

# **How can Sovereign Money be brought into circulation?**

## **Accounting options for a central Bank\***

by Thomas Mayer

(8.2.2013, [Thomas.mayer@vollgeld-initiative.ch](mailto:Thomas.mayer@vollgeld-initiative.ch))

The monetary reform required to introduce Sovereign Money consists of two main components:

1. Only the central bank will be allowed to create new electronic money. Banks will no longer be allowed to create new deposit money, but can only lend out money that is already in existence.
2. The central bank brings the new money, known as Sovereign Money (or “Vollgeld” in German) into circulation, usually by issuing debt-free money directly to the state or to the citizens.

How will this actually work in practice? From the perspective of the central bank, there are several ways to distribute new Sovereign Money:

1. Temporary and interest-bearing loans to banks (current practice)
2. Purchase of assets (current practice)
3. Interest-free loans of an unlimited term to the Government
4. As a gift to the State or citizens
5. Stake holding in the State
6. Stake holding in the economy
7. Profit distribution to the State or citizens

In the following sections how each of these would work is explained, and their relative merits are discussed.

Methods one and two correspond with current practice. These paths remain open after this monetary reform, but they should not be used as the rule, but rather as the exception.

\* Translated from “Wie Vollgeld in Umlauf bringen? Bilanzierungsmöglichkeiten aus Sicht der Zentralbank” by Emma Dawnay

Sovereign Money comes into circulation debt-free with methods four to seven, but there are large differences between them. It is considered that the “best” methods will be clear, understandable and describe the reality of the situation well. How money is brought into the system is important because the method by which money is introduced can either help or hinder the general understanding about the money system.

Given the advantages and disadvantages of the different methods, it is argued that method 7 "profit distribution to the State or citizens" is the optimum solution. Dr. Timm Gudehus comes to the same conclusion in his essay "Money creation and public finance" (1). The British proponents of Sovereign Money monetary reform, Positive Money, also recommend this method in "The Positive Money Proposal, 2013" (2), but they find the other methods are also possibilities.

This article is written from the perspective of Switzerland and the Eurozone Member States. Due to the current Swiss Sovereign Money initiative, real figures from Switzerland have been used to illustrate method 7. Very simple representations of the balance sheet are used below for the sake of clarity and **the bookings are marked in bold**. There are four possible movements in balance sheet accounting: balance sheet expansion, balance sheet contraction, a change in assets or a change in liabilities.

## Method 1: Temporary and interest-bearing loans to banks

Temporary and interest-bearing loans are currently the standard way that the central bank brings money into circulation. Money is created by expanding the central bank's balance sheet. When the central bank gives Bank "A" a loan of 1000, both the amount owed by the Bank A to the central bank as well as the balance of Bank A's account with the central bank are increased by 1000.

Central Bank balance sheet	
Assets	Liabilities
Other assets <b>Loan to bank A: + 1000</b>	Other liabilities <b>Reserve account of Bank A at the central bank: + 1000</b> Equity

This central bank money (known as central bank reserves) is of a higher order and circulates only between banks and the central bank. The public (e.g. businesses and individuals) receives only book money of a lower order, generated by the banks. The banks create this in just the same way as the central bank creates central bank reserves. Bank money is created by expanding the bank's balance sheet. If a bank has granted a loan of 10 to a customer, this is booked on both sides of the balance sheet.

Bank balance sheet	
Assets	Liabilities
Other assets <b>Loan to customer: + 10</b>	Other liabilities <b>Customer's current account: + 10</b> Shareholder equity

## Method 2: Purchase of assets

It is also common for central banks to purchase securities, currencies, gold or other assets. This will still be possible after the Sovereign Money monetary reform is introduced. For this either new central bank reserves are created or foreign-exchange reserves (foreign currencies) are used.

*Balance sheet expansion:* The central bank buys 100 gold and 100 of shares from Bank “A”. New central bank reserves have been created.

Central Bank balance sheet	
Assets	Liabilities
Other assets <b>Gold stocks: + 100</b> <b>Investments: + 100</b>	Other liabilities <b>Reserve account of Bank A at the central bank: + 200</b> Equity

*A change in assets:* The central bank uses foreign currency to purchase 100 gold and 100 of shares. This brings the foreign currency back into circulation, but no additional central bank reserves are created.

Central Bank balance sheet	
Assets	Liabilities
Other assets <b>Foreign exchange reserves - 200</b> <b>Gold stocks + 100</b> <b>Investments + 100</b>	Other liabilities Reserve account of banks Equity

### *Discussion:*

The purchase of assets to bring currency into circulation can continue to take place at a low level as it has done up to now, but it should not become the dominant method. This is because the profit goes mainly to the organisations selling the gold, stocks or other securities. When the central bank buys many such assets, the price of those

assets will rise. Also, if the central bank owns large amounts of such assets it will have a conflict of interests (i.e. to maintain the price of these assets rather than meet other goals). As the monetary authority, the central bank should engage as little as possible in the financial markets so it can remain independent when enacting monetary policy, and be committed to the common good.

