The Swiss National Bank.

The worlds fourth largest sovereign wealth fund created.

What Now?

Zürich, 14. September 2017

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Swiss National Bank – Quo Vadis O' National Bank? Quid pro Quo?
The share price of the Swiss National Bank (SNB) passed 3,000 CHF in August 2017. Up from ca. 1,000 CHF in April 2016. A mark at which it had sat, peacefully, for the previous X years. It's now at 3,620, a price increase of 260% in less than two years. A truly rock hard erection inducing investment return.

But you know this. Unless you've been living on Mars for the last couple of years without access to Bloomberg, or Inside Paradeplatz, you know full well the stock of the SNB has been attending aerobics classes. Here it is, over five years.

Why? Or, "What on Earth going on??!!". Is this rational? Is a speculator at work? Is someone looking to make a buck? Has someone lost their marbles?

On a casual glance at the chart, something should jump out at you here immediately, it's the P/E ratio. It is 0.08. P/E ratios are usually between 10 and 20 for a listed firm. Unless of course you're a tech firm, then it's fantasy land for your P/E ratio. A P/E ratio of 0.08 on a stock price of 3,620 implies an Earnings per Share (EPS) of 45,250 CHF. For a listed stock, this is truly weird.

The intent of this article is to try to take a common sense look at the puzzle. Try to shine some light. There has been a lot of ink spilled in the last twelve months on the subject, some serious, some sensible and some outright nonsense. The stock price itself, I actually consider irrelevant to the real issue and the discussion that should be taking place. Presumably to the relief of the SNB and the Bund who I am guessing are trying to work out what to do with this thing they have created without the distraction of a public outcry.

Let's start from the beginning. SNB, "wer bist du?". Who are you and what do you do? Thus speaks the SNB on page one of the website:

> "The Swiss National Bank (SNB) is Switzerland's central bank. It is vested with the note-issuing privilege and has been mandated to conduct the country's monetary policy. In accordance with the Constitution and Swiss law, the SNB is independent in the fulfilment of its mandate, is accountable to

> the Federal Assembly and is obliged to provide the general public with regular information on its activities."

So the SNB is a central bank. It prints money and conducts monetary policy. It is apparently a public institution. Really? So why is someone buying the stock? Why is the SNB even listed on the exchange in the first place?

The creature created. The fund we have become.
The SNB was listed in 1907, when it was created as a public company. It simply never de-listed, which explains the listing. To the rocketing share price, the Swiss National Bank appears at first blush to be increasingly being valued by someone(s) as an investment fund. Which is downright weird, because what it appears to me to be, right now, is the worlds fourth largest Sovereign Wealth Fund (SWF). On its way to becoming the largest.

Let's go with this assumption – SWF – and ask "How did this happen?" Well, if you remember back a few years, to 2008. Yes, an eternity ago, we were all having something of a crisis. This crisis created two main drivers. First; enormous amounts of money were being created by European central banks, translating into enormous amounts of money looking for a safe haven. One big safe haven was the Swiss Franc and Switzerland. Second driver; this created huge demand for Swiss Francs, pushing up the price of the Franc. This in turn elicited howls, screams of protest and the gnashing of teeth from Swiss exporters, the tourist industry and basically anyone and everyone who sold any form of goods or services to other countries. Around 80% of the economy has foreign exposure. Not a tenable situation.

The SNBs mandate states: "Its primary goal is to ensure price stability". This certainly includes stabilising the Franc. The SNB heeded the call to action, not that it had much choice. And girding its loins with the battle cry, "we will defend, to the death, to the death do you hear, the Swiss Franc" entered the fray. The SNB had to get the value of the Franc down and keep it down. When interest rates are already zero, there is only one way left to do it, one shot in the locker: increase supply of the commodity to match demand. This is the only measure they had; put Swiss Francs onto the market. This means printing money. The SNB created Swiss Francs. Where there was nothing, money was created. A bit like biblical creation. In the forex market, the SNB exchanged these created Swiss Francs for Euro and U.S. dollars. You may remember a thing called the "Euro peg". It was set at 1.2 CHF to the Euro. An arbitrary mark the SNB pledged to defend. Again, to the death presumably. It was a credible pledge. And several hedge fund managers lost their shirts and their houses over the next few years testing the SNBs resolve.

Fast forward a few years, to January 2015. The SNB had to this time printed around 500 Billion Swiss Francs which it had exchanged for Euro and dollars, accumulating a forex position of around 450 Billion Euro. Speculators were gathering, people were betting on both sides of the equation, would the SNB continue, wouldn't they? Who knew? In January 2015, the SNB caved. Abandoning the peg with no warning whatsoever, sending the rate from 1.2 CHF : 1 EUR to below 1:1 overnight. Sending a number of hedge funds bust in the process and making overnight millionaires of a few other hedge fund managers. However, the SNB was now "stuck" with around 500 billion francs worth of forex. Mostly in Euro and dollars.

Damn! What do we do now?

- Can't give it away.
- Can't spend it.
- Can't put it back where it came from.
- Can't eat it.
    - ➢ We're gonna' have to keep it.

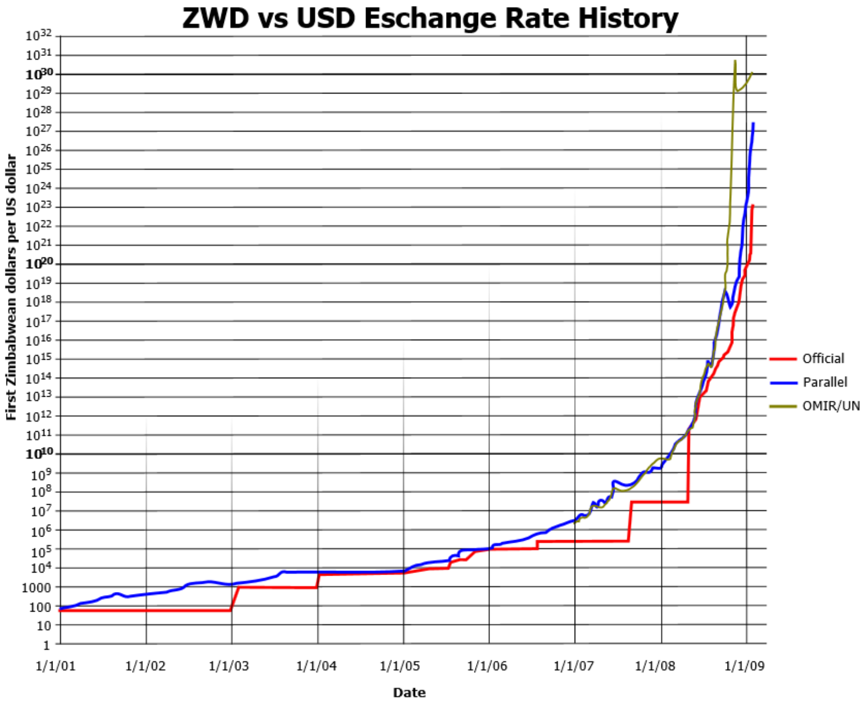
The SNB invested the cash. Ie., the SNB purchased assets with the cash. Bonds and equity. Hard assets. Income and capital gain producing assets. In Euro and dollars. Ie., and this is an important distinction: non-domestic-currency assets – claims on foreign governments and its peoples. Let's clarify the substance of this transaction.
1. The SNB created "something" out of "nothing".
2. The SNB used the "something" to buy real assets. Very real. Income and capital gain/loss producing assets.
3. The SNB now held a very substantial securities portfolio.

