Speech

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Competitiveness of Swiss companies – the SNB's contribution Swiss CFO Day

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Ladies and Gentlemen

It is a great pleasure to be here at the Swiss CFO Day 2016. This year's topic – international competitiveness – represents a key challenge for companies and politicians alike. In order for companies to create growth and wealth in a globalised market, they are continually having to maintain their position against international competitors. Local factors such as the educational standard of the population, labour market flexibility and the tax burden clearly play their part. The importance of monetary policy may be rather less obvious at first glance. However, as was demonstrated on 15 January last year, when the Swiss National Bank discontinued its minimum exchange rate of CHF 1.20 to the euro, monetary policy measures can influence competitiveness.

The discontinuation triggered a sharp appreciation of the Swiss franc. On the one hand, this appreciation put Switzerland's price competitiveness under severe pressure in the short term, and I'm sure I don't need to go into detail on the practical repercussions for individual companies in a forum such as this. The impact is still being felt at many of your organisations, although Swiss firms have once again proved impressively flexible and resilient. On the other hand, the decision last January was absolutely necessary, given that the euro lost considerable ground against all major currencies as a result of the changed international environment. Waiting any longer would have put the minimum exchange rate under permanent pressure. The minimum exchange rate had become unsustainable. The costs associated with continuing such a policy would thus no longer have been justified. Moreover, had we discontinued the minimum exchange rate at a later date, the impact on the Swiss economy would have been even greater. I am therefore convinced that the SNB's decision came at the right time. Without this difficult step, we would have compromised our ability to fulfil our mandate of ensuring price stability in the medium and long term.

It is precisely by fulfilling this mandate that the SNB contributes indirectly to Swiss competitiveness in the long term. In my remarks today, I will first go into more detail about this contribution. I will then discuss the difference between the short and long-term effects of a strong currency on competitiveness. Finally, I will examine the role of the Swiss franc exchange rate in our monetary policy deliberations.

Competitiveness and macroeconomic stability

In international comparisons of competitiveness, Switzerland is regularly among the leaders. For example, it has headed the World Economic Forum's (WEF) Global Competitiveness Index for years (cf. chart 1). So what are the factors behind Switzerland's high degree of competitiveness? Let me make something clear right at the outset: competitiveness depends first and foremost on companies and their ability to innovate (cf. chart 2). Innovation helps companies to increase productivity, thereby lowering costs and prices. In addition, innovation leads to higher quality and greater exclusivity of products or services, which in many cases bestows price-setting power.

Switzerland is a case in point: its industries are highly competitive, precisely because our country is among the world leaders in innovation, as a number of indicators have shown. If, for example, we look at the number of registered patents relative to population size, Switzerland is by far the most active of the OECD countries (cf. chart 3, left-hand panel). Innovation indices, such as the Global Innovation Index and the Innovation Union Scoreboard, also place it right at the top. A key factor behind this leading position is the level of investment in research and development (cf. chart 3, right-hand panel), which is above average by international standards.

Firms that are innovative and willing to invest cannot develop and thrive in a vacuum. The scope for development is largely dependent on a country's location-specific factors. The spider diagrams used in the WEF Competitiveness Report show the main pillars underpinning the competitiveness landscape (cf. chart 4). These include the level of education, the stability of political institutions, legal certainty, labour market flexibility and the quality of infrastructure.

A further prerequisite for companies' ability to innovate is a stable macroeconomic environment – in other words, a stability-oriented monetary policy and a sustainable financial policy. Price stability and sound public finances make it easier for companies to plan, especially as regards investment.

This is where the SNB comes in. According to the National Bank Act, it is responsible for ensuring price stability, while taking due account of economic developments. By fulfilling this mandate, the SNB makes a major contribution to a stable macroeconomic environment, and hence indirectly to the competitiveness of the Swiss economy (cf. chart 5).²

From a historical perspective, the SNB has successfully fulfilled its monetary policy mandate. Long-term average inflation is lower and less volatile in Switzerland than in most other countries (cf. chart 6). As a result, the Swiss franc has lost less purchasing power over time compared to other currencies.

