**Our Purpose**

Monetary policy is important. It has broad effects across the economy, affecting young and old, poor and rich, savers, home buyers, firms and workers, profits and wages, the business cycle, and the long-term prosperity of the country.

Public debate about monetary policy is vital not only for basic democratic reasons, but also for the SNB to explain its views, and to listen to the views of the public it serves. The SNB Observatory aims to promote such a constructive debate based on facts and economic science.

The SNB Observatory is currently run by Stefan Gerlach, Yvan Lengwiler, and Charles Wyplosz.

For all our contributions, browse to [snb-observatory.ch](http://snb-observatory.ch)
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ABSTRACT

The Swiss National Bank enjoys an excellent reputation for keeping inflation in check better than other central banks. Today, in a time of low inflation and negative interest rates, this reputation has become a problem. It unduly restricts monetary policy and prevents urgently needed monetary stimulus. A revision of the strategy is needed now. We recommend that the SNB should commit to a more precise and slightly higher inflation goal and it should clarify the role of the exchange rate in its strategy.
EXECUTIVE SUMMARY

The Swiss National Bank has earned a reputation as being able to keep a close lid on inflation. This credibility has served the country well in the past, but it has now become a burden. Interest rates and inflation rates have continuously declined over the last decades, for several reasons, some of which are outside central banks’ influence.

The key component of any successful monetary policy is to keep inflation expectations well anchored at the desired level. Today, inflation expectations are too low in Switzerland, which is one of the main reasons why interest rates in this country are more negative than elsewhere. This situation constrains the SNB in loosening monetary conditions, which would be helpful now, given the COVID-induced slump. It also entails a risk that the SNB might be unable to avoid more serious deflation.

The current strategy of the SNB is unable to lead the way out of the current monetary impasse. In fact, we argue that the SNB is not currently following its official strategy anymore. A review of the strategy is therefore needed. In fact, all major central banks are currently reviewing their strategies because the macroeconomic situation has changed.

We offer an analysis of the current situation for Switzerland, and we three easy to implement improvements of the current strategy:

- The SNB should replace its “inflation comfort zone” of 0% to 2% with an inflation objective centered at 2%. The objective should be achieved on average over the medium term.
- The SNB should publish a quantitative inflation expectation survey on a regular basis that meets professional standards and is based on a valid sample of respondents. Alternatively, the SNB can outsource this task (e.g. to SECO or KOF).
- The SNB has to make clear that inflation below the 2% objective is as undesirable as inflation above it, and that deflation is a serious problem. It should steer the public's expectations close to the inflation objective using all communication channels, including speeches and official publications.

These measures would already help, but deeper changes may be required to regain monetary control. In particular, the role of the exchange rate in the SNB practise of monetary policy has become unclear. It may be necessary to include the exchange rate as an important component of the SNB’s framework.

- The SNB should consider reviewing its strategy to recognize that the exchange has become its overriding concern. This would involve formalising and explaining its exchange rate objective as well as the means to achieve the objective.
1. **The importance of price stability**

High inflation is a bad thing. When the cost of living rises, not everyone can secure protection: workers may struggle to obtain wage compensation, firms may be unable to raise prices, and savers may see a fall in the value of their assets. These losses mean that others gain: inflation redistributes incomes and wealth in arbitrary ways.

In addition, companies need to adjust their prices constantly. This is a nuisance and costly. Customers need to be informed about new prices and they must adjust to them. All of this renders prices less informative. High inflation is also more unpredictable. That makes it harder for firms and households to plan for the future and raises the risk that resources will not be allocated efficiently.

Deflation is problematic for much the same reason as inflation, with additional drawbacks. One reason is the difficulty of lowering prices. A zero-inflation rate means that prices are stable on average. Some individual prices and wages will go up and others will go down. It is well known that there is a reluctance to reduce prices and, especially wages.

Another reason is that borrowers whose incomes fall face difficulties servicing their debts, potentially triggering wide-spread defaults and triggering financial instability.

Central banks are usually tasked with delivering price stability. They can do so in the medium term because over a few years, inflation is mainly determined by monetary policy. Over shorter time intervals, other factors (including fiscal policy, exchange rate movements, commodity prices and the global economic developments) also play a role.

