THE SWISS EXPERIMENT: FROM THE LOWER BOUND TO FLEXIBLE EXCHANGE RATES

Peter Bernholz

On January 15, 2015, to the perfect surprise of markets, business firms and politicians, the directorate of the Swiss National Bank decided to abolish the lower bound for the euro of CHF 1.20, which had been introduced on September 6, 2011. Obviously, the SNB had limited the number of people involved so that no leaks to the outside world occurred. In fact, a short time before the decision the Bank had still insisted that it would stick to the lower bound. Thus, the old truth had been confirmed that if a change of a foreign exchange regime is planned, central banks are obliged to lie.

The surprise was the greater since the lower-bound regime had been a big success.² It had been introduced after a strong fall of the euro to nearly CHF 1 to prevent damages to the real Swiss economy. During the 40 months of the peg's existence, the SNB only had to intervene about 4 months to maintain the lower bound and prevent the Swiss franc from appreciating against the euro. When the lower bound was announced the Bank pledged to defend it by

 $\it Cato\ Journal$, Vol. 35, No. 2 (Spring/Summer 2015). Copyright © Cato Institute. All rights reserved.

Peter Bernholz is Professor Emeritus at the Center for Economics and Business at the University of Basel.

¹ Putting a floor under the euro/franc exchange rate at 1.20 Swiss francs per euro meant the SNB had to buy euros at that rate to maintain the peg. If the equilibrium rate moved above the peg, no intervention would be necessary.

² The author has to admit that he may be biased concerning the success of the lower bound, since he was one of the first to propose its introduction in the beginning of August 2011.

creating as many Swiss francs as needed to maintain the peg. This announcement stabilized expectations so that nobody wanted to risk losses by betting against the SNB. The Bank had to intervene strongly only during three months in the summer 2012. That intervention was not due to speculation.³ Rather, two different related reasons may have been important for these interventions. First, the eurozone experienced a crisis of confidence. Second, Switzerland was enjoying a current account surplus that had to be financed. If the Swiss people and business firms were no longer prepared to invest in euros because they mistrusted the euro at the time, the SNB had to take over this task, which may have been an important reason for the interventions in 2012. After that episode no new interventions were necessary until the end of 2014. For some time the euro even reached CHF 1.24. And until the end of 2013 foreign reserves even fell by CHF 22 billion.

The absence of interventions in most months since 2011 marked quite a contrast to their substantial volume of CHF 200 billion from the end of 2008 to August 2011, which had scarcely been able to influence the fall of euro against the Swiss franc. This difference was presumably caused by the failure to shape expectations by introducing a lower bound.

In fact, with the introduction of the lower bound for the euro the SNB had successfully sheltered the Swiss real economy (including tourism) and unemployment against a sizable recession and deflation, even though at the rate of CHF1.20 an overvaluation of the franc still existed compared to its purchasing power parity, and thus a weak deflation took place in 2012–13.

It has been argued that the introduction of the lower bound of CHF 1.20 for the euro by the SNB has been a mistake. But the reasons given for this opinion are in no way convincing. First, the exchange rate fell from CHF 1.64 for the euro in 2007 as a consequence of the international crisis to 1.0663 on August 4, 2011. Even if we take the average value of CHF of 1.565 for the years from 1996 to 2008, this implies a revaluation of about 47 percent. It is unthinkable that such a shock would not have had disastrous consequences for the Swiss real economy and Swiss tourism. Even with the lower bound of CHF 1.20 a strong overvaluation remained. Second, the

³ By studying future and option markets, I convinced myself that no speculation was involved.

Swiss franc not only appreciated against the euro, but also against other currencies. For instance the dollar fell from CHF 1.6886 in 2000 to 1.030 in 2008 and 0.8873 in 2011. Third, foreign trade as a share of GDP is the more important the smaller the country. For Switzerland the share of exports (without gold) amounted to 35.7 percent of GDP in 2013. Finally, 46.3 percent of Swiss exports go to the eurozone. As a consequence, the dangers threatening economic activity and employment were much bigger than in larger countries. Thus, the assertion that the SNB should not have introduced the lower bound for the euro is not maintainable in view of economic realities.

The Dilemma Faced by the SNB

The situation changed, however, at the end of 2014, when the SNB again had to intervene strongly in foreign exchange markets, probably because of the announcement of the European Central Bank that it would begin buying bonds (including those of governments) in March 2015, amounting to 1,140 billion euros until September 2016. The avowed purpose of this "quantitative easing" is to increase inflation to the ECB's target of 2 percent, and thus to reinvigorate the eurozone's sluggish growth. As a consequence, the euro weakened strongly against the dollar and other currencies, and with it, because of the lower bound, the Swiss franc, In fact, after the abolition of the lower bound, one of the three members of the Bank's directorate, Fritz Zurbruegg (2015), explained in an interview on January 22 that if the lower bound had not been abolished, the SNB would have had to supply about CHF 100 billion for the month of January alone to maintain the peg. Together with the Bank's already huge foreign reserves of about CHF 500 billion at the end of 2014, the new additions would have raised foreign reserves to nearly the value of Switzerland's GDP. Consequently, at the beginning of 2015, the SNB was faced with a dilemma. On the one hand, reserves and the monetary base (M0) had reached dangerously high volumes for a small country; on the other hand, the removal of the lower bound for the euro—that is, a further revaluation of the Swiss franc threatened the real economy and employment, and also increased the risk of deflation. Given this situation, the directorate made its decision to let the franc float after first having introduced negative interest rates in December 2014 without notable success. But the

Bank also announced that it would again intervene in the foreign exchange market if necessary.