The generally stable economic and political environment in Switzerland is one of the reasons why the Swiss franc is popular with investors and has a tendency to strengthen. Thus, a financial and monetary policy that successfully contributes to macroeconomic stability is both a basis for competitiveness on the part of Swiss companies and a driver of Swiss franc strength (cf. chart 7). This is especially the case in times of heightened uncertainty.

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¹ The Global Innovation Index is published by Cornell University, INSEAD and the World Intellectual Property Organization (WIPO), and covers 143 countries. The Innovation Union Scoreboard is a European Commission tool for evaluating the innovation performance of EU member states and other European countries such as Switzerland.

² As part of its mandate, the SNB must also contribute to the stability of the financial system. A well-functioning system of bank lending is also an important pillar of macroeconomic stability. However, my remarks today will focus on monetary policy.

Competitiveness and the strong Swiss franc

But aren't these two consequences of a stability-oriented economic policy at odds with each other? Or, to put it another way: does a strong franc really lead to a reduction in competitiveness? It is essential to differentiate between the short and long-term impact of a strong currency on competitiveness, and it is these differences which I will now examine in the second part of my remarks.

In the short term, the answer is obvious: an appreciation makes Swiss companies less competitive on prices than their foreign rivals (cf. chart 8). It becomes harder for them to sell their products and services at a price that covers the costs involved. The increased pressure on margins forces many companies to make adjustments. Without a doubt, these adjustments are painful and require a high degree of innovative thinking, a willingness to take risks and flexibility, from both employers and employees. If need be, companies may have to withdraw from markets in which they are no longer competitive, or relocate part of their production – and thus some jobs – to lower-cost countries, in order to keep pace with their foreign competitors. Individual companies may even have to cease their activities in Switzerland altogether. A study by the KOF research institute shows that, following a Swiss franc appreciation, the segment of lower-skilled workers in particular sees employment numbers fall.³

However, the same study also points out that, despite pressure on margins, the remaining companies will respond to the franc's appreciation by stepping up research and development, improving product quality and increasing the number of highly skilled workers they employ. Over time, these measures should lead the industries concerned to become more productive overall. The majority of empirical studies for other countries confirm that, as a general rule, strong competitive pressure increases an industry's productivity. Moreover, a number of country studies indicate that an appreciation can have a positive impact on productivity. Often, the relationship is reciprocal, with productivity gains themselves leading to a stronger currency. Thus, in contrast to the short term, in the long term one cannot claim a contradiction between an economy's competitiveness and a strong currency (cf. chart 9). The fact that Switzerland is among the world leaders in competitiveness, despite the strong Swiss franc, confirms this finding.

I'd like to illustrate the difference between the short and long-term consequences of a stability-oriented economic policy with a classroom metaphor. In most school classes, there is a particularly enthusiastic pupil, the 'swot'. For swots, the immediate effect of good academic

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³ Cf. Kaiser, B. and M. Siegenthaler (2015), The skill-biased effect of exchange rate fluctuations, *KOF Working Papers*, KOF Swiss Economic Institute, ETH Zurich, 385.

⁴ Cf. Holmes, T. J. and J. A. Schmitz Jr. (2010), Competition and Productivity: A Review of Evidence, *Federal Reserve Bank of Minneapolis Research department staff report*, 439. The authors conclude that 'nearly all the studies found that increases in competition lead to increases in industry productivity'.

⁵ Cf., for example, Ekholm, K., A. Moxnes and K. Ulltveit-Moe (2012), Manufacturing restructuring and the role of real exchange rate shocks, *Journal of International Economics*, 86 (1), pp. 101–117 or Fung, L. (2008), Large Real Exchange Rate Movements, Firm Dynamics, and Productivity Growth, *Canadian Journal of Economics*, 41 (2), pp. 391–424.

achievement is negative, as they become excluded by the other pupils. Should they perform less well, simply to avoid this unpleasant situation? In the short term, the result would be positive, but in the long term they would probably regret it.