## Switchover to Sovereign Money

By switching to Sovereign Money, the “lower-order” money will no longer be necessary, as money equivalent to central bank reserves can be used for everything. Below this is called book money.

*How will the switchover affect a bank's balance sheet?*

*A switch in liabilities:* At the moment a bank has liabilities to its customers in the form of balances on current accounts. After the switch over to Sovereign Money these will become liabilities of the central bank. A bank will no longer owe the customer (account holder) anything, but the central bank will owe them. The customers' current accounts will still be managed by the banks, but off the bank's balance sheet.

A bank balance sheet	
Assets	Liabilities
Other assets Loans to customers	Other liabilities <b>Customer current accounts: -1000</b> <b>Credit from central bank: + 1000</b> Shareholder equity

Off Balance Sheet
<b>Customers' current accounts: + 1000</b>

*How will the switchover affect the central bank's balance sheet?*

*Balance sheet expansion:* The loans to banks will increase in line with the book money in circulation. A new account called "book money in circulation" must be created, as before the switchover central bank book money (known as central bank reserves) didn't leave the central bank. This will be a change under the Sovereign Money monetary reform. The central bank book money will circulate everywhere in the economy in the same way as banknotes. For the central bank's balance sheet this will work in the same way as the account “Bank notes in circulation” works today. This account comprises of all stocks of cash held by private individuals, companies and public institutions. The new balance sheet account “book money in circulation”

will include all book money in customers' current accounts, which are managed by the banks off-balance sheet.

Central Bank balance sheet	
Assets	Liabilities
Other assets <b>Loans to banks: + 1000</b>	Other liabilities <b>Book money in circulation: + 1000</b> Equity

At the point of the switchover to Sovereign Money, bank loans from the central bank will increase to the amount of the money supply M1 (in the euro area 5.170 billion euros, in Switzerland 537 billion CHF, as of 2012). During a transitional period of about fifteen years these loans will be scaled back. As the banks repay their loans to the central bank (for example, when their customers repay their own loans to their banks), there will be a contraction of the central bank's balance sheet: both "loans to banks" and "book money in circulation" will contract. The amount of money repaid will simply disappear from circulation. For the money supply to remain stable, the central bank must create new Sovereign Money and bring it into circulation at the same rate at which loans are being repaid. The only exception to this is if the central bank wants to make new loans to the banks, for example when the credit supply is insufficient in certain sectors of the economy. Typically, new Sovereign Money will be created and given debt-free to the State or to the citizens. The possible methods of doing this are described below.

### Method 3: Interest-free loans of an unlimited term to the Government

Here we look in more detail how interest-free credit of unlimited term can be given to the government. How does this look in the central bank's balance sheet? Two bookings take place:

1)*Balance sheet expansion:* the central bank loans the Federal Government 1000 and credits this to its central bank account.

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
Loans to banks	Bank notes in circulation
<b>Interest-free credit of unlimited term to: the government: + 1000</b>	Book money in circulation
the cantons	<b>The government's account at the central bank: + 1000</b>
the citizens	Equity

2)*A change in liabilities:* the Government uses the money either to pay off debts or to pay salaries and suppliers. Thus, money will be transferred from its central bank account to other accounts managed by commercial banks. This book money has come into general circulation outside of the normal circulation of central bank reserve money.

That's why it is necessary to have the account "book money in circulation", which includes all book money balances maintained by the banks. The government's account at the central bank reduces and the book money in circulation increases. A comparable change in liabilities takes place today, when banks buy bank notes from the central bank and the banknote circulation grows.



Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
Loans to banks	Bank notes in circulation
Interest-free credit of unlimited term to:	<b>Book money in circulation: +1000</b>
the government	<b>The government's account at the</b>
the cantons	<b>central bank: - 1000</b>
the citizens	Equity

Using this method the central bank makes new money available as a liability. The government owes an interest free debt of unlimited duration to the central bank of an amount equal to the amount of money in circulation.

What does an interest free loan of unlimited mean? What forms of such debts are used today?

- Donor loans to charities are often of unlimited duration and always interest-free. Here a charity gets a loan and it can use the interest income, but if the loan is terminated it must be repaid.
- Bank overdrafts are open-ended loans for private individuals and enterprises. When a customer has an overdraft facility, he may use this money without any repayment agreement; however the bank may terminate the overdraft facility when it wants.
- Banks and insurance companies also issue open ended loans in the form of perpetual bonds. These are called "Hybrid bonds" because they are a hybrid between debt and equity. The hybrid bond can only be terminated by the borrower, not by the lender. Hybrid bonds count towards a bank's regulatory capital. The exact distinction between debt and equity is hazy and will repeatedly be debated. The requirements for hybrid bonds have been tightened in the new Basel 3 rules.