Overnight, without intending to, probably, due to the heat of battle not thinking too hard about the consequences, the SNB had created one of the worlds largest Sovereign Wealth Funds.

Post creation?
The "created" Swiss Francs are highly unlikely to "disappear". To make them disappear, the SNB would have to use Euro and dollars to purchase Francs in the forex market, pushing up the value of the Franc. That's a non-starter. So the Francs are out in the market permanently. And the SNB keeps its Euro and dollar stock and bonds.

This printing of lots and lotsa Francs is no different to the national bank of Zimbabwe printing lots of Zim dollars. The big difference is for some reason no-one wants to buy Zims. People do like Francs though. Lots of them. Printing money as we all know usually leads to hyperinflation, which we can all agree is a BAD THING. Very bad.

To illustrate, let's look at what happened when the Central Bank of Zimbabwe printed Zims. Lots of Zims. Hyperinflation resulted. Which in 2009 hit 500,000,000,000%.



This is a logarithmic scale, as you can see from Y-axis. It just doesn't do justice somehow to the true fiscal and monetary policy insanity of this. Notwithstanding, it's still beautiful. As is the one hundred trillion dollar note it produced.

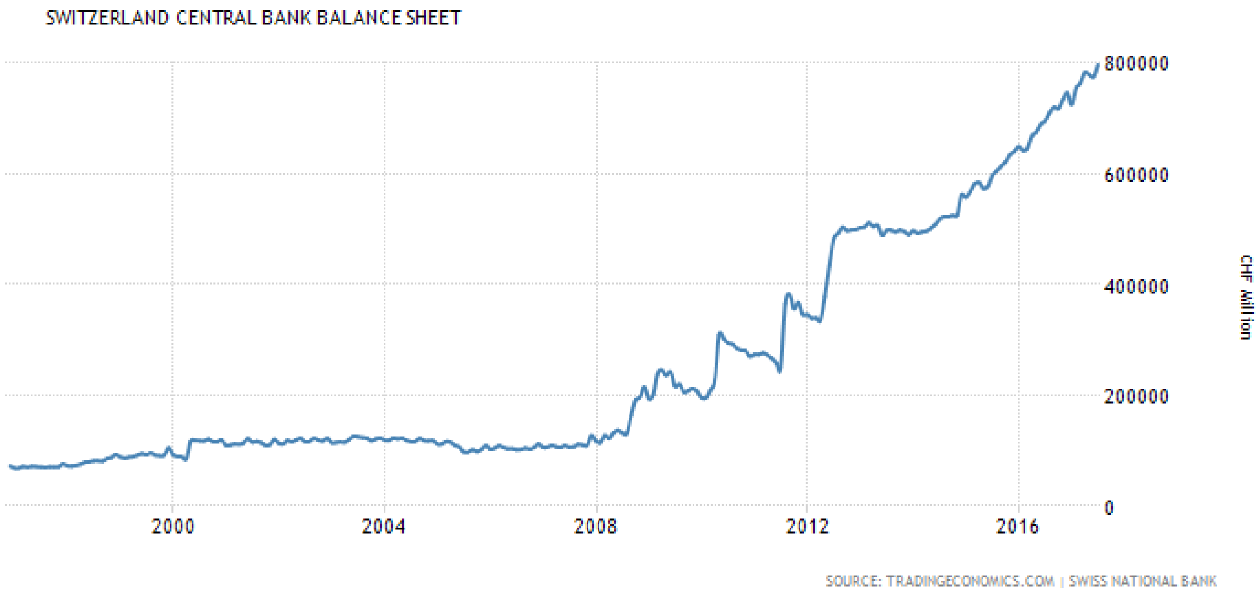
Here however in sunny Switzerland, there was no inflation. None at all. As you see, very stable.

Magnificent isn't it? The very picture of monetary stability. The SNB printing money didn't result in any inflation, so we didn't get new banknotes with lots of zeros. We stayed with our one hundred franc note.

Very beautiful, good show, Orell Füssli (part owned and managed by the SNB). It's still worth the same as it was in 2008 too. In fact, 500 billion Francs worth of intervention barely held off a massive appreciation of the Franc. Since the caving of the peg in January 2015, the SNB has continued to "intervene" and print Francs. Successfully "defending" the Franc, as we see here.

CHF to EUR

Of course, continuing to print Francs, the SNB continues to buy Euro and dollars. So the foreign exchange position has continued to build. At a rate of around 100 billion Francs per year. The creation of assets of course is reflected on the balance sheet, which looks like this.



Like climbing Everest, isn't it? This graph tells us that in 2008, at the start of the financial crisis, the SNB balance sheet was around 120 Billion CHF. Where it had been stable for years. In 2009 the SNB started intervening. Since then the SNB has added around 680 billion Francs to the balance sheet, which just coincidentally is around the growth in its "foreign reserves" position. However, it's not in fact foreign exchange, it's not Euro and dollars sitting around in cash in bank accounts, it's assets. Securities. It is 80% bonds and 20% stocks. To use a term properly describing what this "foreign reserves" actually is, it is assets under management (AuM).

The SNB as Sovereign Wealth Fund

At the time of writing, taking the 30. June 2017 interim results, the SNB balance sheet has grown to 775 billion CHF. Of which 724 billion CHF is foreign currency investments. Let's put the zeros on to get an idea of scale, that's: 724,000,000,000 CHF under management. It's a lot of money. Swiss annual GDP in 2016 was 659 Billion CHF. So we're well past that. These are income producing investments. The result of printing money. Nothwithstanding the origin of it all, it is value creation. It is wealth creation.

I argue that the substance of this transaction is that the SNB has created a very large sovereign wealth fund. It has achieved this not through economic activity in the traditional sense. Where most countries (Norway for example) sell real commodities, oil or whatever, and buy assets, the SNB has done this without actually selling anything of value. A truly remarkable achievement.

At the current rate of growth, in three to four years, the SNB will have a trillion dollar balance sheet. With around 900 billion Francs under management in its investment portfolio. To compare, the Norwegian Sovereign Wealth Fund is the worlds largest. It has 960 Billion dollars AuM. It was created through the sale of oil. The SNB is on the way to matching this. The SNB has done it simply by printing Swiss Francs.

Being the biggest and the best, let's take a closer look at Norway. It has been around a while, it was set up as a sovereign wealth fund in 1990. It is strictly managed and controlled by a separate unit of the central bank, called "Norges Bank Investment Management" (NBIM). It answers to the board of the central bank and the Norwegian parliament. It can invest in stocks, bonds and real estate abroad only. It owns on average 1.3 percent of global equities. It employs over 550 people. By comparison the SNB probably has about 50 people managing its billions.