Switzerland as an economic centre faces a similar dilemma. The result of the successful economic policy, and the associated stability, is that the Swiss franc has a tendency to strengthen, demanding constant adjustment from companies and their workforces. So should Switzerland throw its principles overboard and pursue an irresponsible financial and monetary policy? This would automatically reduce the pressure to appreciate and to adjust. And in the short term, that probably would bring some relief. However, in the medium and long term, such a policy would certainly come at the huge cost of endangering the hitherto successful 'Swiss model'.

The Swiss franc's role in SNB monetary policy strategy

What does this mean for monetary policy in practical terms? As a rule, monetary policy should not focus on the short-term impact of a strong franc on price competitiveness. Therefore, a monetary policy geared towards long-term macroeconomic stability does not normally involve any fine-tuning of the exchange rate. Accordingly, the SNB's monetary policy strategy since the 1970s has been based around a freely floating Swiss franc exchange rate that is not actively managed by the National Bank.

This is not to say, however, that the SNB does not take the exchange rate into account in its monetary policy deliberations – on the contrary: because Switzerland is so closely integrated into the global economy, both appreciation and depreciation phases have far-reaching consequences for economic and price developments in our country. As a result, exchange rate movements have a major influence on our inflation forecasts. Thus, they also play an important role in monetary policymaking.

The SNB thus takes the macroeconomic repercussions of exchange rate movements into consideration. Under normal circumstances, we can respond by adjusting interest rates, without intervening directly in the foreign exchange market. This approach has proved to be useful and, in terms of our mandate, suited to the purpose. It allows the SNB to conduct a monetary policy that is optimally tailored to the country's needs.

Despite the positive experience with flexible exchange rates, in certain situations it may be necessary for the SNB to intervene in the foreign exchange market, in order to influence exchange rate movements directly. This is the case when the interest rate as a tool proves insufficient to ward off a threat to macroeconomic stability in Switzerland (cf. chart 10).

The difficult but crucial task of the SNB is to identify under which circumstances a Swiss franc appreciation may lead to a destabilisation. A key element in this evaluation is the speed and magnitude of the appreciation. A rapid and sharp appreciation can result in a substantial fall in the price level in Switzerland. Such a price decline can also cause longer-term inflation expectations to turn negative. Expectations of longer-term price declines can, in turn, lead to

inflation being persistently negative or – in the worst case – to a downward price spiral. This is particularly a risk when the speed of an appreciation leaves companies virtually no time to adjust, and the appreciation is thus combined with widespread upheaval in the real economy.

These destabilisation risks are all the more severe if the global economy is in crisis. An international economic crisis often heralds an inflow of domestic and foreign capital to the Swiss franc, which has acquired a reputation as a safe haven on account of its historical behaviour. In other words, in uncertain times, the franc is seen as an anchor of stability, and is therefore much in demand. The currency can thus experience a strong short-term appreciation as a result. At the same time, a weak global economy can put pressure on sales volumes for the Swiss export industry. This increases the risk that production capacities cannot be fully utilised, that unemployment will rise sharply, and that the Swiss economy as a whole will slide into crisis.

If an appreciation threatens macroeconomic stability in Switzerland through these channels, this has consequences for monetary policy. When conventional instruments reach their limits, the SNB has to resort to other tools in order to fulfil its mandate (cf. chart 11). First and foremost among these are foreign exchange market interventions. Since 2009, the SNB has, as you know, used this tool in a number of ways, purchasing foreign currency amounting to nearly CHF 500 billion. Between September 2011 and January 2015, for example, the SNB used this tool to enforce a minimum exchange rate against the euro.

In this regard, I feel it is important to stress that considerable risks accompany on such interventions. First, market interventions aimed at preventing an appreciation expand the SNB's balance sheet. When there is a fixed exchange rate target, one might even have to expect an uncontrolled expansion of the balance sheet. This is attached to a number of imponderables. In addition to major financial risks, it should be noted that, as the balance sheet grows, it will become increasingly difficult to reduce excess liquidity during a subsequent normalisation of monetary policy, and to fulfil the monetary policy mandate – of ensuring price stability – sustainably.