*Discussion:*

- 1) The government remains indebted to the central bank for eternity, at the level of the amount of book money in circulation. Thus, an essential core argument for the

Sovereign Money monetary reform will not work. It is no longer possible to say that with Sovereign Money the national debt of the Euro Nations could be reduced by 60% or that Switzerland could be totally without a national debt. This weakens the necessary argument for the introduction of Sovereign Money.

- 2) The public may be confused and have fears about the growing “national debt”. There will be two types of national debt, one which must be paid back, and another which is interest-free and perpetual. Such confusion is inevitable. To avoid this, the perpetual interest-free debt should not be calculated as part of the official debt - what isn't in the statistics isn't noticed. This is, of course, common practice. Positive Money in the UK notes that the debt from bank bailouts is not counted in the official national debt statistics.(3) However such an approach isn't consistent with clarity, promoting understanding and democracy.
- 3) Money creation through interest-free credit doesn't give rise to “seigniorage” profit - there is no revenue of 5 billion euros or 300 billion CHF. The creation of Sovereign Money can't be compared with that of coins (with their associated seigniorage) any more.
- 4) Even if the national debt remains, the interest-free credit will sink the interest costs of the State in the same way as if the national debt was reduced, which would greatly aid the public finances.
- 5) Money creation remains associated with debt. Money and credit will not have been separated: money “for payment” will remain linked to credit “with the promise of payment”. It will be difficult to move on from the old patterns of thought, even though we really want to get beyond this and speak of "sovereign money".
- 6) Interest-free loans with infinite maturity require no Sovereign Money monetary reform. They are possible within the framework of the existing monetary system and lead to a displacement of bank money by central bank money. In the end there is almost no difference between this and the current practise of purchasing government bonds which the US Fed and the Bank of England now undertake - known as “quantitative easing”. It doesn't matter if the loans are interest-free or with interest, because central banks can use the interest paid by the State for further payments to the State.
- 7) In the euro area this method would be in contradiction with article 123 of the Treaty on European Union, which prohibits loans from the ECB to the member

governments. In Switzerland this method is also prohibited by the National Bank Act (NBG) in article 11. The prohibition of State financing is a central point of contention in the euro crisis. This ban is strongly anchored in Europe and linked to fear of inflation. Any ideas of changing it would awaken deep-seated fears and meet with strong resistance. Many potential supporters of a Sovereign Money monetary reform would have to revise views they have held for years, which would be asking a lot of them. Striking off article 123 or article 11 would stir up public opinion, that, secretly, there would be an inexhaustible source of funding for the States, ultimately allowing the State to be able to inflate their way out of their deficit problems. The independence of central banks is the key to confidence in the currency. So central banks must be largely protected from exploitation by governments, which is why the credit ban makes sense.

- 8) In previous central bank practice, money always had to be backed by gold, loans to banks or other assets, which make up the assets of the central bank's balance sheet. There fore, up till now money creation has only taken place through making loans or buying of assets. Money is on the liabilities side of the balance sheet. This practise was developed from the time when money had to be backed by a certain amount of gold. In fact all that's needed for democratic legitimate money to have value is a productive economy and an independent central bank. However, the public has a strong need of the sense of security of money being "backed" by something like gold. This does not help the idea of "open-ended credit". According to the general understanding, loans must be written-off when there is no prospect of repayment. Government debt of the size of the money supply can never be paid back, not only because of the huge quantities, but also because if they were, then all the money in circulation would disappear. And now, can the idea that these "bad" loans are intended to back the sovereign money in the same way as gold in the old times be explained to the public? The previous habit of money creation through credit is inappropriate for Sovereign Money reform. Rather than squeeze ourselves in unfitting old clothes, we should choose to prefer new clothes that fit and are comfortable.
- 9) Clarification is also needed about the conditions under which the central bank could repay part of the permanent loan. This would be necessary for the central bank to be able to reduce the amount of money in circulation.

10) The draft of the Swiss Sovereign Money initiative proposes that new Sovereign Money should come into circulation by direct allocation to citizens. This wouldn't be in the form of open-ended perpetual credit (despite any arguments in favour of it) as, in this case, the central bank would have to keep a register of each individual "borrower" (i.e. every citizen). And other questions would remain, such as on death, who would inherit the loan?

Interest-free and perpetual credit is an unconvincing way to bring new Sovereign Money in circulation. The methods below describe the alternatives.

#### Method 4: As a gift to the State or citizens

Why does it have to be so complicated? The central bank could just give sovereign money to the State or the citizens. Giving something can be done without getting anything in return or having a claim on what is given. It's a beautiful and warm gesture.