As a consequence, the euro dropped at once below CHF 1, but has since recovered to CHF 1.0361 as of April 24, 2015. This seems to be far less than the president of the SNB, Thomas Jordan, had expected, when he spoke in public of a short-term overshooting of the exchange rate (Jordan 2015). I have to admit that because of historical evidence since the 17th century I doubt that the overshooting will be short-lived. Indeed, the evidence shows that maximal overand undervaluations of \pm 30 percent occurred for pairs of currencies showing only minor differences in inflation, and that they usually last for several years (Bernholz 2005). This has also been true for the exchange rate of the DM-euro for the dollar since 1972, where five long-lasting overvaluations and undervaluations occurred. A similar long-lasting overvaluation took place for the Swiss franc compared to the DM bloc after 1973, when the Bretton Woods System of fixed exchange rates had broken down. My hypothesis seems also to be supported by the fact that the sight deposits at the SNB increased by more than 40 billion francs from January 16 to February 6, a fact that can only be explained by a similar amount of purchases of foreign exchange in an effort to increase the value of the euro. But as has been mentioned before, in spite of these interventions the euro recovered only to CHF 1.0361 as of April 24.

Possible Consequences of the Removal of the Lower Bound

The removal of the lower bound for the euro is expected to lead to important consequences for the Swiss real economy if the exchange rate of the euro does not recover to at least CHF 1.10 or even 1.15. An immediate consequence was a buying spree by Swiss consumers crossing the borders to Germany, France, and Italy. For a short time, not even enough euros were available to satisfy the demand. Travel agencies already expect a boom for journeys to countries of the eurozone. Some Swiss hotels began to offer better rates for guests coming from these countries. On January 29, a representative of the unions demanded to reestablish the lower bound of 1.20. Even politicians slowly began to move, and asked for extension of government support if working hours had to be reduced with the aim of preventing higher unemployment, also as a consequence of the

high exchange rate. Further demands were presented to reduce administrative burdens and not to introduce new measures like higher prices for electricity planned for the purpose of supporting clean energy. Already proposed anti-cartel legislation meant to prevent foreign firms from demanding higher prices in Switzerland than in other countries suddenly faced better chances of approval in parliament.

Several business firms reacted by introducing extended working hours at unchanged pay, by announcing to stop hiring new employees, and also by planning to transfer to or extend some of their activities in foreign countries. Other firms are planning to pay foreign workers in euros at the old exchange rate. Moreover, some have already warned that negative consequences have to be expected for turnover and profits. To understand the importance of such measures, one has to realize that the greatest part of Swiss exports is going to countries in the eurozone.

At the moment it is very difficult to estimate the damage to be expected for the real Swiss economy and unemployment. Recently the Institute for the Study of Business Cycles at the Technical University Zurich has stated that it expects a small recession in 2015 instead of the formerly calculated real growth of 1.5 percent for Swiss GDP. It is obvious that the tourist industry and small- and medium-sized export firms will be harmed the most. Their expenses and wages are mostly in Swiss francs, and it is well known that reductions in wages are difficult and may lead to social unrest. Thus, to maintain sales, firms will be forced to lower the prices for their goods and services expressed in francs. Multinational firms with great production facilities in foreign countries will be least damaged, but it has to be expected that they may strengthen their foreign activities by reducing those in Switzerland.

Possible Alternatives

What are the possible alternatives to the present policies of the SNB? It is important to discuss these alternatives, because the damages to the real economy and to unemployment at a long-lasting exchange rate near CHF 1 for the euro may urge the Bank to change these policies. I have already mentioned that I do not share the hope of the president of the SNB that only a short-term overshooting of the franc compared to the euro is taking place. Indeed, there exists

much historical evidence going back to the 17th century that overshooting by 30 percent or more, often lasting for years, compared to purchasing power parity is typical of flexible exchange rates (see Bernholz 2005).

The first alternative of the SNB to be considered is given by the possibility of buying euros to raise their value in francs. As mentioned earlier, the SNB appears to have chosen this alternative during the last two weeks of January. The success of this intervention has been limited: until February 12, it only led to an increase of the exchange rate to about CHF 1.05 for the euro. This outcome should not be a surprise because without a limit informing expectations, heavier interventions are necessary, as already experienced by those taken by the SNB from 2008 to 2011.