Second, it is important to bear the following in mind: pegging the franc partially or fully to another currency would mean that the SNB would have to adopt the monetary policy of the currency area concerned. However, it could no longer be guaranteed that this monetary policy would always be optimally tailored to the needs of the Swiss economy.

Thus, the benefits of an active exchange rate policy need to be properly weighed against the costs for the economy as a whole. But there is no one-size-fits-all method of determining the need to intervene in the foreign exchange market, or the best way to do so. The points to consider will differ depending on the situation.

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⁶ Cf. also Danthine, J.-P. (2015): *Swiss monetary policy facts ... and fiction*, speech at the Swiss Finance Institute Evening Seminar, Geneva, 19 May 2015.

Current SNB monetary policy

In that regard, I would like to briefly describe the SNB's current thinking. At its most recent monetary policy assessment about a month ago, the SNB published its new inflation forecast. The forecast shows that, assuming an unchanged interest rate policy, inflation will rise gradually over the coming quarters, and will exceed 1.0% in 2018 (cf. chart 12). So the forecast suggests that current monetary policy is appropriate. For this reason, in December the SNB decided to continue its expansionary policy. This is based on two elements: first, an interest rate of –0.75% on sight deposits at the SNB combined with a target range for the three-month Libor of between –1.25% and –0.25%; second, the SNB's willingness to influence exchange rate developments if necessary.

The negative interest rate and the willingness to intervene on the foreign exchange market serve to make investments in Swiss francs less attractive, and thereby reduce the pressure on our currency. These measures demonstrate that business as usual is still a long way off. During the crises of the last few years, recurring safe-haven flows of both domestic and foreign capital have led to severe upward pressure on the Swiss franc. Despite weakening somewhat over recent months, the franc is still considerably overvalued, as chart 13 illustrates. The blue curve shows changes in the inflation-adjusted, trade-weighted Swiss franc exchange rate. The yellow bars mark deviations from the long-term average, which is currently around 15%. At the same time, the global economic recovery is still not firmly bedded in. Our current monetary policy is tailored to these circumstances. It counters the risk of an undesirable appreciation and, in turn, the associated risks to price and economic developments.

Conclusion

Ladies and gentlemen, following the discontinuation of the minimum exchange rate of CHF 1.20 to the euro almost a year ago, Swiss competitiveness came under pressure in the short term. Yet Switzerland's position among the leaders in major international rankings clearly shows that, over the long term, exchange rate developments are only one factor shaping competitiveness. A more decisive role is played by the existence of a strong network of location-specific factors which have been established, nurtured and honed over several decades. By fulfilling its price stability mandate, the SNB contributes substantially to perpetuating one of these factors – macroeconomic stability.

In this regard, a monetary policy geared towards flexible exchange rates has, in principle, stood Switzerland in good stead over the last 40 years. Under certain conditions, however, the SNB is prepared to intervene directly in the foreign exchange market. This applies especially in the prevailing environment. Whether, and to what extent, foreign exchange market intervention is called for requires careful deliberation, and consideration of the international environment. Prior to the discontinuation of the minimum exchange rate, international developments had caused the euro to lose considerable ground against all major currencies; the minimum rate had thus become unsustainable. We appreciate that the exchange rate

situation since then has presented you all with a huge challenge. Our decision was inevitable, however, to guarantee the SNB's continuing ability to conduct an effective monetary policy. Ultimately, the resulting increase in flexibility means that the SNB can better contribute to keeping Switzerland on the road to competitive success.