Thus nothing need be written on the asset side of the central bank's balance sheet when money is created. A balance sheet expansion does not happen: the new money is created as a change in liabilities at the expense of equity. Every time money is given to the State (which thus would have higher balances on its central bank account) the central bank's equity decreases.

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities Book money in circulation <b>The government's account at the central bank: + 1000</b> <b>Equity: -1000</b>

If the Government spends the new money, it comes – as we have seen above - in the entry “book money in circulation”.

However, the central bank's equity will soon be used up. For normal companies this would lead to insolvency. This is no problem for a central bank, because it is excluded by the insolvency law. It always has liquidity, since it creates the money. Therefore it doesn't mean anything special if the central bank has no equity. If equity is negative, it slips on the assets side of the balance sheet. But even with negative equity, the central bank can give away more and more new money. This is now done by a balance sheet expansion, where the negative equity becomes more and more negative:

Central Bank balance sheet	
Assets	Liabilities
Other assets <b>Negative equity: +1000</b>	other liabilities <b>The government's account at the central bank: + 1000</b>

*Discussion:*

- 1) This is a simple, straightforward method. Technically there are no disadvantages.
- 2) However, psychologically it would be disastrous. Up until now money has always been backed by assets: previously gold, loans, fixed assets or investments – things with real values. Now, should it be backed by "negative equity"? Many would wince even at those words alone. "Negative equity" is equated with bankruptcy. Investors avoid companies with "negative equity" like the plague. The emotional message would be: our money is no longer backed with anything; soon it will have no more worth, each man for himself!

Even when it might be possible to explain everything in the long run, the effort would be huge and the feelings associated with "negative equity" would remain dismal.

What other options do we have?

## Method 5: Stake holding in the State

The central bank could also provide the State with equity. Instead of lending or giving it's called a stake holding.

This fits with current accounting practices. Each central bank has holdings of shares or equity participation. When the central bank takes a stake holding in the State, it must be without any voting rights (such as silent partnerships, non-voting shares or participation certificates), because the central bank should not be allowed to have influence on governmental decisions.

Money creation takes place via an expansion of the balance sheet.

Central Bank balance sheet	
Assets	Liabilities
Other assets <b>Stake holding:</b> <b>to State: + 1000</b> to cantons/countries to companies	Other liabilities <b>The government's account at the</b> <b>central bank: + 1000</b> Equity

*Discussion in comparison to "interest-free and open-ended credit":*

- 1) Relief of the national debt is possible. The debt may be paid off using equity contributions of the central bank (the central bank is taking a stake holding in the State, as if the central bank was buying shares in State). This procedure is known to companies, who often use new equity to pay off debt.
- 2) We should ensure transparency in debt statistics.
- 3) There will still be original seigniorage (money creation profit), because a profit arises which leads to more State equity.
- 4) Money becomes properly separated from debt.
- 5) There is no problem with the ban on central banks giving loans to the State.
- 6) The need that money should be backed by something is fulfilled.

- 7) The question of whether the central bank can cancel investments and thereby reduce the money supply remains open with this method.
- 8) A "silent participation" in the State is possible, but such a participation to the citizens is hard to imagine.
- 9) It seems strange is that the central bank, itself a State organ, will become the main legal owner of State.

There are still other options to a stake holding in the State?



## **Method 6: Stake holding in the economy**

What does stake holding mean? Taking a stake in an entity is like making an advance, for something to happen. When someone takes a stake in a company, they provide the means so that the company can invest and produce something. That's exactly the same as when the central bank takes a stake in the whole economy. The central bank provides the means, in this case the money, so that the economy can develop and the "productive capacity of the economy" can be attained. It is because of this productive capacity of the economy that money has any value. Money has value if it can buy something that the economy produces. The "productive capacity of the economy" is the only real backing that money has. The central bank should align its monetary policy with this fact. When there's a forecast of growth in the economy of 1%, the central bank should increase the amount of money in circulation by at least 1% to make this growth possible.

For these reasons the British initiative Positive Money proposes having an entry called "The productive capacity of the economy" on the assets side of the central bank's balance sheet.(4) In this way the central bank takes an equity stake in the national economy. The new money supplied would go either to the State or would be issued equally to all citizens, where it would be spent in the economy and be earned by companies.

As the sovereign money is created without credit, it is "free equity" of the economy. If all the external financing were paid off, the sovereign money would remain and it would be counterbalanced with equity on the balance sheets of all organisations and citizens. To reiterate: as long as money comes into circulation only through increasing credit, the equity of an entire economy can only arise due to tangible assets, not due to financial assets.

As the amount of financial assets currently scales with the amount of credit, the financial assets of one person or organisation must be balanced by the debts of another person or organisation. As an example: If the ECB introduced 5.170 billion euro of free equity in circulation, equity within the euro zone would be increased by

this amount. The distribution of this equity will be constantly in flux. It is “free equity”, which is not associated with specific companies or institutions, but would move to those who are financially successful.

