Speech

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A new premise for SNB monetary policy? KOF Forecast Conference

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Ladies and Gentlemen

I would like to thank you for your invitation to the KOF Forecast Conference. Economic forecasts play an important role in investment and consumer decisions. They are also a central parameter in the economic decision-making process of public institutions. At the same time, we know that economic forecasts are associated with considerable uncertainty. Even comprehensive models only represent a very simplified presentation of a complex reality. Assumptions based on the forecasts can quickly be overtaken by events. In this regard, 2015 is a very special year for the forecasting institutions in Switzerland. The decision by the Swiss National Bank (SNB) of 15 January to discontinue the minimum exchange rate of CHF 1.20 to the euro and to lower the interest rate on sight deposit accounts at the SNB to –0.75% rendered important assumptions of the existing forecast obsolete. After the decision, the Swiss franc appreciated sharply. At the same time, interest rates in the money and capital markets continued to fall and are now predominantly in negative territory.

Some market analysts have asked themselves whether this situation has brought about a fundamental change of premise or creates an entirely new set of parameters for the Swiss economy and the SNB's monetary policy. Even if the extent of the slowdown in growth was assessed differently by the different forecasting institutions, there can be no doubt about it: The SNB's decision has had far-reaching consequences for the Swiss economy.

Notwithstanding this, I will argue in my remarks that – while the current situation is unique – with regard to both the Swiss franc exchange rate and the interest rate environment – it is not fundamentally new. I will therefore focus first on the magnitude of the Swiss franc strength. Afterwards, I will examine the importance of the negative interest rate in the current environment. Finally, in the last part of my speech, I will discuss the impact of low interest rates on financial stability.

Consequences of the strong Swiss franc

Let me start by looking at the exchange rate. Since the discontinuation of the minimum exchange rate, the Swiss franc has appreciated considerably, and many industries and companies have been – and continue to be – affected. The export industry, in particular, is suffering. However, companies exposed to competition from abroad, retail businesses close to the border, the tourism industry and domestic suppliers of exporters are also facing major challenges. While the current situation is difficult, a strong Swiss franc does not in itself fundamentally change the parameters for Switzerland. Switzerland's economic and political stability and the structural current account surplus has created considerable demand for our currency in the past, too. Moreover, uncertainties or crises have often cemented the Swiss franc's safe haven status, resulting in additional cyclical appreciation.

The favourable position of our economy by international standards shows that a strong currency can have a positive overall impact in the long term. Companies are under constant pressure to cut costs and innovate and this strengthens the economy's adaptability, flexibility and productivity. Quality improvements and specialisation ensure that foreign customers have

few comparable alternatives to many Swiss export products. Companies therefore have a certain pricing power. At the same time, the strong Swiss franc helps to further integrate the Swiss economy into the global value chain. Here, too, the negative impact for Swiss suppliers contrasts with positive long-term effects. A SECO study shows that greater integration in the global value chain – thanks to the associated natural hedging – helps to alleviate the negative effect of an appreciation on profit margins. Many companies are therefore able to absorb the effects not only by adopting internal cost-cutting measures, but also via lower import prices. Overall, then, we may assert that specialising in high-quality products and services which exhibit high value added and cannot be easily substituted, on the one hand, and natural hedging on the other hand, make the Swiss economy more resilient to appreciation shocks.

My comments so far may appear overly positive. This is why it is important to me to make three reservations. First, using the trade-weighted real exchange rate, chart 1 shows that the Swiss economy has already had to live with exchange rate fluctuations in the past. However, the appreciation since 2007 is of an entirely different quality and even the appreciation shocks of the 1970s and 1990s pale in comparison. In particular, it must be borne in mind that the speed of appreciation was particularly high this time around. It is much more difficult to digest a rapid appreciation since it leaves companies with less time to initiate the process of adaptation. Even companies that would normally be in a position to absorb an appreciation and maintain their competitiveness are coming under pressure.

Second, it must be emphasised that, *on average*, the export volume of Swiss products has reacted comparatively little to exchange rate movements. The qualification *on average* is an important one. In fact, the dependence on exchange rate movements of the two largest sectors in terms of export share (chemicals, including pharmaceutical products, and precision instruments and watches) is distinctly below average. Thus, these sectors' share of total exports has gone up over time. By contrast, the adjustments some companies and industries have made to the strong franc have been – and still are – so far-reaching that they are having to completely rethink their future in Switzerland.

