 300):
  - Oil companies sell foreign currency, buy NOK and pay taxes to the government in an amount of NOK 100. "Bank deposits" is reduced and the item "government deposits" increases by NOK 100.
  - The government spends NOK 20 (the deficit). The item "government deposits" is reduced by NOK 20, while "bank deposits" increases by NOK 20.
  - Norges Bank buys foreign currency for NOK 80 (USD 13.3) in the market, i.e. the difference between oil taxes in NOK less spending of petroleum revenues. "Petroleum buffer\_FX bought in the market" increases by USD 13.3 and "bank deposits" by NOK 80. "Bank deposits" remains unchanged in sum (-100+20+80=0)
  - Norges Bank buys foreign currency in an amount equivalent to USD 50 from the SDFI which is transferred to "petroleum buffer\_SDFI-FX" and NOK 300 is credited "government deposits".
  - USD 13.3 is transferred from "Petroleum buffer\_FX bought in the market" to "foreign currency investments for the GPFG". NOK 80 is transferred from "government deposits" to "government NOK account for the GPFG".
  - USD 50 is transferred from "petroleum buffer\_SDFI-FX" to "foreign currency investments for the GPFG" at the same time as NOK 300 is transferred from "government deposits" to "government NOK account for the GPFG".

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 $<sup>^{14}</sup>$  This means that the government's only source of petroleum revenues is the SDFI.

- 4. The non-oil deficit is larger than oil taxes in NOK. For example: oil taxes are NOK 100, the non-oil deficit is NOK 120 and the SDFI is USD 50 (NOK 300):
  - Oil companies sell foreign currency, buy NOK and pay taxes to the government in an amount of NOK 100. "Bank deposits" is reduced and "government deposits" increases by NOK 100.
  - Norges Bank buys foreign currency in an amount equivalent to USD 50 from the SDFI which is transferred to "petroleum buffer\_SDFI-FX", and NOK 300 is credited "government deposits". The item "government deposits" increases by a total of NOK 400.
  - The government spends NOK 120 (budget deficit). The item "government deposits" is reduced by NOK 120, while "bank deposits" increases by NOK 120 (NOK 280 now remains in "government deposits" to be transferred to "government NOK account for the GPFG", while "bank deposits" have increased by a total of NOK 20).
  - Norges Bank transfers USD 46.66 from "petroleum buffer\_SDFI-FX" to "foreign currency investments for the GPFG". At the same time, NOK 280 is transferred from "government deposits" to "government NOK account for the GFPG".
  - Norges Bank sells USD 3.33 (NOK 20) from "petroleum buffer\_SDFI-FX". The item "bank deposits" is reduced by NOK 20 (reserves in the banking system remain unchanged in sum).