All in all, an inflation rate of zero would seem ideal. However, a low but positive inflation rate is even better. The first reason has to do with the reluctance of cutting prices and wages. When some prices and wages must go down relative to others, a low positive average inflation rate allows more flexibility and is therefore preferable.

The second reason is related to the legroom needed to operate monetary policy.

2. **Too low inflation complicates monetary policy**

For much of the past decade, Switzerland has had recurrent episodes of deflation. While the rate of deflation has been modest, it has complicated the operation of monetary policy. Like other central banks, the SNB controls a short-term interest rate to achieve its desired inflation rate
and to smooth business cycles. The level of interest rates that the central bank sets is determined by three considerations: the public’s inflation expectations, the state of the business cycle and the “neutral real interest rate.”

The neutral real interest rate is defined as the real interest rate at which inflation will remain stable given the two other factors. It is determined by non-monetary factors such as technology and demographics and, as such, is outside the control of the central bank. It is not observed but can be estimated. Such estimates have declined across the world in recent decades, partly due to the ageing of society. This has forced central banks in all advanced economies to continuously lower their policy rates.

A problem occurs when inflation expectations, which are largely governed by recent inflation rates, and the neutral real rate are both very low. In such a situation, the central bank will on average over the business cycle set interest rates very low, just above zero. If a sharp recession occurs, normally the central bank would want to lower the interest rate. Starting from just above zero, this may force the central bank to set interest rates below zero. This is precisely what has happened in Switzerland and a number of other countries (Japan, Denmark, Sweden, the euro area) in recent years.

There are, however, limits to how negative interest rates can be. Essentially, significantly negative rates may encourage bank depositors to switch to hold cash, whose interest rate is zero. Large withdrawals from bank accounts stand to destabilize the financial system and could trigger a financial crisis.

Overall, “lowflation” — a situation in which inflation and interest rates are so low as to render interest rate policy ineffective — prevent the central banks from reacting to recessions, in effect emasculating monetary policy.

3. SNB’s strategy

In 2000, the SNB has moved from monetary targeting to a more modern monetary policy strategy that is still in place today. This framework is based on an explicit definition of price stability and use of inflation forecasts as the main policy indicator. The strategy is explained on its [website](#). It consists of three components.

First is the definition of price stability, the SNB’s primary objective, as annual inflation, measured by the Consumer Price Index, of less than 2%. Since a “protracted decline of the price level” is also interpreted as a
breach of price stability, the SNB has implicitly defined price stability as inflation between 0% to 2%, although deviations below zero, as long as they are not “protracted,” are acceptable.

Second, the SNB publishes quarterly an inflation forecast for the following twelve quarters. This forecast is “conditional”, in the sense that it assumes that interest rates will remain unchanged during the forecast period. According to the SNB, three years is roughly the time it takes for monetary policy to affect inflation.

Third, the SNB “implements its monetary policy by setting the SNB policy rate.”

4. The predicament

The SNB has a well-earned reputation for being tough on inflation. As a result, actual and expected inflation are lower than in most other economies. Figure 1 shows that inflation in Switzerland has been below inflation in Germany, another low-inflation country. This implies that the SNB will on average over the business cycle set lower interest rates than other central banks. It is therefore more likely than other central banks to face the minimum possible interest rate as a constraint on policy.

While pursuing low inflation has served the country well in the past, the fact that the SNB has been on average more ambitious than other central banks has solidified low inflation expectations of the public. Combining this with the secular decline of the neutral real interest rate, the perception of the SNB as being particularly inflation adverse has now turned into a disadvantage. It hampers the ability of the SNB to act effectively today.

This situation has serious consequences.

Figure 1 Swiss and German inflation rate.
First, it prevents the SNB from stimulating the economy sufficiently in a cyclical downturn, and even more in a time of crisis such as the current pandemic.

Second, current interest rates are negative for the whole maturity spectrum. The ten-year bond yields have been at zero or significantly negative for the last five years. This has negative consequences for the pension system and for banks.

Third, being unable to lower its interest rate, the SNB has massively expanded its balance sheet much more than other central banks. The balance sheets of the Federal Reserve and the ECB have expanded to less than 40% and 65% of GDP, respectively. In contrast, the SNB has a balance sheet of 150% of GDP.