Third, I am aware that it is easy for an outside observer to talk about the advantages of a strong currency. At the same time, the SNB's various direct contacts with companies allow us to gain concrete insights into current problems. During the last six months, my colleagues from the Governing Board and I have held frequent meetings with representatives of the business community; these discussions were very heated. It is therefore clear to me that adjustments to a strong currency do not happen just like that. On the contrary. Adjustment processes as a result of appreciation shocks are always very painful. Underlying these processes is a great willingness to take risks on the part of companies and investors, and a high level of commitment and flexibility from employees.

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D. Fauceglia, A. Lassmann, A. Shingal and M. Wermelinger, *Backward Participation in Global Value Chains and Exchange Rate Driven Adjustment of Swiss Exports*, study on behalf of the State Secretariat for Economic Affairs SECO, 2015. A study by the World Bank has revealed that exchange rate elasticity of industries has decreased worldwide. Closer global integration of the value chain was also cited as the main reason for this development (S. Ahmed, M. Appendino and M. Ruta, *Depreciations without Exports?* World Bank Policy Research Paper, 2015).

In addition, our eight delegates for regional economic relations are constantly in touch with companies from different industries throughout Switzerland. The results of the special survey on the effects of Swiss franc appreciation conducted in the last two quarters show that a large portion (70%) of the companies surveyed are being negatively affected by Swiss franc appreciation. Many companies' margins have come under pressure. However, the surveys also illustrate how quickly – and differently – companies have reacted to the challenges. The fact that our most current survey suggests a slightly improved economic outlook is encouraging.

Economic developments abroad are even more crucial for Swiss exports than the exchange rate. The importance of global economic trends for our country can be clearly seen in chart 2. It shows that downturns in world trade and dips in growth in Switzerland occur almost concurrently. But the characteristics of demand from abroad differ in important ways. Internal SNB studies have shown that short-term changes in demand from neighbouring countries have an especially strong effect on exports; in the case of demand from emerging economies, however, long-term developments play a more significant role than they do in the advanced economies. This is why, in recent years, the export industry has increasingly orientated itself towards these emerging economies, where growth has also been considerably stronger. The greater importance of these regions was particularly beneficial during the financial crisis because demand from emerging economies fell much less, and recovered more quickly, than demand from the traditional export markets of Europe and the US.

What support can the Swiss economy currently expect from global demand? In the monetary policy assessment two weeks ago, the SNB stated that the US and the UK saw robust economic development in the first half of the year. The muted recovery in Europe continued as well, due partly to the favourable exchange rate situation. By contrast, the emerging economies presented a mixed picture. Some countries registered a decline in growth, and uncertainty regarding economic developments in China has increased. Consequently, growth was not broad-based internationally, which was also reflected in the lack of momentum in global trade (cf. chart 2).

We nevertheless expect the moderate pace of global economic recovery to continue. Expansionary monetary policy and low commodity prices are supporting economic activity in the advanced economies. This is a positive development for the outlook in Switzerland. If global economic growth continues at the same moderate pace, this will help mitigate the negative effects of the strong Swiss franc. Export activity should thus become a growth driver again. Domestic demand will also support the economy. For these reasons, we anticipate that economic conditions will improve somewhat in the second half of the year. However, uncertainty remains high. For 2015 we expect real gross domestic product (GDP) to grow by just under 1%.

The difference is in the differential

Let us now turn to the interest rate environment. Did our decision of 15 January cause a fundamental shift in parameters in this area? No. I am, of course, aware that, since the introduction of negative interest on banks' and other financial market participants' sight deposits at the SNB, many money and capital market interest rates start with a minus sign rather than a plus. For instance, yields on Confederation bonds with terms of up to ten years are currently negative. So, mathematically speaking, the parameters have indeed shifted.

But what is important for the Swiss franc, and thus for the Swiss economy, is not domestic interest rates in an absolute sense, but relatively speaking – i.e. the differential between Swiss and foreign interest rates. Historically, Swiss nominal interest rates have tended to co-move with those in other countries, albeit usually at lower levels, especially when compared to the euro area. The comparatively low interest rates in Switzerland are, first, the result of low and stable inflation. Second, they provide incentives for capital outflows, which are the counterpart of the traditional current account surplus. Since the financial crisis, interest rates have dipped towards the zero lower bound in many advanced economies, so that this classic rate differential has virtually disappeared. In order to re-establish a clear differential, the SNB has lowered its reference interest rate into negative territory, exerting downward pressure on the entire Swiss interest rate curve. As chart 3 shows, using yields from Swiss and German five-year government bonds, since then the interest rate differential to other countries has widened again. Similar developments can also be observed for all other bond maturities. Thus, the situation as regards the interest rate differential has not *changed* since 15 January; rather, it has partly *normalised* thanks to the negative interest rate.