This can be better understood on a balance sheet. The balance sheet below was created for Germany by the Bundesbank, by merging the balance sheet values of all individuals, companies, banks and Government institutions. The numbers are, of course, not to actual bookings, but statistical estimates. At the end of 2012 it looked like this (in billions of euros):

German economy			
Assets		Liabilities	
Tangible fixed assets,		Liabilities against foreign	5.420,0
livestock	8.404,6	Net assets(Equity)	11.450,3
Equipment, buildings			
building land	2.607,7		
Loans to foreign	5.858,0		
<i>Total</i>	<i>16.870,3</i>	<i>Total</i>	<i>16.870,3</i>

Overall there is 11.450,3 billion euro equity available, which is distributed between all companies, private and public institutions. The corresponding assets consist only of tangible things; all monetary assets have corresponding debt.

With the introduction of sovereign money (using methods 4 to 7) the balance sheet would look like (the changes are in bold):

German economy			
Assets		Liabilities	
Tangible fixed assets,		Liabilities against foreign	5.420,0
livestock	8.404,6	Net assets(Equity)	<b>12.764,3</b>
Equipment, buildings			
Building land	2.607,7		
Loans to foreign	5.858,0		
<b>Financial assets</b>	<b>1.314,0</b>		
<i>Total</i>	<b><i>18.184,3</i></b>	<i>Total</i>	<b><i>18.184,3</i></b>

The “financial assets” are the previous monetary aggregate M1 which would be 1,314 billion euros for Germany at the end of 2012. Accordingly, the economic net worth or equity is higher due to the extra 1,314 billion euros capital available. This is the stake holding of the central bank against the productive capacity of the economy of in Germany.

The idea that the central bank can take a stake in “the economy”, rather than a legal entity such as a person or firm, will take some getting used to. It would also contravene current legal practices. However, it is precisely the role of the central bank, which operates at the level of the whole economy. All the money circulating in society is in the central bank’s balance sheet, therefore the economy also “belongs” in the balance sheet as an asset. Money creation would look like this:

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
<b>Stake holding in economy: + 1000</b>	<b>Book money in circulation: + 1000</b>
	Equity

*Discussion:*

- 1) This is a simple solution which accurately describes the real situation.
- 2) The only real backing that money has is “the economy”, which is on the assets side of the balance sheet.
- 3) The balance sheet entry "Stake holding in economy" is fitting for the role of the central bank.
- 4) A stake holding in the common good (the economy) is a much more accurate classification of money than a national debt.
- 5) However, “taking a stake holding in” is commonly understood differently, which could lead to misunderstandings. Usually, it relates to a legal entity and comes with certain rights. With a "Stake holding in national economy" there is no clear legal entity and no participation rights.

- 6) A direct payment of new sovereign money to the citizens would possible with the changes to the Swiss Constitution as put forward by the Sovereign Money monetary reform initiative.

## **Method 7: Profit distribution to the State or citizens**

This last option works the way most think people that money works. Here, the money is exclusively the property of the respective owner, which is separated from the central bank's balance sheet. The central bank would be responsible for a statistic on how much money is in circulation. This is probably the easiest solution to understand. A further advantage is that sovereign money comes into circulation through a profit distribution. This is a standard technique, and it has no disadvantages.

Paper money and book money must be accounted in the same way as coins are currently accounted for. First the current practice will be explained.

Today, central banks buy coins for the State at face value and this is recorded as an entry on the assets side of the balance sheet as "coins in circulation". The central banks deal with coins as any trader with his goods. If the coins are resold to banks, they disappear from the central bank's balance sheet, but are recorded separately to control the money supply. The banks pay for the coins with their central bank reserves (or book money), so that a contraction of the central bank balance sheet occurs with each sale of coins. Issuing coins is so recorded as a *sale* in the central bank's balance sheet, however, issuing banknotes and book money is accounted for by as a *liability* of the central bank. Therefore, the Swiss National Bank (SNB) and ECB banks have a balance sheet entry "banknotes in circulation", but not a balance sheet account "coins in circulation". A genuine money creation profit (or seigniorage) arises from issuing coin-money, while only the income from issuing book money or bank notes arises from the interest the banks must pay for "borrowing" them. Book money and bank notes are only lent, not sold.

### **To understand the current practice, everything is reiterated in five steps**

*Step 1: Central bank buys coins from the State.*

The central bank creates the money for this purchase through an expansion of the balance sheet. The State gets the face-value of the coins accredited to its account at

the central bank, and can immediately use this coin-creation “profit” or seigniorage (= face value of coins less the cost to mint them).