Fourth, unlike in other countries, the balance sheet expansion have taken the form of foreign exchange interventions. While these interventions have failed to raise inflation, they have led the US Treasury to label Switzerland as a currency manipulator. We have argued in a previous report that there is no merit to this claim, but the incident suggests that this policy may also face limits.

5. Adjustments to the strategy

The SNB has proven in the past to be able to adapt to new circumstances. It abandoned monetary targeting twenty years ago because it did no longer provide a workable framework. Since then, the situation has shifted once more. The real neutral interest rate has declined. Inflation rates have fallen in all advanced economies, and the lower bound on interest rates has become a reality. The effectiveness of the unconventional monetary policy measures is still controversial. Paradoxically, the SNB is in a worse situation than its peers, just because it has been so successful in the past of reigning in inflation. The ability of the SNB to steer the economy and avoid deflation seems to be slipping. Clinging on to the status quo is a risky proposition.

Other central banks are adapting. The Federal Reserve has just completed such a strategy review and the ECB is currently conducting one. It is time for the SNB to do the same.

5.1 Define a symmetric point inflation objective

As noted above, the interest rate is driven by inflation expectations and the neutral real interest rate. While the neutral rate is probably beyond
its reach, the SNB can try to affect inflation expectations. The task is to convince the public—households who go shopping, firms and workers who negotiate wages, financial markets that shape interest rates beyond the short-term under central bank control—that inflation will on average be higher in the future than it has been in the recent past.

How can the SNB steer inflation expectations? The most important tool the SNB has is its credibility. If the public believes that the SNB is aiming at higher inflation objective, expectations will adjust and inflation will rise.

A good place to start is the definition of price stability. The current 0 to 2% “zone of indifference” is vague. It is compatible with inflation forever around 0% or forever around 2%. A point-objective has the advantage of focusing expectations. Since a 2% objective has emerged as a global standard, the SNB should adopt it as well. In doing so, it would join many central banks from small open economies like Australia, Canada, Sweden and New Zealand.

**Recommendation 1.** *The SNB should replace its “inflation comfort zone” of 0% to 2% with an inflation objective centered at 2%. The objective should be achieved on average over the medium term.*

Of course, the SNB cannot hit a point objective every month or even every year. Monetary policy is simply too blunt an instrument for this. Instead, the objective should be met on average over the medium term, or over the business cycle. Paraphrasing the Reserve Bank of Australia, the objective would be “to keep consumer price inflation around 2 per cent, on average, over the business cycle.”

Symmetry implies that over- and undershoots of the objective should balance over time. This aspect has been made more explicit by the US Federal Reserve as part of its strategy review. This new approach is likely to be widely adopted worldwide.

### 5.2 Measure, report and manage inflation expectations

Measuring inflation expectations is complicated. Over the years, many techniques have been developed to do so.

- *Market-based inflation expectations.* The financial markets set interest rates at horizons longer than the central bank policy rate. In doing so, they reveal their collective view of where inflation is heading.
Surveys. A number of organizations, private and public, conduct regular polls asking households and/or firms what they believe inflation will be in the future.

Model-based forecasts. Forecasts differ from measured expectations. Professional (public and private) institutions produce forecasts, often using econometric models.

What is the situation in Switzerland?

Market-based inflation expectations are usually measured by comparing inflation-indexed and nominal bonds. But Switzerland has no market for inflation-indexed bonds, arguably because inflation has been so low.

Surveys are conducted by SECO and by the CFA Society in association with Crédit Suisse. SECO only asks respondents whether they see inflation rising or declining. In its Quarterly Bulletin, the SNB publishes the CFA/CS expectations survey (see Figure 2). It also reports its own survey of its regional representatives who ask the companies they visit about their expectations (see Figure 3). This survey is not based on a valid, balanced sample, which is unsatisfactory.

Given the importance of inflation expectations, it is surprising how little effort the SNB is making in collecting and publishing this crucial information. The Federal Reserve produces and publishes a quantitative...
index of common inflation expectations. In the euro area, from the start, the ECB has conducted and published a quarterly survey of professional forecasters and, since the beginning of 2020, a consumer survey. The Bank of Japan conducts several surveys every year on a wide variety of topics that are relevant to monetary policy, including qualitative inflation expectations.