A second alternative was proposed by Ernst Baltensperger of the University of Bern a few days before the lower bound was abolished. He recommended a lower bound for a currency basket consisting of euros and dollars, both with a weight of one half, to be defended by interventions if necessary (Baltensperger 2015). Such a solution would have allowed a milder solution of the dilemma faced by the SNB, because the dollar had already begun to rise in terms of the euro and that development would probably continue given the ECBs announcement of QE, set to begin in March. This solution would have been much less damaging to the real economy, though it has to be admitted that a currency basket is somewhat less efficient to handle and less able to influence expectations.

A third alternative would have been to maintain the lower bound for the euro somewhat longer, but to lower it after some time according to the differences of inflation between the eurozone and Switzerland. This new policy would have had to be announced in advance. It is true that such measures would at least for some time not have reduced the inflow of foreign reserves. But that doesn't necessarily imply a disadvantage. I still recall that Charles Kindleberger of MIT told me about 30 years ago that with regard to U.S. monetary policy: "We indebt ourselves short-term at low cost and invest the proceeds long-term with higher earnings." This is exactly what would occur if the SNB chose the third alternative. The Bank would indebt itself against foreigners by selling them stable francs, which it can produce nearly without costs, and then invest the foreign exchange reserves profitably in foreign countries, a policy followed recently by China and the Gulf States.

Such a policy would, as a side-effect, offer inflation-haunted for-eigners a stable money—that is, a valuable good. However, the SNB, as central bank of a small country, would presumably argue that it might lose monetary control by following such a strategy. Moreover, the Bank might point out that a large part of its foreign exchange reserves had to be invested in short-term liquid assets that could be sold if needed to support the franc or to reduce the monetary base in case of inflation. To me both arguments do not seem to be very convincing. Since its foundation in 1907, the SNB has been able to maintain the lowest average rate of inflation of all developed countries, as stated by former president Claude Trichet of the ECB on its 100th anniversary (Trichet 2007). As a consequence, the SNB's reserves have always increased.⁴

A third argument against the third alternative is the following: The debts of the SNB would be denominated in Swiss francs, but its assets in foreign currencies. This would mean that each revaluation of the franc would lead to sizable losses. This argument sounds plausible. But it is only valid as long as the SNB would follow a wrong investment policy. For it is well known that the prices of shares, property, and gold develop in line with inflation—and thus, at least in the long run, compensate the losses brought about by revaluations.

Finally, no loss of control concerning monetary policy had to be expected by selecting the third alternative. For this policy is only dependent on *changes* in interest rates and the monetary base. The latter can always be accomplished if the SNB issues its bills, which has been legal for several years.

In sum, the three alternative scenarios mentioned for the SNB's monetary policy are still available to the Bank—even after the removal of the lower bound for the euro—if there is serious damage to the real economy.

Conclusion

The SNB's removal of the lower bound for the euro was a mistake. That policy decision has weakened the Bank's credibility and could lead to strong problems for tourism, several branches of industry, and

⁴ This is generally true except for passing losses because of lower prices for gold reserves, the selling of more than 50 percent of them as "no longer needed" since 2000, and the distribution of the proceeds to the Swiss Federation and Cantons.

employment. At the moment, predictions run from a strong weakening of the growth rate of GDP to a recession. Moreover, a small deflation is expected.

A better solution to the inflow of foreign exchange would have been to follow the proposal by Baltensperger (2015) to move to the lower bound of an evenly balanced euro-dollar basket at a time when the dollar has been rising in terms of the euro. This would have allowed a smooth change of the system and maintained the credibility of the SNB. With a future lower rate of inflation in Switzerland than in the United States and the eurozone this lower bound could have been lowered.

Against such a solution the directorate of the SNB has argued that the expected inflow of CHF 100 billion in January 2015, which would have brought up foreign exchange reserves to nearly the amount of GDP, would have been too much for a small country. But a comparison with Norway, which is even smaller (not in territory) than Switzerland, is throwing some doubt on this proposition. In Norway the wealth accumulated because of oil exports and invested mainly in foreign countries has already reached 200 percent of domestic GDP. And it is the Norwegian National Bank that is managing the corresponding fund. It also should be possible to profitably invest Swiss foreign exchange reserves stemming not from exporting oil but sound money. However, it has to be admitted that such a decision would require not only great courage but also a fundamentally changed perception, and might also lead to political problems for the independence of the SNB.

References

Baltensperger, E. (2015) Interview with *Neue Zuercher Zeitung* (11 January).

Bernholz, P. (2005) "Die Bedeutung der Geschichte für die Wirtschaftswissenschaften und der Ökonomischen Theorie für die Geschichtsforschung." *Perspektiven der Wirtschaftspolitik* 6 (2): 131–50.

Jordan, T. (2015) Interview with *Neue Zuercher Zeitung* (17 January).

Trichet, C. (2007) Speech presented at the Occasion of the 100th Anniversary of the Swiss National Bank (22 June).

Zurbruegg, F. (2015) Interview with Blick (22 January).