Competitiveness of Swiss companies – the SNB's contribution

Fritz Zurbrügg Vice Chairman of the Governing Board Swiss National Bank

Swiss CFO Day Zug, 13 January 2016

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Switzerland is regularly among the leaders in competitiveness rankings

WEF COMPETITIVENESS INDICATOR

	2011	2012	2013	2014	2015
1	Switzerland	Switzerland	Switzerland	Switzerland	Switzerland
2	Singapore	Singapore	Singapore	Singapore	Singapore
3	Sweden	Finland	Finland	US	US
4	Finland	Sweden	Germany	Finland	Germany
5	US	Netherlands	US	Germany	Netherlands
6	Germany	Germany	Sweden	Japan	Japan
7	Netherlands	US	Hong Kong	Hong Kong	Hong Kong
8	Denmark	United Kingdom	Netherlands	Netherlands	Finland
9	Japan	Hong Kong	Japan	United Kingdom	Sweden
10	United Kingdom	Japan	United Kingdom	Sweden	United Kingdom

Source: WEF

Competitiveness depends first and foremost on companies' ability to innovate

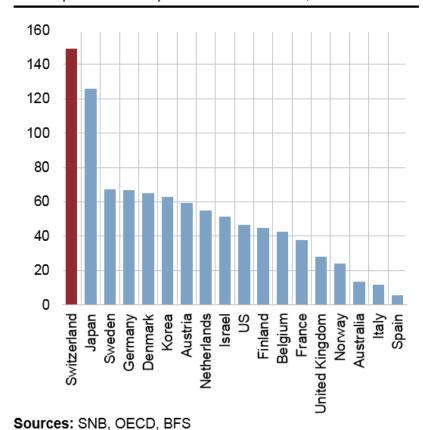
Competitiveness

Ability to innovate / Productivity

Swiss companies are characterised by their strong ability to innovate

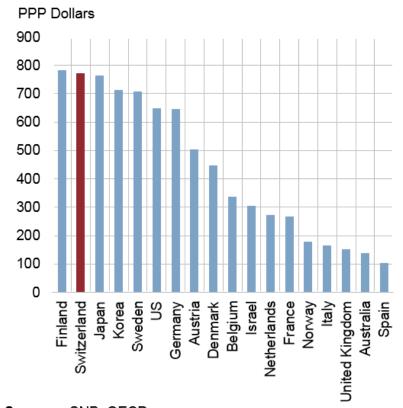
PATENTS PER CAPITA

Triadic patent families per 1 million inhabitants, 2013



R&D EXPENDITURE PER CAPITA

Manufacturing, average 2008-2012



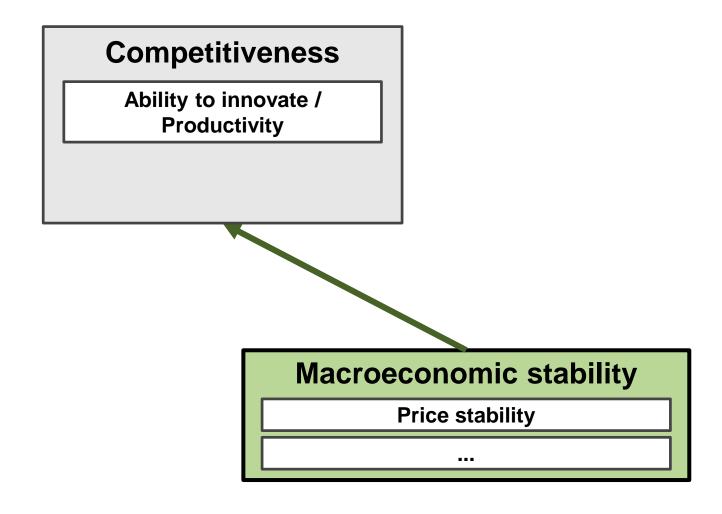
Sources: SNB, OECD

Location-specific factors also play a role in competitiveness



Source: WEF

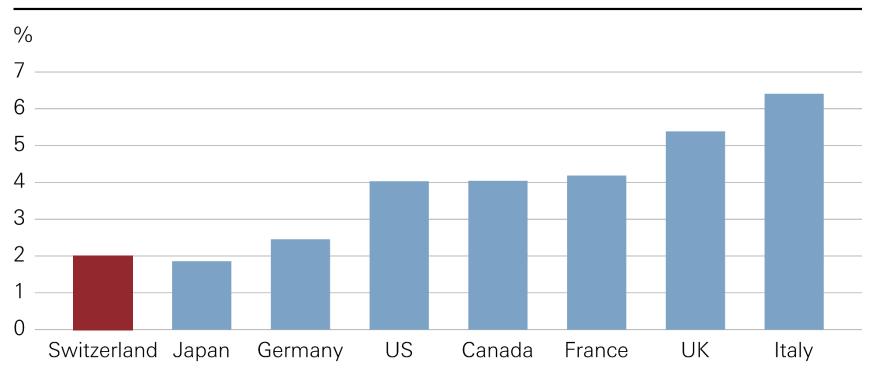
The SNB makes a contribution to competitiveness by fulfilling its mandate of price stability



Low and stable inflation rates indicate that the mandate has been sucessfully fulfilled