Currently, the SNB publishes a quarterly inflation forecast, generated by its internal deliberations, see Figure 4. The forecast is conditional, meaning that it assumes no change in the current interest rate. The intended purpose is to guide expectations: “the conditional inflation forecast serves as the main indicator for the monetary policy decision, but also plays an important role in communicating policy to the public. [...] If forecast inflation indicates a deviation from the range of price stability, an adjustment in monetary policy could prove necessary in the future.” (SNB website). This statement suggests that if the conditional inflation forecast moves away from the comfort zone, the SNB will seek to drive inflation back into the zone.
While the intention is good, the guidance is vague, at best. The SNB does not spell out how or when it will adjust policy, nor where exactly in the range it wishes to drive inflation. The SNB’s management of inflation expectations is far too lax.

**Recommendation 2.** The SNB should publish a quantitative inflation expectation survey on a regular basis that meets professional standards and is based on a valid sample of respondents. Alternatively, the SNB can outsource this task (e.g. to SECO or KOF).

5.3 Make it credible

How does the SNB try to affect the underlying expectations? It usually adjusts monetary policy quarterly and it explains its decision during press conferences in June and December. A key component is the speech given by the president. The box below presents excerpts from these speeches. It suggests that the SNB is generally timid in acknowledging that inflation is too low. Even negative inflation is not flagged as a serious problem.

In order to make the proposed new inflation objective credible, the SNB must be much more forceful in its communications. The public must be made to understand that the SNB is committed to reinflating the economy. Without clear and powerful statements, the history and culture of the SNB of being vigorously hawkish about fighting inflation makes a positive inflation objective not credible.

The redesigned and higher inflation objective that we propose will not be helpful unless the SNB makes it credible. In the current situation, for instance, it might announce that interest rates will not rise until inflation overshoots the objective. Overshooting is in line with average inflation targeting after years of undershooting. Transparent guidance would help to solidify the view that the SNB is unwavering in its pursuit of the higher inflation objective.

**Recommendation 3.** The SNB must make clear that inflation below the 2% objective is as undesirable as inflation above it, and that deflation is a serious problem. It should also make better use of the inflation forecast as a communication device to steer the public’s expectations close to the inflation objective. This effort must involve all communication channels, including speeches and official publications.
In its December 2020 monetary policy commentary SNB reported an inflation rate of –0.9% for the third quarter. President Jordan predicted that the “inflation rate is likely to be higher again next year (0.0%) and slightly positive in 2022 (0.2%)” and stated that “long-term inflation expectations are well anchored and stand at around 1%” (but did not explain the source of this forecast).

The commentary contains a discussion of risks to the world economy, but no indication that a second hard lockdown could amplify the strength and duration of deflation. Nor did it mention that further deflation would be dangerous, since the SNB’s traditional instrument is exhausted.

In its June 2015 commentary, SNB reported an inflation rate of –0.7% for the first quarter and predicted that it would decline further to –1.2% two quarters later and to rise above zero in early 2017. It attributed these developments to the discontinuation of the minimum exchange rate. While President Jordan mentioned that “[i]n light of the uncertainty of the future of Greece, the Swiss franc continues to serve as a safe haven currency,” He did not acknowledge that further large inflows to Switzerland would increase deflation risks.

In June 2012, the SNB reported an inflation rate of –0.9% for the first quarter. It predicted inflation of 0.3% in 2013 and 0.6% in 2014. This turned out to be optimistic. Inflation reached 0% in mid-2013, it stayed there for a year, and then fell below zero again. The SNB did not acknowledge that there was a risk of deflation but merely stated that “for the foreseeable future, there is no risk of inflation in Switzerland.”

At this point, one might ask: under what circumstances would the SNB admit that inflation is too low and deflation risks are serious?

Communication was more forceful previously. In December 2011, President Philipp Hildebrand explained that “[i]f foreign demand were to fall off more sharply than expected, downside risk to price stability would emerge.” Inflation was still positive at the time, but was projected to become somewhat negative for the following four quarters.

In June 2009, President Jean-Pierre Roth signalled serious concerns of deflation: “in March 2009 [...] price stability was threatened, not by the temporary inflationary escalation of 2008, but [...] by the risk of a fall in prices over the coming three years. Since [...] our room for manoeuvre in the area of interest rates was limited, we decided to turn to unconventional instruments in order to bring about a further relaxation in monetary conditions.” Inflation had just reached 0% at the time and was projected to be negative for three quarters.
6. Towards a new strategy?