The SNB has none of the controls nor the organisational complexities of the Norwegian SWF. Going on its performance I would argue it doesn't need them. It's doing damn well without the legal & compliance lawyers, the assorted parasites and various hangers-on. However it might be an idea to emulate some governance elements of the Norwegian model. First though, comes the acknowledgement of what has been created. Only then can we start looking at governance, ethics and management.

Where does Switzerland stand in the global Sovereign Wealth Fund rankings? Here's the top ten:

Country	Sovereign Wealth Fund Name	Assets USD-Bil	Inception	Origin	*Linaburg-Maduell Transparency Index*
Norway	Government Pension Fund – Global	954.07	1990	Oil	10
UAE – Abu Dhabi	Abu Dhabi Investment Authority	828	1976	Oil	6
China	China Investment Corporation	813.8	2007	Non-Commodity	8
Kuwait	Kuwait Investment Authority	524	1953	Oil	6
Saudi Arabia	SAMA Foreign Holdings	514	1952	Oil	4
China – Hong Kong	Hong Kong Monetary Authority Investment Portfolio	456.6	1993	Non-Commodity	8
China	SAFE Investment Company	441**	1997	Non-Commodity	4
Singapore	Government of Singapore Investment Corporation	359	1981	Non-Commodity	6
Qatar	Qatar Investment Authority	320	2005	Oil & Gas	5
China	National Social Security Fund	295	2000	Non-Commodity	5

You will notice that four of the top five are the result of oil. Number 3, the China Investment Corporation is the result of the Chinese government pouring money from various sources into a fund to invest. At the end of the day though, the origin of funds is irrelevant. What matters is the assets under management. To be clear, there is no difference between the assets the SNB are managing to the assets the Norwegian SWF is managing. *It is exactly the same thing.* To refer to these assets as "exchange reserves", as is done in the annual report is misleading. These "exchange reserves" are AuM and should be called AuM. I.e., SNB Assets = Norwegian Assets = Financial Assets (stocks and bonds). No difference.

The only difference is the origin, the Norwegian assets came from a tax on oil. The Swiss assets came from printing Swiss Francs. A practice which for most countries would simply result in hyperinflation and economic collapse. Here it resulted in 696 Billion CHF foreign currency assets under management as of end 2016. Up to 724 Billion CHF end June, 2016. The SNB is currently running the worlds fourth largest sovereign wealth fund and on it's current trajectory, it's heading for the number one spot in a few years. It has achieved this not by skimming a few percent of the sale of oil or other commodities. Rather, it has achieved this solely by printing money. I.e., firing up the printing presses. Assuming the year of inception for the Swiss SWF as 2009, eight years in, we're doing very well indeed.

Why the sudden increase in the share price?
This is where the discussion gets hairy. I originally thought that the main reason for the runup in the stock price of the SNB is that someone(s) thinks that the real value of the SNB stock is the Net Asset Value of it's holdings, divided by the number of shares. Ie., the SNB is being increasingly valued as an investment fund. A "Kollektive Anlage". Does this make sense? Well, No, not really, as we will discuss below.

Others have ventured the theory that the SNB is a bond substitute. The yield however has dropped from 1.5% to 0.41% in CHF. At a stock price of 1,000 CHF, for a dividend of 15 CHF for a yield of 1.5%, Ok, but not at 3,620 CHF. The SNB also has the power to arbitrarily suspend the dividend, which it has done. For various reasons, I do not buy the theory that the SNB is a bond substitute.

Indisputable is that value has been created. A lot of value. The holder of this value is a listed company. What we see in the rise of the stock price is the expression of someone or someones belief, expectation, that at some point there will be a distribution of part of that value to ordinary shareholders. There is no other explanation. The market is (slowly) trying to price this value.

Before someone writes in to the comments section, I would point out that traditional methods of valuation are useless. For example, the Dividend Discount Model and the various growth models don't work because there is no dividend growth and the SNBs cost of equity is zero or negative. Value of stock = Dividend per share / (Discount rate – Dividend growth rate). With a discount rate of zero the value of the stock is infinity. Which is nonsense.

Follow the money – distribution of profits
Let's look now at the assets, cash flows, the rules governing those cash flows and the distribution of profits. From the annual report, we read the following with regard to dividend payment:

> **Share capital and dividend**
>
> For 2017, the following dates and comments are applicable (this information is updated each January for the current year):
>
> **Share capital**
>
> The share capital of the SNB amounts to CHF 25 million and is divided into 100,000 registered shares with a nominal value of CHF 250 each. The shares are fully paid up (art. 25, para.1 NBA).
>
> **Listing**
>
> The SNB shares are listed on the Swiss stock exchange SIX Swiss Exchange.
>
> **Share performance**
>
> Due to the legally stipulated maximum dividend of 6%, the price of the SNB share usually develops along similar lines to a long-term Confederation bond with a 6% coupon.
>
> **Taxable value**
>
> The taxable value of the SNB share for 2016 amounts to CHF 1,750.
>
> **Dividend amount**
>
> Subject to the Annual General Meeting's approval of the proposed profit appropriation, a dividend not exceeding 6% of the share capital is to be paid from net profit (art. 31 para. 1 NBA). The dividend is CHF 15 (gross) and CHF 9.75 (net) per share, after deduction of withholding tax.
>
> **Dividend payment**
>
> The dividend will be credited to your account.
>
> **Dividend entitlement**
>
> Shares purchased up to the ex-dividend date (3 May 2017) are eligible to receive the dividend payable on 5 May 2017.
>
> **Value date of dividend payment**
>
> 5 May 2017

Make sense so far? To summarise, the SNB is a listed company, on the Swiss Exchange, with 100,000 registered shares outstanding, carrying a nominal value of 250 CHF per share, with a current market price of the stock at 3,620 CHF. There is one share class only, entitling all shareholders to the same distribution. How to even start discussing this? Let's pretend this is a University essay project question, worded:

> **Statement:** Suppose the SNB created a sovereign wealth fund out of fresh thin mountain air. The SNB has assets under management at end 2016 of 696 Billion CHF. All of it interest and dividend yielding. The SNB is increasingly being valued as an investment fund. The SNB has not the faintest idea what to do with the cash. The stock price is skyrocketing. The SNB pays a small, fixed dividend to stockholders. The SNB pays a very large, separate distribution of profit to a special interest group, which is non-related to individual stockholders and completely unrelated to a stockholders holdings. Discuss.

Let's start with who owns the shares. A slim majority of SNB shares are held by cantons and cantonal banks. At the end of 2016, they held 52% of the shares. The remaining shares are mainly owned by private individuals. The confederation itself is not a shareholder. The major shareholders are:

- Theo Siegert (Düsseldorf) with 6.72% (6,720 shares)
- The Canton of Berne with 6.63% (6,630 shares)
- The Canton of Zurich with 5.20% (5,200 shares)
- The Canton of Vaud with 3.40% (3,401 shares)
- The Canton of St Gallen with 3.00% (3,002 shares)

The dividend is straightforward, each share gets 15 CHF. The distribution of profits however is separate - governed by Article 31 of the National Bank Act (NBA).