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
Loans to banks	Banknotes in circulation
<b>Stock of coins: + 1000</b>	<b>The government's account at the central bank: + 1000</b>
	The banks' accounts at the central bank
	Equity

Off-balance sheet	Coins in circulation
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*Step 2: Central bank generates book money.*

For the purchase of coins, the banks need central bank reserves. They can get these through getting a loan from the central bank. This expansion of the central bank balance sheet looks like this:

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
<b>Loans to banks: + 1000</b>	Banknotes in circulation
Stock of coins	The government's account at the central bank
	<b>The banks' accounts at the central bank: + 1000</b>
	Equity

Off-balance sheet	Coins in circulation
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*Step 3: Central bank sells coins at face value to banks.*

The banks pay for the coins with central bank reserves. So the balance sheet entries “stock of coins” and “the banks’ accounts at the central bank” reduce by the same amount as the central bank’s balance sheet. The new coins issued are included in monetary aggregate statistics off the balance sheet.

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
Loans to banks	Banknotes in circulation
<b>Stock of coins: -1000</b>	The government’s account at the central bank
	<b>The banks’ accounts at the central bank: - 1000</b>
	Equity
Off-balance sheet	<b>Coins in circulation: +1000</b>

*Step 4: Central bank can print banknotes.*

Paper money is printed on behalf of and at the expense of central banks. Euro bills produced for inventory are not recorded in the balance sheet (unlike the coins which are), despite being held in the same vaults as the coins at the ECB banks. However, the cost of printing is paid from the balance sheet. This procedure is very unusual; each company accounts for stock levels in its inventory. The ECB doesn’t book any assets for unsold banknotes, however, it does book the costs associated with their manufacture. The Swiss National Bank manages the production of banknotes a bit differently: they have an account “stock of banknotes” which is written in the balance sheet not at value, but only with the manufacturing costs.

*Step 5: Banks change book money into banknotes.*

When a bank withdraws banknotes, a change in liabilities side of the central bank’s balance sheet takes place without expanding or contracting the balance sheet.

Money is moved from “the bank’s account at the central bank” to “banknotes in circulation”. Banknote circulation is just a different kind of "liability" of the central bank. The liability of the bank to the central bank is unchanged. The banknotes are only lent, not sold, and therefore no genuine seigniorage arises; there is only some interest which arises from the loan of the banknotes.

Central Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
Loans to banks	<b>Banknotes in circulation: +1000</b>
Stock of coins	The government’s account at the central bank
	<b>The banks’ accounts at the central bank: - 1000</b>
	Equity

  

Off-balance sheet	Coins in circulation
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The current practice has been described above. After a Sovereign Money monetary reform, coin, paper and book money will have the same meaning and value. Therefore they should be treated in the same way on the central bank’s balance sheet. If book money and paper money are recorded in the same way as is the current practise for coins, seigniorage (money creation profit) will result from sovereign money being brought into circulation.



## The transition to sovereign money and new accounting in ten steps

The figures from Switzerland at the end of 2012 are used in the following discussion.

*Step 1: Money in bank deposits is converted into sovereign money.*

All current accounts (CHF 474 billion) are converted into sovereign money. As shown above, this occurs through a change in banks' liabilities from customer deposit accounts to the Swiss National Bank. For the banks there is no change in the size of their balance sheets, however they now "owe" the Swiss National Bank rather than their customers. The current accounts would be continued off balance sheet. At the Swiss National Bank, the balance sheet expands through increasing the entry "loans to banks" and at the same time booking a new entry "book money in circulation".

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
<b>Loans to banks: +474 billion CHF</b>	<b>Book Money in circulation: +474 billion CHF</b>
	Bank Notes in circulation
	Equity

  

Off-balance sheet	Coins in circulation
	Bank notes in circulation
	Book money in circulation

*Step 2: Accounting for the stock of paper money.*

The paper money in the vaults of the ECB so far has been a hidden reserve, being off the balance sheet. The practice of the ECB banks so far has been not to capitalise the inventory of paper money. The SNB does write its inventory of paper money in the balance sheet, but only with the manufacturing costs. When this stock of paper money is booked in the balance sheet at face value, this leads to a special profit which increases the equity.

In the balance sheet below a value of “10” is used to demonstrate this, as the actual inventory of printed Swiss francs is not available.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets Loans to banks Stock of: Coins <b>Banknotes: +10</b> Book money	Other liabilities Bank Notes in circulation The banks' accounts at the central bank <b>Equity: +10</b>
Off-balance sheet	Coins in circulation Banknotes in circulation Book money in circulation

*Step 3: Removing the entry “bank notes in circulation” from the balance sheet.*

The next step is to remove the amount of bank notes in circulation off the balance sheet (in the euro area 910 billion euro, in the Switzerland 59 billion CHF, as of 2012). This works in the same way as for coins. The bank notes won't be a liability of the Swiss National Bank any more, but they are sold and then “belong” to the owners of the bank notes. On the balance sheet this is achieved through a change in the liabilities. The “bank notes in circulation” entry is reduced to zero, and at the same time the “Equity” is increased by this amount, as if it were a profit. Of course this high special “profit” cannot be immediately distributed to the Confederation, cantons or citizens, but must be held as retained earnings, otherwise the money supply would increase too quickly, which would be inflationary. The banknotes in circulation will now be recorded in extra “money supply” statistics, off the balance sheet (like coins always have been).