The recommendations above may not be enough to end the present “lowflation” episode, but they will help. They are easy to implement and there is little reason to wait.

However, it is time for the SNB to recognise that the policy rate has been stuck at –0.75% for more than six years and has ceased to play a role as a policy instrument. Instead, the exchange rate has become an intermediate objective and plays a crucial role in the SNB’s pursuit of price stability.

Until 2009, the franc floated freely. As a consequence of the global financial crisis and the resulting large inflows into Swiss francs, the SNB started to intervene massively in the foreign exchange market. It eventually adopted a 1.20 floor vis-à-vis the euro in 2011 but abandoned it in 2015. It has continued to intervene heavily in the foreign exchange market since then, in much the same way as when the floor was operative.

How could this exchange rate strategy be formalized? One possibility is to peg the franc to the euro, as is done by the Danish Central Bank. This would remove the ability of the SNB to control interest rates. Given the safe haven status of the franc, Swiss interest rates would fall below those in the euro area. However, the trend-wise appreciation of the real exchange rate discussed in our previous report would take place through higher inflation in Switzerland than in the euro area rather than through a nominal appreciation of the Swiss franc. While that would be helpful now, inflation in Switzerland above 2% for sustained periods of time would not be acceptable. Fixing the Swiss franc to the euro exchange rate is therefore no permanent solution. It also has the disadvantage that the SNB would lose its monetary autonomy.

A second possibility would be crawling peg framework much like that of Singapore. The SNB would announce a desired rate of change of the franc for the following quarters and use foreign exchange market interventions and interest rate changes, when that become possible again, to seek to achieve it. This would merely formalize the current situation, in which the SNB could be described as having a desired rate of change of the exchange rate against the euro of zero.

This solution also has two advantages. First, monetary autonomy is preserved. With a time-varying crawling peg, the SNB can regularly adjust its policy to hit its inflation objective, independently from the ECB. Second, the need for foreign exchange market interventions would be drastically reduced as the markets would follow the SNB’s lead.
Announcing such a shift in the policy framework would consequently not involve a fundamental change in policy. However, the SNB’s exceptional credibility suggests that declaring a path for the exchange rate is likely to engender stabilizing expectations. Steering the exchange rate would therefore most likely require much less intervention, maybe after an initial period during which the markets may test the resolve of the SNB, than the present system. That would be helpful.

Once economic recovery has been achieved in and outside of Switzerland, the SNB would announce what path of the exchange rate it judges is most likely to achieve the 2% inflation objective, and use the interest rate as well as supporting foreign exchange intervention to achieve it. That path is likely to entail a slow nominal appreciation of the Swiss franc although there may be periods when a slow nominal depreciation is needed.

The SNB may initially have judged that the current situation in which the policy rate has lost its policy role and is maintained indefinitely at \(-0.75\%\), and the exchange rate serves as an intermediate target, would be temporary. But given that inflation and the neutral interest rates are likely to remain very low for a long while, it must be expected to persist. While the exact modalities of a new strategy with a clearer role for the exchange rate requires a deeper analysis, greater frankness about its importance is called for.

**Recommendation 4.** The SNB should formalise and explain to the public the role of the exchange rate in its policy strategy.

### 7. The bottom line

Because the macroeconomic situation has shifted considerably over the last decade, all major central banks are revising their strategies now. The SNB should do the same, and seek views outside its walls.

One necessary step to escape the deflationary danger is for the SNB to publicly embrace a positive inflation rate. It can do so by setting an inflation goal of 2% and making clear that undershooting this goal is as undesirable as overshooting it.

In addition, it is time for the SNB to recognise that the policy rate is stuck at \(-0.75\%\) and has ceased to play a role in policy. Instead, the exchange rate has come to play a crucial role in the SNB’s pursuit of price stability to the point of having become an intermediate objective.
Greater transparency and frankness — and indeed a formalisation — of the role of exchange rate in SNB policy is desirable. Clarity about the SNB’s views of the appropriate level for the exchange rate is likely to engender stabilising expectations and reduce the need for foreign exchange market intervention, given the SNB’s unquestioned credibility. The exact modalities of a new strategy requires a deeper analysis and it is time for it to start.