Art. 31.

1. A dividend not exceeding six percent of the share capital shall be paid from the net profit.
2. One-third of any net profit remaining after the distribution of a dividend shall accrue to the Confederation and two-thirds to the cantons. The Department and the National Bank shall, for a specified period of time, agree on the amount of the annual profit distribution with the aim of smoothing these distributions in the medium term. The cantons shall be informed in advance.
3. The net profit accruing to the cantons shall be distributed in proportion to their resident population. The Federal Council shall regulate the details after having consulted the cantons.

The NBA thus explicitly disenfranchises private individual shareholders. Hardly seems fair, does it? It goes further. To ensure sure no-one outside the club can get any power whatsoever, it restricts voting rights to 100 shares. Ie., if you have more than 100 shares, you can only vote the first 100 you have. This is governed by Article 26 of the NBA, "Share register, limitation of transferability":

> "Art. 26, S. 2.
>
> A shareholder's registration is limited to a maximum of 100 shares. This limitation shall not apply to Swiss public-law corporations and institutions or to cantonal banks pursuant to Article 3a of the Federal Act of 8 November 1934 on Banks and Savings Banks."

In practice this means that Mr. Siegerts 6,720 shares do not confer 6,720 votes, rather 100 votes only. Whereas Canton Zürich can vote all 5,200 of its shares, Mr. Siegert can vote only 100 of his shares at the AGM. Or 1.4% of his holdings. Hardly seems fair, does it? The SNB is after all, a listed company. There is therefore, no incentive to register as a shareholder. Why indeed?, you can't vote the stuff. This perverse arrangement has resulted in the SNB – according to the SNB – having no idea who has been buying the stock.

Let's return to profit distribution. The SNB distributes cash to shareholders in two ways:

1. The SNB pays a dividend to its shareholders
2. The SNB pays an amount to the Cantons
    - This is completely unrelated to the dividend paid to shareholders

Quoting the 2016 SNB annual report once again.

> "The allocation to the provisions for currency reserves corresponds to the minimum amount of 8%. After taking into account the distribution reserve of CHF 1.9 billion, the net profit comes to CHF 21.7 billion. This will permit a dividend payment of CHF 15 per share, the legally stipulated maximum amount, as well as a profit distribution of CHF 1.7 billion to the Confederation and the cantons. The distribution reserve after appropriation of profit is CHF 20.0 billion"

This means that on a profit of 21.7 Billion CHF all investors get 15 CHF per share. A total disbursement of 1.5 Million CHF. Which is 0.0069% of profits. Paid out to shareholders. Of your listed company. Not much is it? If you hold 100 shares, you get 100 X 15 = 1,500 Swiss Francs, At a share price of 3,000 CHF: 100 X 3.000 CHF = 300,000 CHF, for a dividend yield of 0.5%. I don't know about you, but if I were an ordinary shareholder, I'd be pissed.

If however, you are a Canton, holding 100 shares, you receive your 1,500 Swiss Francs, plus your share of the 1.7 Billion CHF profit distribution. 52% of the stock is in the hands of the Cantons and Confederation. Going through the same basic maths, assuming the Cantons stock holding is in approximate proportion to its population proportion, if the Canton holds 100 shares, it gives 100 X 30,909 CHF = 3.09 Million CHF. Mr. Siegert, holding 6,720 shares got 100,800 CHF.
Canton Bern, on this basis holding 6,630 shares most likely got around 6.63% of 1.7 billion = 112.7 Million CHF.

This is investor discrimination pure and simple. There is no excuse for this. None. Not on this huge scale. Yes, you can establish different share classes. But here, all 100,000 shares are the *same share class*. Dear SNB, dear Bund, if you are going to be a listed company, you play by the rules of listed companies. You do not just run on a set of rules made up to suit you. If you want to do this, you de-list. Dear SNB, if you are going to play this game, you need to de-list.

It's hardly worth calculating dividend yield on the basis of profit distribution, but let's do it anyway. On a share price of 3,000, the dividend yield is 1,000%. A share price of 1,000 CHF gives a dividend yield of 3,200% There *is* a share class in Switzerland with a dividend yield of over one thousand percent. Yes, Yes! Give me more of that.

It must be very clear to everyone at this point, even to the most mathematically challenged types in the SP and the Greens that the SNB is one hell of a good investment.

Let's backtrack now with a common sense question. How is this possible? The SNB is after all a joint stock company, with one share class, listed on an exchange, subject to the rules of the exchange. The answer is the NBA. No, not the National Basketball Assocation, but the National Bank Act. Of 1953, revised 2002. However, neither the founders of the SNB in 1907 nor the 1953 act nor the 2002 revisions envisioned, imagined, in their wildest dreams that the SNB could wind up managing 700 Billion CHF or more in assets. "Unvorstellbar!", "Unmöglich!!!", I can imagine the cries back in 2002 at the very suggestion. The NBA is however still an act of Swiss parliament. Written into law and it can be revised. Subject of course to the usual procedures. Plus likely referendum. Bottom line, this can be changed. With this much money at stake, I think someone is betting it will be. Substantially.

Governance

Managing seven hundred billion odd in assets must be quite a challenge. Oddly, the challenges appear hardly worth a mention in the annual report, with only this pithy reference appearing on page 146.

> "The rise in the foreign exchange reserves affected the requirements of the portfolio management systems. In 2016, to support asset management, new front-end applications were introduced to enable a more efficient investment process"

That's it. That's all the SNB has to say on the challenges of managing over 700 Billion CHF in assets. I would love to see some disclosure on the „efficient investment process". Alas, I am disappointed. There is none. But the SNB clearly has supermen (and some superwomen) on the trading desks and in the research department. Since the rules were changed in 2005 (yes, again) to allow the SNB to buy and hold listed equities, it now holds 20% of its "currency reserves" in listed shares. Ie., 145 Billion CHF. Of which 92 Billion CHF is in American equities; Facebook, Apple and so forth. I can only imagine the size of the trades and some of the conversations. "Hmm, Apple looks good today." "Hmm, Yes. 150 Million Apple?" "Ja, Tim wore a snappy suit yesterday at the annual convention." "Ja, coole, geile new iPhone". "Go pick up a hundred fifty million worth of apples." I do wonder how the SNB staff is able to effectively manage and administer this volume of AuM? How can they be set up to effectively manage 700 Billion odd of assets? Though as anyone who has managed money knows, the size of the order generally doesn't make much difference. In 2009 where you put an order for ten Million or so, that order today is for a hundred Million. It's just extra zeros…

The SNB does spend some time talking about what they invest in and the decision making process on page 79. It is rather sparse and essentially says they buy all sorts of bonds and basically mimic equity indices in purchases for the equity portfolio, which certainly makes sense under the circumstances.