So the introduction of negative interest achieved an important objective. Lower interest rates make Swiss franc investments less attractive compared to foreign investments. Of course, the interest rate differential is not the only factor behind the demand for Swiss francs. For this reason, it is not always easy to determine when, and how strongly, it will influence the Swiss franc exchange rate. However, if all other factors remain the same, there is less demand for investments in Switzerland – and thus for Swiss francs – when Swiss interest rates decline.

But I am also aware that negative interest rates do not constitute business as usual. In addition to the interest rate differential, nominal interest rates will themselves also return to normal. For this to happen, economic conditions abroad will need to improve to the point that interest rates in Switzerland can rise without causing the Swiss franc to strengthen further. This is currently not the case. At the most recent monetary policy assessment, we decided to leave the target range for the three-month Libor unchanged at between -1.25% and -0.25%. The interest rate on sight deposits at the SNB remains at -0.75%. Despite a slight depreciation, the franc is currently still significantly overvalued. We are convinced that negative interest rates and the SNB's willingness to intervene as required in the foreign exchange market will make investments in Swiss francs less attractive; both of these factors serve to weaken the Swiss franc. The provisional inflation forecast in chart 4 is also based on a depreciation, along with a Libor rate of -0.75%. The chart shows that, over the short term, inflation will be lower than

forecast in June, owing to the lower oil price. However, it will return to positive territory in the medium term.

Negative interest and financial stability

So the negative interest rate is currently essential to ensure appropriate monetary policy conditions for the Swiss economy. But we also know that low interest rates, and in particular a prolonged period of low rates, pose a risk to financial stability. Experience in many countries has shown that such conditions provide fertile ground for imbalances to develop in credit markets and asset prices. Indeed, under normal circumstances, lower money market interest rates lead via transmission channels to lower credit and mortgage rates. In Switzerland, the focus is on the mortgage and real estate markets, as around 85% of private domestic loans are in the mortgage segment. Chart 5 shows that, despite negative money market rates, mortgage rates have not fallen; they have even risen slightly. Movements in mortgage market rates seem to have become decoupled from SNB monetary policy. How can this development be explained?

It is true that a lowering of interest rates into negative territory differs from a conventional interest rate cut in terms of its transmission to mortgage rates. This is because interest on deposits and savings make up a considerable portion of banks' refinancing costs. Whereas, in a positive interest rate environment, banks would not hesitate to pass on falling money market rates to holders of deposit and savings accounts, when rates are negative, they are reluctant to do so. This reluctance can partly be explained by the fact that retail bank customers regard cash holdings as an attractive alternative to bank deposits, and could withdraw their deposits if interest rates turn negative, thereby depriving the banks of an important refinancing source. Thus, uncertainty over the collective behaviour of bank customers could be seen as a factor dissuading banks from passing on negative interest rates. As a result, banks' liability margins – the difference between the interest on a maturity-matched alternative funding source and the interest on deposits – have dipped into negative territory. This is clearly illustrated in chart 6. Banks have responded to the pressure on liability margins by raising mortgage rates (i.e. by increasing the asset margin).

In principle, the slight rise in mortgage rates is good news from a financial stability standpoint. So can negative interest rates even be regarded as a tool to combat imbalances on the mortgage and real estate markets? In my opinion, the answer is no, since, in a longer-term perspective, mortgage rates are still at very low levels. And imbalances on the mortgage and real estate markets remain high. Chart 7a illustrates this using the relationship between developments in real estate prices and rents, while chart 7b does the same using the ratio of

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² Cf., for instance, O. Jordà, M.HP. Schularick & A.M. Taylor, *Betting the House*, NBER Working Paper 20771, 2014, M.D. Bordo & J. Landon-Lane, *Does Expansionary Monetary Policy Cause Asset Price Booms; Some Historical and Empirical Evidence*, NBER Working Paper 19585, 2013, or L. Gambacorta, *The Risks of Low Interest Rates*, Ensayos Sobre Política Económica, 29, 64: 14-31, 2011.

The bank's total margin is made up of three components: asset margin, liability margin and transformation margin, minus any hedging costs (so-called structural contribution).

outstanding mortgages to GDP. In addition, despite a slight rise in mortgage rates, there are a number of other channels through which the prevailing low interest rate environment could further increase the risks to financial stability. I would now like to look at three of these risks in greater detail.