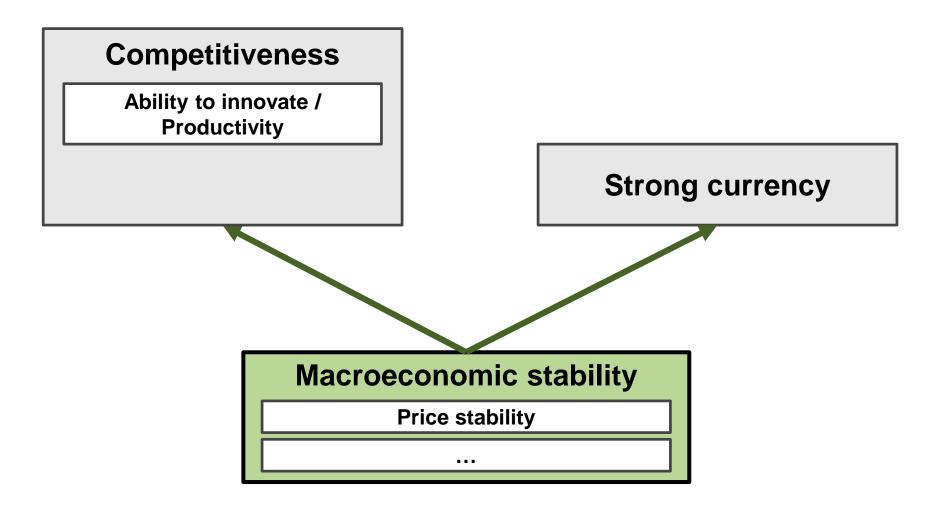
AVERAGE INFLATION

1975 to date

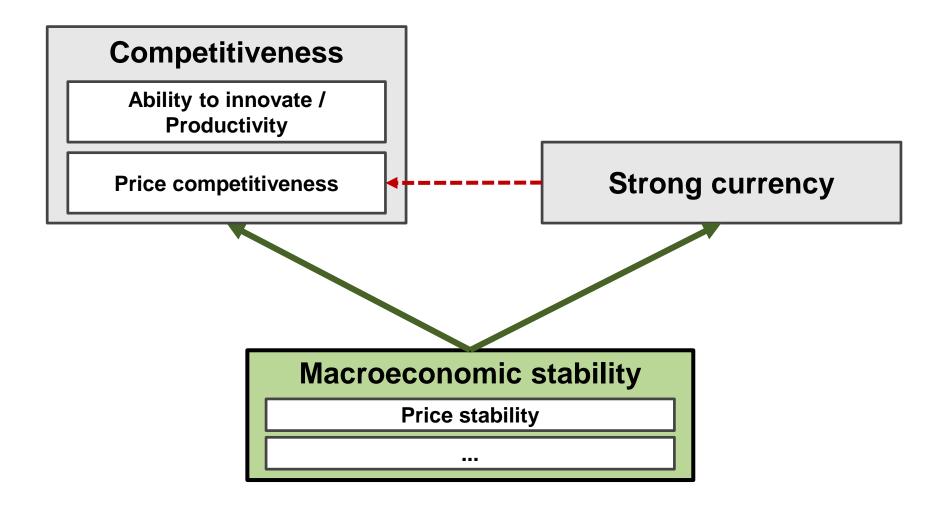


Sources: SNB MAP, OECD

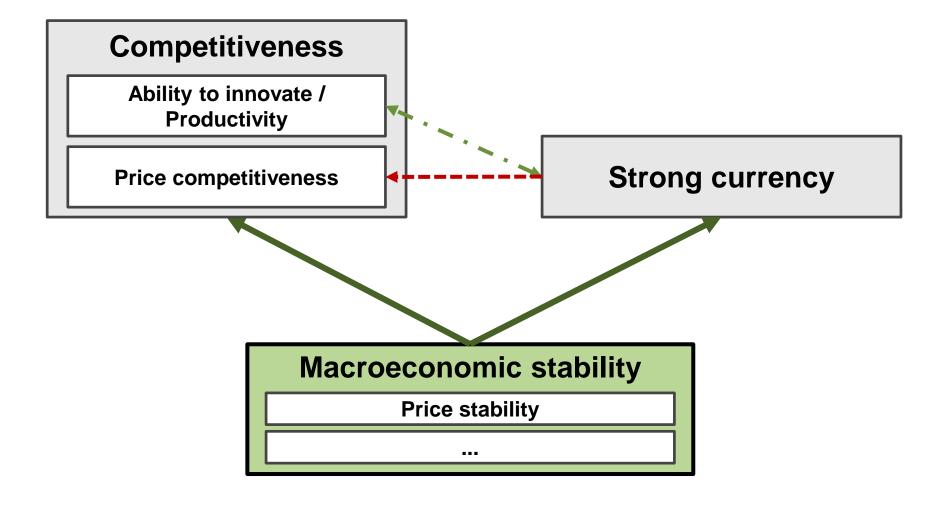