As of writing the SNB has 724 Billion CHF in AUM it is trying to manage with a system infrastructure that, I am guessing was probably stretched at 50 Billion. It is a testament to the competence, intelligence, common sense approach, dedication and flexibility of the staff that they are doing as well as they are. Right now, equity holdings alone are at 150 Billion CHF. To compare, the worlds largest hedge fund, Bridgewater associates, in Westport, U.S.A. has 103 Billion USD under management. Sitting on and trading a mountain of cash this size is power. Real, raw, power. The SNB can and does move markets. Wall Street has started tracking and forecasting SNB trades because when the SNB trades, it has a material effect on stock prices. Yes, you can (theoretically) forecast because the SNB is basing its trading on market indices, subject to certain restrictions. Having this much money at your disposal gives you the power to make and destroy fortunes, you can make some hedge fund managers rich and you can send others bust. This sort of power is intoxicating. Your own employees and their families can also make themselves rich front running trades. Right now there appear to be very few (if any) controls on this and it is extraordinary how reticent and with how much of a sense of responsibility the SNB appears to have demonstrated in having this power. They seem to be thinking very carefully about how they do things. This appears to be one very well-run institution.

The inner workings of the SNB – an overview
The inner workings of the SNB are reasonably described in the 2016 annual report. Let's go back to the determination of the amount of cash to be distributed to the Cantons, how does this work? Well, they agree on how much they are going to get, on what basis. Presumably with heated discussion and much flying of feathers. Thus:

> "In November 2016, the FDF and the SNB signed an agreement covering the financial years 2016 to 2020. As in the past, the annual distribution is set at CHF 1 billion, provided the balance of the distribution reserve is positive. In future, however, omitted or reduced distributions will be compensated for in subsequent years if the distribution reserve allows this. Furthermore, the distribution amount will be raised to a maximum of CHF 2 billion if the distribution reserve exceeds CHF 20 billion."

This means that the Cantons get at least 1 billion CHF per year provided the "distribution reserve" is positive. Given that the SNB has 696 Billion CHF in cash to fall back on, it's kind of difficult to imagine having less than 20 Billion. Though in 2013 they did manage to imagine just this. It then means that if there is more than 20 Billion in the "distribution reserve", the cash to the cantons will be between 1 and 2 Billion. Sure enough, in 2016 the "distribution reserve" was 23 Billion CHF and the cantons duly received a payout of 1.7 billion CHF. The report spends some time going into how the "distribution reserve" is arrived at. Essentially, it's the SNBs annual profit. It does not discuss at all however, nor does it take into account the value of the SNBs AuM. Funny that. With good reason. With the massive growth in AuM since 2010, the "distribution reserve" has become a nonsensical fiction. Did the Cantons miss this?

What does the annual report actually have to say on the assets under management? Not that they call it AuM. Heaven forbid. Here on page 84 they call it "equity capital".

Higher loss risk – adjustmentof allocation to provisions

> "The SNB's equity capital is composed mainly of the provisions for currency reserves and the distribution reserve; it is built up from retained profits and serves in particular to absorb losses. The increase in currency reserves for monetary policy reasons in recent years has caused the SNB's balance sheet to grow, and this in turn has resulted in higher loss risk. Any such losses would reduce equity capital. Annual allocations to the provisions are necessary to ensure a healthy equity base."

This, in my opinion, is complete nonsense. "The increase in currency reserves" is growth in AuM due to the printing of money. But we do see the words "retained profits" here. Nice. Do we see the words "retained profit" anywhere else in the annual report? No. Come again? No really, the only place it appears is here under discussion of loss risk. A Freudian slip perhaps. So, just what retained profits are referred to here? The 696 Billion CHF buildup in the balance sheet? Please, SNB, help me understand here what you are referring to by "retained profits". These two words do not appear anywhere in the financial statements, not in the balance sheet and not in the place you would expect: "Changes in equity". Nothing. Then "higher loss risks". On what? The 696 Billion CHF printed by the SNB?. Since when do you refuse to recognise profit but highlight "loss risk"? Your correspondent is struggling here.

It is difficult to keep a straight face while reading the annual report. A rare humour can be found in the pages of this remarkable document. It is indeed a rare institution that can be so successful in simply following a (very) special set of rules that were made up for it without slipping up through complacency. Well done SNB. But backing up a step, the annual report states:

> "In accordance with art. 31 para. 2 NBA, one-third of the SNB's net profit – to the extent that it exceeds the dividend requirement – is distributed to the Confederation and two-thirds to the cantons. The amount of the annual profit distribution to the Confederation and the cantons is laid down in an agreement

> between the Federal Department of Finance (FDF) and the SNB."

I posit to you that even the basis of distribution has become nonsensical. Why? Because this is saying that the distribution to the cantons is dependent on profit and loss arising on the investment portfolio. The investment portfolio however is a result of the printing of money. AuM as of 31.12.2016 were 696 Billion CHF. Profit and loss are being calculated on the AuM, the investment portfolio. The "distribution reserve", upon which the ability to pay distributions to the cantons is pegged at 20 Billion CHF, which at end 2016 is 2.3% of AuM. Which incidentally means that a 2.3% change in the value of AuM can wipe out or double the distribution reserve. A single bad week in the markets can do that. Maybe the "distribution reserve" and the setup all made perfect sense with an SNB balance sheet of 120 Billion and AuM of 80 Billion or so. With 696 Billion CHF of AuM, I argue that the concept of "distribution reserve" is utter nonsense. If you have a bad year, you make a distribution of retained profit to the distribution reserve to make the payments. Like any other enterprise. Assuming the AuM total hits a Trillion Swiss Francs in five years or so, the distribution reserve will be 2% of AuM. Making distributions dependent on an arbitrary 20 Billion CHF "target" dwarfed by a Trillion CHF in AuM to call on to make said distributions is crazy. It was crazy already at 500 Billion. This system of determination of profit distribution is outdated. A dividend yield of 2% on AuM, not extravagant by any means, would, on 700 billion in AuM give 14 billion CHF to the cantons. On 700 Billion of AuM, it would also take over 50 years of 14 Billion CHF p.a. distributions to run down the 700 Billion. I can already picture Ueli Maurer running to McDonnell Douglas to place his order for two six-packs of FA-18s. Go Ueli, go.

Back to business. There is in fact a problem to the distribution volume; the amount of cash you give away. In NGO speak it's called "Absorbtive Capacity". It is the term used to describe the capacity limits of a developing country to absorb foreign aid. I.e., you give Benin, Togo or Gabon an ocean of cash and they simply drown. They can't put it to use, there isn't the infrastructure. The same principle applies here, the Cantons and Bund cannot absorb this quantity of cash. Ah, the problems of wealth. You don't have enough money, that's bad. You have too much, it's still problematic. Sorry Ueli…

Let's now look at the balance sheet, income statement, profit distribution and the rules governing distributions more closely. From the 2016 annual report, we read the following.