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets	other liabilities
Loans to banks	<b>Bank Notes in circulation:</b>
Stock of:	<b>-59 billion CHF</b>
Coins	The banks' accounts at the central bank
Banknotes	<b>Equity: +59 billion CHF</b>
Book Money	

  

Off-balance sheet	Coins in circulation <b>Bank Notes in circulation:</b> <b>+59 billion CHF</b> Book money in circulation
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*Step 4: Removing the entry "book money in circulation" from the balance sheet.*

All the book money in circulation should be dealt with in exactly the same way as with coins. In step 1 above, 474 billion CHF (formerly in bank deposit accounts) were written into the Swiss National Bank's balance sheet as "book money in circulation". This needs to be removed from the balance sheet, in the same way as the bank notes were removed in the previous step. Thus the equity will increase, as well as the "book money in circulation" statistic which is recorded off the balance sheet.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets	Other liabilities
Loans to banks	<b>Book Money in circulation:</b>
Stock of:	<b>- 474 billion CHF</b>
Coins	The banks' accounts at the central bank
Banknotes	<b>Equity: + 474 billion CHF</b>
Book money	

Off-balance sheet	Coins in circulation Banknotes in circulation <b>Book money in circulation:</b> <b>+474 billion CHF</b>
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*Step 5: Removing the central bank reserves from “the banks’ accounts at the central bank” from the balance sheet.*

The banks had central bank reserves of 930 billion euros at the ECB and 292 billion CHF at the SNB at the end of 2012. After the Sovereign Money monetary reform the central banks should manage these accounts in just the same way as the banks manage their customer current accounts, which means off the balance sheet. The book money (central bank reserves) will belong to its owner; it will have a value in itself rather than being a liability. Up until now, central bank reserves were a claim against the central bank, for which the banks could get another “book money” or cash. This doesn't make sense; it's only a remnant from the time of the gold standard when bank notes could be converted into gold. Today there is nothing backing central bank money anymore, therefore it doesn't need to be an IOU for anything. Like the bank notes and book money above, the removal of the central bank reserves (or book money) from the Swiss National Bank's balance sheet involves changing the liabilities in favour of equity. The “book money in circulation” off the balance sheet increased accordingly.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets	other liabilities
Loans to banks	<b>The banks' accounts at the central bank:- 292 billion CHF</b>
Stock of:	<b>Equity: + 292 billion CHF</b>
Coins	
Banknotes	
Book money	

  

Off-balance sheet	Coins in circulation Banknotes in circulation <b>Book money in circulation: +292 billion CHF</b>
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At the point of changeover to Sovereign Money, with the corresponding necessary changes in accounting practices described above, the Swiss National Bank will get a huge “profit” - from one day to the next. This will be:  $59 + 474 + 292 = 825$  billion CHF. Such numbers make one giddy. What will the Swiss National Bank do with this profit?

Nothing! First the Swiss National Bank has to solve another problem. There are 5 billion CHF coins in circulation, 59 billion CHF bank notes in circulation and 766 billion CHF book money in circulation, totalling 830 billion CHF. This is 292 billion more than just before the changeover to Sovereign Money, because the previous funds the banks had at the Swiss National Bank are now included.

This high balance has been caused by the financial crisis. The Swiss Franc has been a safe haven - money from all over the world has poured into Switzerland. This has led to an appreciation of the Swiss Franc. The SNB then acted to hold the exchange rate at  $1\text{CHF} = 1.20$  euros by continually buying up foreign currency using new central bank reserves. This resulted in the assets of the SNB balance sheet increasing to 432 billion of foreign currency assets in 2012, and the liabilities to the banks increasing to 292 billion CHF— in 2007, these liabilities were just 8 billion CHF.

Before the changeover to Sovereign Money the banks couldn't do anything with these reserves except bunker them in the Swiss National Bank, because the current money system consists of two separate circuits. With Sovereign Money there is only one circuit and all the money can be used anywhere. So, after the changeover to Sovereign Money, the banks could start to speculate with this 292 billion CHF which would overheat the financial markets. This should be prevented.

The Swiss National Bank should therefore reduce the money supply as quickly as possible. It can do this by insisting that the banks quickly pay back the 474 billion CHF loan they received in step 1 above. To do this, a central bank only needs to either set a short termination date for the loan, or to briefly demand a high interest rate on the loan.