Risks to financial stability

First, in the real estate market, there is an increasing focus on movements in the prices of residential investment property. Both private and institutional investors, such as pension funds and insurance companies, can boost the demand for real estate investments even further, either through the search for yield, or because of a lack of other investment opportunities. Yields on real estate investments continue to be well above those on alternative investments, as shown in chart 8a, which compares yields on ten-year Confederation bonds with those on investments in residential real estate. This yield difference could cause demand to stay high for the near future, thereby pushing prices up even further. Although the borrowing component in investment property financing tends to be lower than in owner-occupied real estate, domestically focused banks are exposed to this segment. One-third of new mortgages are issued for residential investment property, yet the affordability risk for such property owned by private individuals is roughly as high as for owner-occupied real estate. Moreover, a correction in this segment can affect other real estate market segments, via changes in market confidence and expectations (spillover effects). So we need to keep a close watch on the residential investment property segment.

A *second* risk arises due to falling liability margins in an environment of low interest rates. To offset these, a bank essentially has two options – apart from increasing its lending interest rate. Both options are associated with higher interest rate risk, which in turn increases the risks to financial stability. First, it can grant a higher proportion of long-term loans at higher interest rates, as they generate higher interest revenue than short-term loans. However, this also increases the so-called *maturity mismatch*. The greater the maturity mismatch, the higher the interest rate risk, and thus the potential economic losses for the bank in the event of a sudden interest rate rise. This is because the larger the maturity mismatch, the quicker the rise in refinancing costs compared to long-term fixed interest income when interest rates go up. Second, a bank which has hitherto hedged against interest rate risk might be tempted to dispense with such hedging, and the associated costs. Chart 8b shows that interest rate risk has indeed risen in periods of low interest rates or, as happened between 2009 and 2014, has remained at high levels. At the current margin, we are seeing first signs that risk has once again increased slightly since the introduction of negative interest.

The term maturity mismatch describes an imbalance between the usually longer repricing maturity on the assets side (e.g. for mortgage loans) and the shorter repricing maturity on the liabilities side.

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Yields on real estate investments are often compared with those on Confederation bonds. The different levels of risk on these asset classes do justify a certain risk premium or yield spread, but that spread is currently very high. We can thus assume that there is a significant spread, even after the different levels of risk are taken into account.

A third potential risk to financial stability arises from the fact that, in the prevailing interest rate environment, non-banks such as insurance companies and pension funds in search of yield also find the prospect of granting mortgage loans attractive. Even though currently only a relatively small portion of mortgages is granted by non-banks, it is doubtful whether the banks will be able to maintain the current elevated asset margin on new mortgage loans in a prolonged period of negative interest rates. The increased competition as a result of non-bank participation could reduce banks' scope for raising mortgage rates. From a financial stability perspective, the resulting squeeze on profits could ultimately lead to banks having insufficient reserves with which to increase or maintain their capital levels. This reduces the resilience of the banking system and increases the risks to financial stability.

In sum, I can say that particular attention needs to be paid to financial stability in an environment of persistently low interest rates, especially when combined with negative interest rates. Therefore, the slightly slower momentum currently being observed on the mortgage and real estate markets is welcome, but we should nevertheless remain alert.

Conclusion

In a number of respects, the current situation is unusual for Switzerland and its economy. The significant overvaluation of the Swiss franc and the very low, or even negative, interest rates pose a major challenge for economic agents and authorities – in particular the SNB. Yet, as I have explained, our monetary policy has not changed fundamentally. As a small economy that is strongly interconnected with the rest of the world, Switzerland is heavily dependent on economic developments abroad, and will remain so. These developments can explain the current strength of the Swiss franc, but they are also part of what has driven the exceptionally low interest rates in Switzerland.

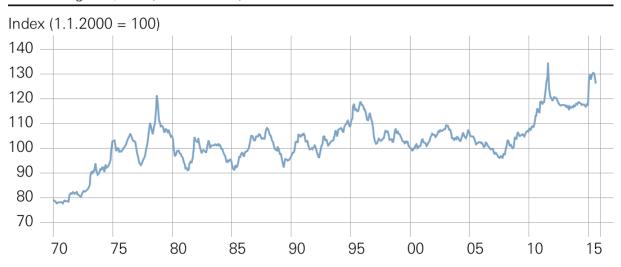
Neither the strong currency nor low interest rates are new phenomena. Rather, they are traditional characteristics of the Swiss economy, which have had a positive effect on living standards in the past. But the weak recovery of the global economy and persistently high uncertainty since the 2008 financial crisis have meant that these characteristics have become much more pronounced. The Swiss economy is accustomed to dealing with difficult exchange rate conditions, and has demonstrated its versatility time and time again. However, the Swiss franc is particularly overvalued at the moment. The SNB's current monetary policy reflects this challenging environment. The negative interest rate on sight deposits, together with the willingness to intervene on the foreign exchange market as necessary, make it less attractive to hold Swiss francs and thereby support a further weakening of the currency. At the same time, the SNB continues to monitor carefully the effects of low interest rates on financial stability.