Assets:

> "At the end of 2016, the SNB's assets amounted to CHF 747 billion, compared to CHF 641 billion the previous year. They consisted almost exclusively of currency reserves, that is gold and foreign currency investments (less liabilities from investment policy-related repo transactions). Currency reserves were up by CHF 89 billion year-on-year to CHF 692 billion, principally due to inflows from foreign currency purchases and valuation gains."

And Income:

> "The return on currency reserves was 3.8%. Returns on gold and foreign exchange reserves were 11.1% and 3.3% respectively. As regards foreign exchange reserves, both fixed income investments and equities contributed to the positive result."

The return on currency reserves was 3.8%. This means that overall return on AuM was 3.8%. on 696 billion, this is 26.3 billion. A nice income stream. We turn to net profit. What profit did the SNB ended up deciding to declare in 2016?. Acknowledge? Recognise? What number did they pick? According to the annual report:

> "The SNB's 2016 annual financial statements closed with a profit of CHF 24.5 billion, following a loss of CHF 23.3 billion in the previous year. This positive result was primarily attributable to gains of CHF 19.4 billion on foreign currency positions and CHF 3.9 billion on gold holdings."

So far so good, the SNB reported 24.5 billion CHF profit for 2016. Good show, SNB.

Wait a minute though, as of 31. December 2015, the SNB had Foreign currency investments (AuM) of 593 Billion CHF. On 31. December 2016, the SNB had Foreign currency investments (AuM) of 696 Billion CHF. For a growth in AuM of 102 Billion CHF. What, may I ask, is that increase? If that is not profit, what is it? Please, ladies and gentlemen of the SNB, help me out here, I am trying to understand your accounting. What is this hundred Billion?

To explain why I am asking this, I would like to look at the actual business of the SNB. Which is printing money. Note issuance, as it says on its website. *"It is vested with the note-issuing privilege and has been mandated to conduct the country's monetary policy"*. I.e., the SNB manufactures money. Note issuance, the printing of Swiss Francs, is the business, the economic activity of the SNB. In the course of conducting its business – monetary policy and the issuance of money - the SNB has a gain in 2016 of 102 Billion CHF. Ladies and gentlemen, I posit to you, ***this is Income.*** If this is not income, ***what is it?*** Since the SNB has little to speak of in cost of goods sold, if this is not profit, what is it?

To illustrate, when an enterprise produces widgets and sells those widgets in the market, profit equals sales revenue less cost of goods sold. Let's say I am a bakery, I produce bread rolls, I sell bread rolls in the market. Perhaps I sell my bread rolls for Swiss Francs. Perhaps I sell them for Euro. Or Yankee dollars. In this case, the SNB is selling its product, its widgets, for Euro and US dollars and has made a profit on the sale of its product. I posit to you the possibility that the SNB and the SNBs auditors have not recognised a profit on the sale of its product. What about product returns you say? Does anyone out there seriously think the SNB is going to be buying back Swiss Francs anytime soon? Like in the next ten years?

Let's move now to the SNBs capital base. The annual report states:

> "At a financial level, ensuring a healthy capital base remains a key concern. Extensive foreign currency purchases in recent years have led to strong growth in the currency reserves and thus in the SNB's balance sheet, resulting in higher loss exposure."

I consider this rather misleading. How can ensuring a healthy capital base be a key concern when you are sitting on 700 Billion Francs in cash? The assets are referred to as "currency reserves". What? The SNB is holding bonds and the shares of listed companies in an investment portfolio with a conservative 80:20 asset allocation. It is holding securities, income producing assets. Not "currency reserves". Moreover, the SNB created money, purchased assets with that created money and holds those assets in the balance sheet. But does not and has not reported the creation of those assets as a profit. Or as a gain. Or as value creation. It is however here stating that it will recognise a loss on the depreciation of those created assets. What? My apologies, but this, in my opinion, is bullshit. Please, ladies and gentlemen of the SNB, you have the floor.

To the auditors. Why should they be spared? KPMG are the auditors. Dear KPMG, what are you thinking? What standards are you using to audit the measurement and accounting of the activities of the SNB? Looking through the statements, it seems to me you are having something of an Enron moment. With a huge difference, it's pointing in the other direction. Ie., Enron (massively) over-stated its results. Again, in my opinion, as an auditor you get into trouble *if and only if* one or more of the following happen:

1. Your client goes bust.
2. Your clients stockholders complain.
3. The regulators complain.

All the unpleasantness, lawsuits, fines, partners "leaving after mutual agreement for early retirement", Arthur Anderson nuclear extinction events, stem from these three events. Well, all three of these are highly unlikely in this case, so KPMG would appear free to indulge in whatever fantasy the client wants of them. Please tell me if I am missing something here. Enron as we know went bust, which did for Arthur Anderson. The SNB however cannot go bust, the stockholders cannot complain, nor are the regulators likely to. Please, Mr. Rickert and Mr. di Fluri, tell me, how do you calculate the profit of the SNB? What accounting principles do you use? How do you account for the hundred Billion Swiss Franc *growth* in assets?

To give KPMG their due, in all fairness, they do recognise that the "currency reserves", at 696 Billion Swiss Francs, are material. A "Key Audit Matter". Good show, KPMG. It is in the auditors letter, right at the back of the annual report, thusly….

> Key audit matter: In absolute figures, foreign currency investments constitute
> the Swiss National Bank's most important balance sheet position. Due to their

> composition and amount, even small changes to the negotiable securities prices and the Swiss franc exchange rates can lead to material effects on the valuation in the balance sheet as well as on gross income, and therefore also on the Swiss National Bank's equity. Therefore, the valuation of the negotiable securities within foreign currency investments was considered to be an area of focus in our audit.
>
> Our audit approach for the foreign currency investments comprised among others the following main audit procedures: we compared the valuation of the negotiable securities (money market instruments, bonds and equities) included within foreign currency investments with reference values that we obtained by applying our own valuation approach. The valuation methodology we used took into account, among other things, market liquidity and other characteristics relevant to the valuation of the individual negotiable securities. Further, we tested the valuation approach used in the relevant IT applications.

What on earth does this mean? Your correspondent is struggling here. Again, ***what*** are the currency reserves?

Who has been buying the SNB shares?
A run-up in the price of a share implies someone is buying those shares. Obviously. An increase in share price from 1,000 CHF to over 3,000 CHF means someone or someone(s) has built a position. Who is this someone? So we asked the SNB. "Dear SNB, do you know who is purchasing your shares?". Response from the SNB. "Dear Inside Paradeplatz, we do not know.".