Switzerland's political and economic stability contributes to a strong currency



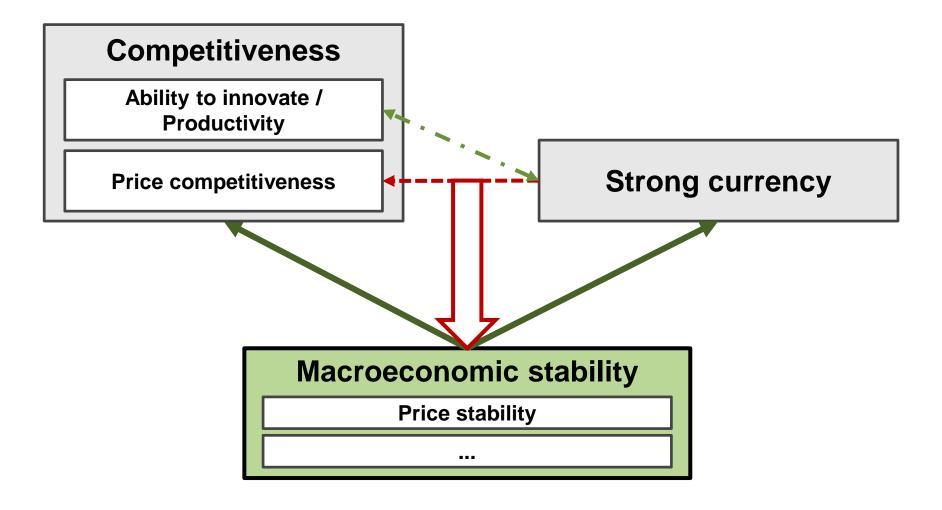
A strong currency reduces competitiveness in the short term