*Step 6: Banks pay off central bank loans.*

Here it is assumed that the banks repay 250 billion CHF loans within a few days of the changeover. This appears as a change of assets in the balance sheet. The entry "loans to banks" is reduced and the entry "stock of bank money" is increased by the same amount. At the same time, the off-balance sheet statistic "book money in circulation" decreases by this amount.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets <b>Loans to banks:- 250 billion CHF</b> Stock of: Coins Banknotes Book money: <b>+ 250 billion CHF</b>	Other liabilities Equity
Off-balance sheet	Coins in circulation Banknotes in circulation <b>Book money in circulation:</b> <b>- 250 billion CHF</b>

*Step7:Removing the central bank reserves from the balance sheet.*

The Swiss National Bank will now be relieved that it can announce that the book money in circulation has been reduced by 250 billion CHF. It never needed the new stock of 250 billion CHF book money, and distributing this as profit would greatly increase the amount of money in circulation, leading to inflation. Therefore, the book money is “destroyed” by reducing the equity by the same amount, which accordingly reduced the size of the balance sheet. However, 575 billion CHF out of the initial 825 billion CHF of the changeover “profit” mentioned in step 5 still remains.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets Loans to banks Stock of: Coins Banknotes Book money: - <b>250 billion CHF</b>	other liabilities <b>Equity: - 250 billion CHF</b>
Off-balance sheet	Coins in circulation Banknotes in circulation Book money in circulation

The previous steps would all have happened in a few days after the changeover to Sovereign Money. The subsequent changes will take place over much longer time scales.

The banks will repay more loans over the years (when, for example, their customers repay their mortgages) and the SNB will reduce its foreign currency investments. Thus the money supply will reduce. For a while the SNB will find this reduction of the money supply no problem, but at a certain point the SNB will need to compensate for this reduction by bringing new Sovereign Money into circulation. To enable economic growth, the SNB will need to slightly expand the money supply each year. Also, between 2 and 5 billion CHF worth of extra bank notes will be needed annually. The next steps explain how this will be achieved.

*Step 8: central bank prints paper money.*

Any money production leads immediately to a seigniorage profit. Central banks are the only institutions which can manufacture money and make such a profit. All other organisations need to be economically active and generate a surplus, to make a profit. Central banks don't need to do this, because they produce the money. When the central bank prints 2 billion CHF worth of paper money, their stock of bank notes increases by 2 billion CHF and there is a seigniorage (or money creation profit) which increases its equity by this amount. The central bank's balance sheet looks like this:

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets Loans to banks Stock of: Coins <b>Banknotes: + 2 billion CHF</b> Book money	Other liabilities <b>Equity: + 2 billion CHF</b>
Off-balance sheet	Coins in circulation Banknotes in circulation Book money in circulation

This is a special property which a central bank has, and is unknown to most people. Profit, people believe, comes through hard work or luck in speculation, but not by a simple expansion of a balance sheet. However, profits often do arise in this way for organisations. An example of this is when a company builds a block of flats and rents them out. In the balance sheet the "asset", the block of flats, isn't entered as the construction costs incurred in building the block, but rather the expected value of the block should it be sold. When this is higher than the construction costs, a profit is created. Because the block could actually be sold, this profit through an expansion of the balance sheet often goes unnoticed.



*Step 9: central bank creates new book money*

The creation of book money takes place in exactly the same way as printing paper money, increasing the value of the central bank's equity. New book money is written into the entry "Stock of book money", and the equity is increased accordingly. This is despite the fact that holding a stock of book money is not necessary (unlike coins or paper money), because it can be generated in the blink of an eye. The storage of book money is, of course, not in a vault, but on an account in the central bank's computer.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets Loans to banks Stock of: Coins Banknotes Book money: <b>+ 50,000 CHF</b>	Other liabilities <b>Equity: + 50,000 CHF</b>
Off-balance sheet	Coins in circulation Banknotes in circulation Book money in circulation

### *10 Step: Distribution of seigniorage profit.*

When the Swiss National Bank transfers seigniorage to the State or the citizens, a reduction in the size of the balance sheet takes place. The entry “stock of book money” decreases together with the equity, and at the same time the book money in circulation off the balance sheet grows. In this way, at least 300 billion CHF will be distributed in Switzerland over a period of about 15 years.

Swiss National Bank balance sheet	
Assets	Liabilities
Other assets Loans to banks Stock of: Coins Banknotes Book money: - <b>50 billion CHF</b>	Other liabilities <b>Equity: - 50 billion CHF</b>
Off-balance sheet	Coins in circulation Banknotes in circulation <b>Book money in circulation:     + 50 billion CHF</b>

## Conclusion

The best methods of creating new Sovereign Money are either by the central bank taking a stake holding in the economy (method 6) or by distributing the seigniorage profit to the State or citizens (method 7). The latter is the favoured solution, because it corresponds to how people think about money, and it is already in use for coins. All the other methods have significant disadvantages.

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