In an age of registered shares, where in Switzerland, my understanding is that by law every company is required to know who owns its shares, the SNB apparently has no idea who is holding its shares. Further enquiries to the SNB are apparently either not answered or come back with "no comment". Does the SNB know who owns its shares? As a listed company, they are supposed to. From the SIX website:

> "Owners of registered shares are entered in the **share register** of the company in question. This means that the company knows the names, dates of birth and addresses of its shareholders and the number of shares purchased. This gives the company an **overview of the ownership of its shares** and it is able to contact shareholders directly. When an investor buys shares, the investor's bank is required to provide the company with information on the new shareholder promptly"

These are the rules. The SNB appears exempt. Or is it simply ignoring rules that the SNB and Bund don't like and they haven't gotten around to writing a change or exemption for yet? Let's look at what the SNB says:

> "**The Swiss National Bank (SNB) keeps a share register**.
> The owners and beneficiaries of SNB shares are listed in this register together with their name and address or company and head office.
> Only those persons listed in the share register are considered to be shareholders in respect of the SNB."

Fair enough. However, whereby entry of the beneficial owners details into a companys share registry is compulsory for normal mortal listed companies, the SNB has made up its own rules. You must apply for the privilege.

> **"Application for entry in the share register .**
> The application by a purchaser to be recognised as an SNB shareholder is to be submitted to the Berne head office. A bank confirmation of the share transfer must be submitted together with the application.
> Anyone who does not sign to confirm that the shares were purchased in their own name and for their own account will not be entered in the share register."

Ok, so it looks like the rules have been changed. I don't know about you, but SNB shares sound suspiciously like bearer shares to me. An unreported store of income producing value. Anyway, the product of all this is, the SNB apparently has no idea who has been buying its shares, who now owns its shares, and, has no way of finding out. We pose this question to the SNB, "Do you know who owns the shares in your enterprise?"

Before we close off this chapter, we should really ask if "who is buying the stock" an issue? Well, I think so. I think it's a market integrity issue. It is about insider trading and detecting insider trading. So who could be buying? It's not the SNB, I don't see any Treasury shares listed anywhere in the annual report. Private investors? Most likely. However, it may also be insiders. Employees of the SNB *or their families and relatives* with inside information that a de-listing and subsequent share buy-back is being discussed. This would be a breach of market integrity. And, since 1994, even Swiss law. It may also be lawyers with whom the SNB deals, or with whom discussions have been conducted regarding a buy-back. I have to say it, it is commonly accepted that Swiss lawyers using material non-public information to insider trade would be continuing a proud tradition which has – allegedly - financed many a Porsche, Villa and holiday house in Tessin, on Mallorca and elsewhere. To put it bluntly, an enormous amount of money was – allegedly - made in the '80s and '90's by Swiss lawyers front running corporate deals on which they were advising. It was easy and there were no penalties. This is a problem which arises from the clubby, "we are special" and the "we make up our own rules" way this was all set up. In my opinion, people connected to the SNB in any way should have a reporting obligation.

Why the runup in the price

At last… I think the most plausible explanation for the runup is somone or someones are betting on a de-listing and share buy-back. If you have waded through all the above, the current structure and rules under which the SNB is operating have arguably become untenable for a listed company. A company which happens to be the central bank of the country in which it is operating, which happens to be running a colossal sovereign wealth fund as a hobby. A share buy-back implies a big premium. How big? When the Bank for International Settlements de-listed in the early 2000s and bought back its shares, it bought the shares back at three times the market price. Ie., a 200% premium. This would imply a share buy back price of 9,000 CHF. My guess is it will go higher.

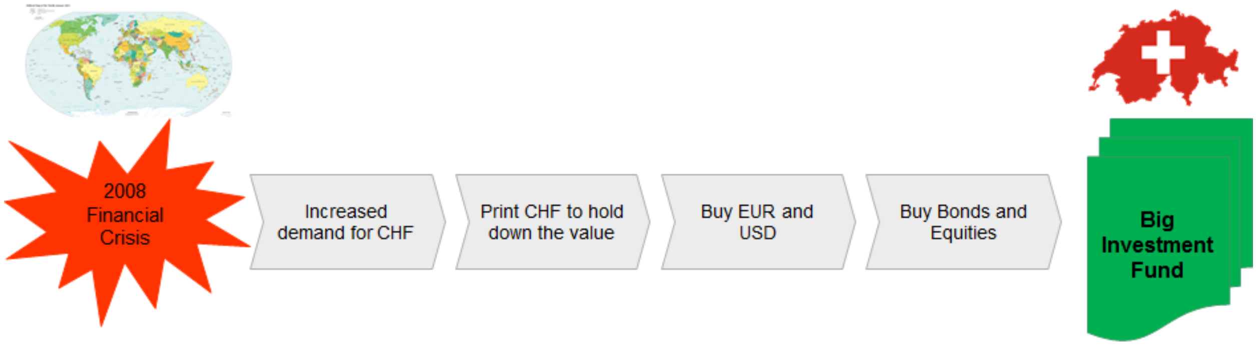
How much will this cost? On a share price of 3,000 CHF, buying back all 100,000 shares will cost the SNB 300 Million CHF. This is a rounding error on an 800 Billion Franc the balance sheet. It's barely material. Say the buy-back premium is three times the market price, 9,000 CHF, the buy-back will cost the SNB 900 Million CHF. On this balance sheet, that's dipping into petty cash.

The real issue

The stock price is actually irrelevant. It's peanuts on a total float of 100,000 shares. Completely. In my opinion, it is a non-issue in the overall situation. The stock price issue, a buy-back has a total value of between 300 and 900 Million CHF. The Elephant in the room and the real issue is that the SNB, by printing Swiss Francs and converting these printed Swiss Francs into hard, income producing assets has arguably created the worlds fourth largest Sovereign Wealth Fund, currently worth around 700 Billion CHF. Having created this fund, I argue to you that the directors of the SNB do not know what to do with the wealth that has been created. Nor does the Bund. I would posit that many Swiss politicians, certainly the SP, but also the CVP and FDP do not have the educational or vocational background to comprehend what has been created or the implications on the basis of the conflicting information so far released. The SVP, being composed largely of current and ex-businessmen is another story. It is inconceivable to me for example that Thomas Matter does not understand what has happened here. Comments Mr. Matter? You have the floor. Extraordinary is that all concerned seem to be valiantly pretending this wealth does not exist. It's extraordinary, the accidental creation of the worlds fourth largest Sovereign Wealth Fund. You couldn't make this up. Fiction, to be believable, has to make sense.

What now?

To summarise:
2008 Financial Crisis → Increased demand for CHF → Print CHF to hold down the value → Buy EUR and USD → Buy Bonds and Equities → Big investment fund. We can express this graphically as below.



To, me, common sense approach, this seems to be what has happened.

How is the SNB doing, right now? According to the interim report as ofJune 2017:
As of 31.12.2016, Foreign currency investments totalled 696 billion CHF
As of 30.06.2017, Foreign currency investments totalled 745 billion CHF

For a growth in AuM of 49 billion CHF in six months. So the SNB is still growing AuM at around 100 Billion CHF per year. For a percentage growth rate of something over 10% per annum. That's on fire! Who the heck grows AuM organically at 10% p.a.? Even with the rate slowing, the SNB is heading for the top of the Sovereign Wealth Fund rankings within five years.