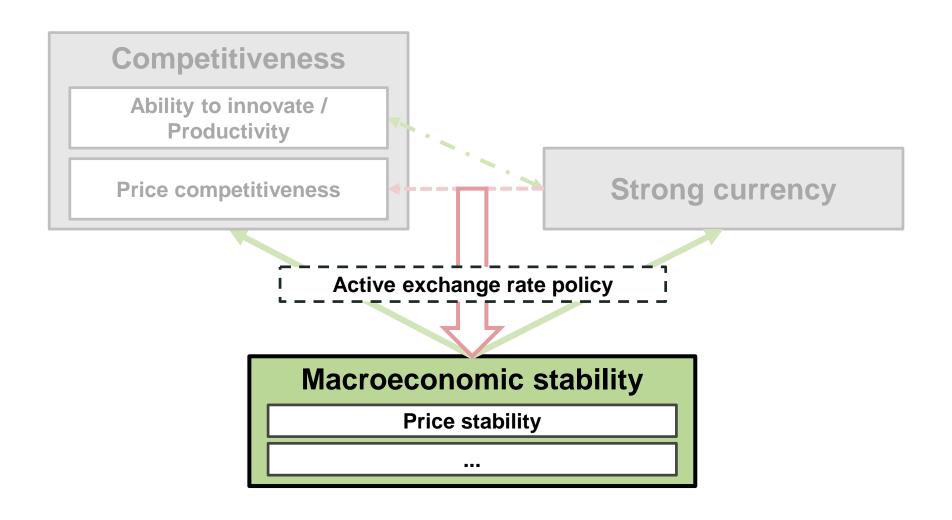
There is no contradiction between competitiveness and a strong currency in the long term



However: A rapid and excessive appreciation of the Swiss franc can compromise stability ...



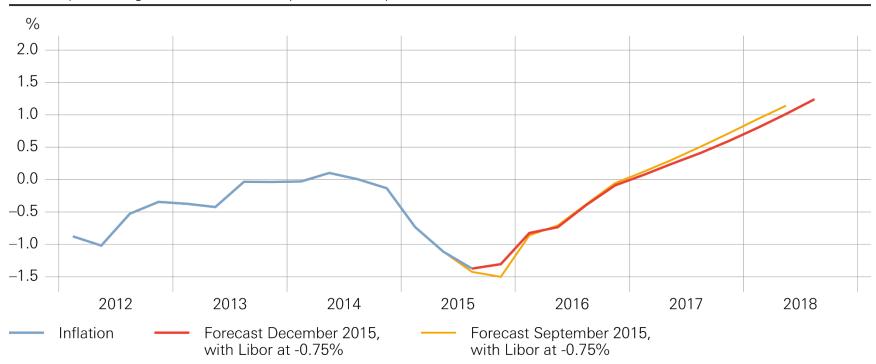
... and call for an active exchange rate policy



Current monetary policy is based on negative interest rates and the willingness to intervene on the foreign exchange market

CONDITIONAL INFLATION FORECAST OF DECEMBER 2015

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

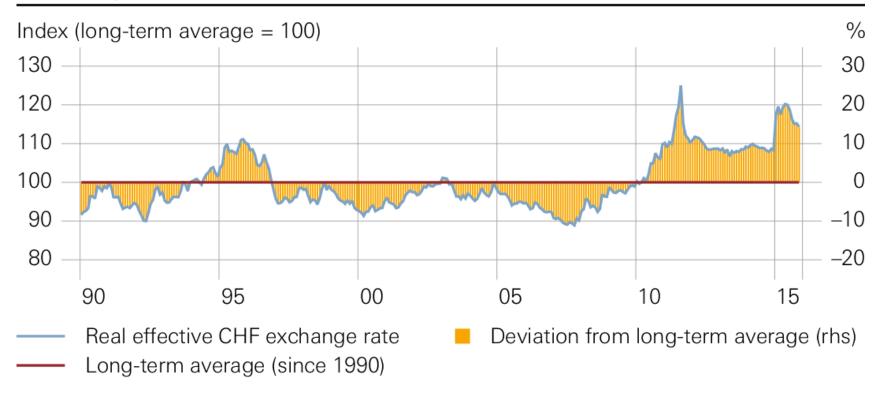


Source: SNB

The Swiss franc is still considerably overvalued

REAL EFFECTIVE EXCHANGE RATE OF THE SWISS FRANC

Trade-weighted (27 countries)



Sources: SNB, BIS

Thank you for your attention

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