Charts

Chart 1

CHF EFFECTIVE EXCHANGE RATE

Trade-weighted, real (27 countries)



Sources: SNB, BIS

Chart 2

WORLD TRADE AND SWISS GDP

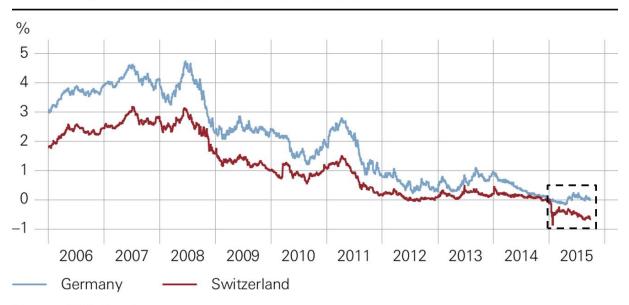


World trade volumeGDP level, Switzerland (rhs)

Sources: SNB, CPB

Chart 3

FIVE-YEAR GOVERNMENT BOND YIELDS



Sources: SNB, Bloomberg

Chart 4

CONDITIONAL INFLATION FORECAST OF SEPTEMBER 2015

Year-on-year change in Swiss consumer price index in percent

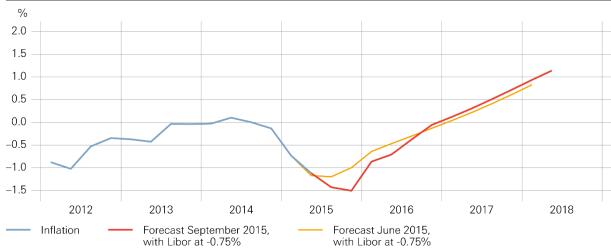


Chart 5

INTEREST RATES OF FIXED RATE MORTGAGES



1: 18.12.2014

Announcement of negative rates: -0,25%

2: 15.01.2015

Lowering of

interest rates: -0,75%

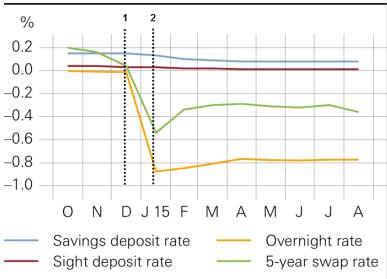
Source: SNB

Source: SNB

Chart 6

DEPOSIT AND MONEY MARKET RATES

End-of-month values



1: 18.12.2014

Announcement of negative rates: -0,25%

2: 15.01.2015

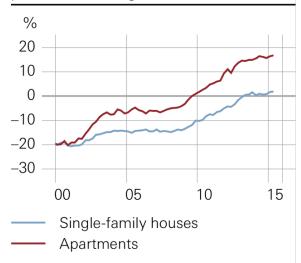
Lowering of

interest rates: -0,75%

Charts 7a und 7b

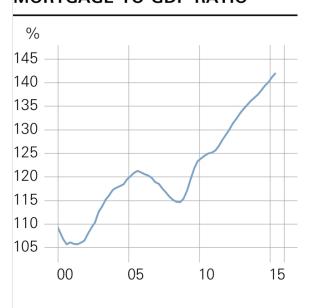
PRICE-TO-RENT RATIO

Deviation from long-term average, asking prices and existing rents



Sources: SNB, SFSO, Wüest & Partner

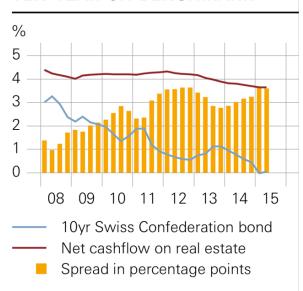
MORTGAGE-TO-GDP RATIO



Sources: SNB, SECO, SFSO

Charts 8a und 8b

RETURNS: REAL ESTATE VS. TEN-YEAR CH BENCHMARK



Sources: SNB, Bloomberg, IAZI

INTEREST RATE RISK % 17.5 15.0 12.5 10.0 7.5 5.0 2.5 0.0 -2.505 15 10 Interest rate risk: Losses in net present value 3M Libor relative to capital, assuming a 200bp interest rate rise; domestically focused commercial