The foreign assets are fairly well diversified too, across EUR, USD, JPY, GBP:
EUR: 42%
USD: 33%
JPY: 8%
GBP: 7%
CAD: 3%

Asset allocation itself follows a standard "Conservative" strategy of 80% bonds, 20% equities, with 68% of the portfolio made up of government bonds. 59% of the bond portfolio is AAA rated. Seriously, this is textbook, good, conservative long term asset management.

Remember, this was NOT intentional. This creation of wealth was NOT George Soros level speculative genius, it was the simple printing of Francs. This mountain of money came about by accident. There are two main reasons. First, it is a product of the unique environment that is Switzerland. Foremost it was created by the men and women of Switzerland, ordinary Swiss people who through dint of hard work and diligence created the environment that made this possible. The directors of the SNB are not responsible for this. This wealth then belongs to the men and women, the ordinary hard working people of Switzerland who indirectly created it. It is the very real fruits of their hard work and labour. It belongs to them and the people should benefit. I would also here venture my opinion that Switzerland does not need expensive toys for gents like Ueli Maurer and certain others. We do not need a dozen FA-18s. For what? In case a bunch of drunk Bavarians in lederhosen come charging over the border looking for a bruising?

Second, the trigger event was the financial crisis, then the ongoing fiscal profligacy of the European Union and the United States. Who essentially made money free by printing cash and lowering interest rates to zero, effectively reducing the real price of money to zero. This was reckless extravagance and wastefulness in the use of resources on the part of the EU and the United States. Rather than bite the bullet and pay the bill when it came due in austerity measures, the problems have been pushed off down the line. To the benefit of the SNB.

I argue that with a change in circumstances of this scale, the rules, laws and legal framework in which the SNB and its associated wealth fund operate are going to have to be changed. Non-action is not an option. To contend that it is not possible to change the rules is not true. The Bund and the SNB can and have changed anything they like should they deem it to be in their and the interests of Switzerland to do so. As always in this extraordinarily cooperative, collaborative country, it's all up for (heated) discussion.

The problem is the Bund and Cantons see no burning need to go through the pain of this very public fight. The Cantons are getting their cash: a 1,000% yield on a share price of 3,000 CHF, a 3,000% yield on a share price of 1,000 CHF. If you think of the price they have on their books, of 250 CHF, the yield is 13,000%. All this is really irrelevant though, the cash is a present to the Confederation and Cantons. To change anything major now will almost certainly end up going to referendum. This is a BIG ONE. Painful. So push it off as long as possible.

A few words to the sponsors – the people of the Swiss National Bank
I would like to say a few words in closing and express my enormous admiration and respect for the intelligence, integrity, hard work, discretion, ethics and the measured, low-key, "getting on with the job" attitude of the men and women of the SNB. This is true professionalism. Whatever ends up happening, it should be recognised that what you have achieved is extraordinary. Even given the very favourable economic and regulatory environment created by the people of Switzerland, the critical point here is that it seems - ***you got it right at every step.*** **Congratulations!**

The directors letter closes with "We wish to thank our employees for all their hard work and valuable support over the past year." To which I would add, Mr. Studer and Mr. Jordan, "You're damn right!"

Closing comments, open questions and conclusion
In closing, a few comments and questions.

1. The runup in the share price is due to someone(s) noticing the creation of massive wealth and the transformation of the nature of the SNB into a very large investment fund. They are assuming, betting, that some of this wealth will trickle down or be passed on to ordinary shareholders in the form of dividends, capital payment or – most likely - a share buyback in the case of a de-listing. I personally believe a de-listing to be most likely. Not knowing who is buying the shares, we can't simply ask them their reasoning.

2. Dear SNB, if you are going to be a listed company, you need to abide by the rules of being a listed company. Otherwise, de-list. You do not make up the rules you like and ignore the ones you don't. Investor discrimination on the scale that is practiced here is not on. It is a disgrace. Minimal and misleading disclosure as found in the annual reports is not on. The capacity, the power to move markets, which the SNB now has, is a huge responsibility. You need to look at and establish proper governance rules, processes and procedures on how to handle this.

3. 800 Billion CHF or more assets under management will at some point have to be allocated to some use. Some cause. Whatever this is. It would for example, guarantee the solvency for the next three generations for the Swiss Pillar 1 pension plan, the "Alters und Hinterlassene Versicherung", the sacred and holy "AHV". Similar to what Norway has done. Put simply, the cash in the fund at the SNB would bail out the AHV with hundreds of billions to spare.

4. The Bund, the Cantons and the people of Switzerland will have to start and engage in the debate as to what is to be done with the money. This is the most important thing. It's not about the stock price, it's not about how this came to pass. It is about "what to do now?".

The SNB is run by a group exceedingly intelligent, well educated men and women. I argue that these men and women must be aware of what has happened. It seems to me they just do not now know what to do about it. Apart from continue to do their jobs, obfuscate a little and buy some time to think. So I ask you, ladies and gentlemen of the SNB, you've had a couple of years now since the caving in and lifting of the currency peg. How close are you to a solution?

In closing then, I want to ask you, what are you going to do when AuM pass the 1 Trillion CHF point? 1,000,000,000,000 AuM. Sitting in the SNBs accounts? When it is no longer possible to obfuscate the creation of the worlds largest sovereign wealth fund. What is your plan when the media storm starts? Perhaps the bank council; Ms. Monika Bütler, Mr. Heinz Karrer, Mr. Daniel Lampart, Mr. Olivier Steimer and Mr. Cédric Tille would care to comment on this.

I ask you, ladies and gentlemen of the Swiss National Bank, ladies and gentlemen of the Swiss National Parliament, what do you intend to do about this?

Appendix

1. Discrepancy in currency reserves figure

There is a discrepancy in the total "currency reserves" figure as referred to in the directors letter and discussion of the annual report of 692 Billion and the "foreign currency investments" in the audited financial statements of 696 Billion. I use the number of 696 Billion for the discussion.

2. Comparison to the Swiss banking industry

How does the SNB compare to the Swiss banking industry as a whole you may ask? It's a good question. Let's look at it. From the Swiss Banking Associations' report for 2016 we take the following:

> "In 2016, 226 of the 261 banks in Switzerland reported a profit, taking total profit to CHF 11.8 billion. The remaining 35 institutions recorded an aggregate loss of CHF 3.9 billion. The result of the period for all banks was thus CHF 7.9 billion."

The SNB has thus "reported" a profit thus three times the size of the entire Swiss banking industry.

Looking at the gross size of the banking industry:

> "The aggregate balance sheet total rose by 2.5% to CHF 3,100.8 billion."

The aggregate size of Swiss banking is 3.1 trillion. The SNB is currently touching 800 billion. If the SNB were a bank, the SNB would be a quarter of the total size of the Swiss banking industry. If we assume the SNB is making a profit of ca. 100 billion CHF per year, which is the rate at which its balance sheet is growing, well, the entire Swiss banking industry in 2016 made less than 10% of what the national bank alone made – or other way around – the SNB alone is ten times more profitable than the entire Swiss banking industry put together. A thought for Sergio, Tidjane and Boris.