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Introduction

The composition of historical economic and financial data for benchmarking long term investment strategies has a history of more than one decade. Several studies for the United States, Great Britain, the Eurozone or the Emerging Markets are available. In this paper we focus on the Swiss market and create a public available benchmark index suite for the main asset classes of stocks, bonds, bills and inflation (SBBI) back to the year 1925. For its creation only publicly available data will be used. To achieve the goal of monthly stock and bond benchmarks a new method for data disaggregation is presented. The basic idea behind this approach is to add the fluctuations from a closely related monthly time series to a time series that is only available on a yearly basis.

Dimson, Marsh and Staunton [2002] published a book and several papers investigating the long term investment opportunities in 19 countries including Switzerland and three global regions around the world. In their book entitled *Triumph of the Optimists* they give an overview of long run rates of returns and other related statistical quantities. Their book provides many tables with market data related to stocks, bonds, bills, and inflation. One of the first studies on long term investments in U.S. equities and bonds can be found in Jeremy Siegel [1994]. Robert Shiller explored in 2000 the U.S. equity market and in 2005 the U.S. housing markets in view of upcoming market bubbles, which resulted in the dot com crisis and the worldwide recession in 2008/2009. Another source in book form for long term U.S. market data is Ibbotson's *SBBI Classic Yearbook* [2011] which lists monthly U.S. time series for stocks, bonds, bills and inflation back to 1925.

The most prominent Swiss long term investment report is Pictet's *Performance of Shares and Bonds in Switzerland* study by Daniel Wydler [1998]. This report is updated once every year by Banque Pictet. Besides this annual publication Dimson, Marsh, and Staunton [2002] have published in their book a chapter about Switzerland on 101 years of global investment returns. Both publications rely on an annual data base. A shorter historical Swiss investment analysis ranging back to 1950 was published by Bank Clariden Leu [2008], however the used monthly data sets are not public available. To our knowledge there are no investigations available that date back to the beginning of the 20th century which rely on and provide a monthly SBBI database for Switzerland.

In this paper we would like to fill this gap and construct a monthly SBBI database by using only publicly available data. Since Pictet's yearly stock and bond indices are the de facto benchmark for the Swiss market, the goal here is not to create new monthly data benchmarks for stocks and bonds

from scratch. So we rather decided to create monthly benchmark series which preserve the trend of Pictet's yearly benchmark and mimic the short term fluctuations of the underlying monthly series with information from additional sources. For that we present a new method for the disaggregation of financial time series data. The time series for the bills is constructed from monthly data available through the Swiss National Bank [2007, 2012] and the monthly inflation data comes from the Swiss Statistical Office [2012]. Note, the time series for inflation allows us to derive besides real also nominal index series for stocks, bonds and bills.

The paper is organized as follows. In Chapter 1 we present our approach for the disaggregation of financial time series data and show how the method works in practice. In Chapter 2 we compose the new monthly SBBI benchmark series and describe how to keep them updated. The Appendix gives additional information on the underlying data and lists the monthly benchmarks series.

1. The Disaggregation Method

In the following we present a new approach that allows to disaggregate an annually recorded financial time series (usually a benchmark series) to a series with a finer granularity of monthly records. The fundamental steps of our method applied to the logarithmic benchmark returns are:

- Interpolate the annual benchmark series $I_{b,a}$ by using a spline interpolation which preserves the end of year records of the benchmark. From this take the smoothed interpolated monthly benchmark values $\hat{I}_{b,m}$ and calculate the logarithmic returns $\hat{r}_{b,m}$.
- Find a related monthly time series $I_{s,m}$ which has approximately the same detrended fluctuations as the benchmark series up to a constant scale factor s. Use the end of year values $I_{s,a}$ to calculate the interpolated monthly logarithmic returns $\hat{r}_{s,m}$ as it was done for the annual benchmark series. Compute the detrended fluctuations $\Delta r_{s,m}$ by subtracting the interpolated monthly returns $\hat{r}_{s,m}$ from the true monthly returns $r_{s,m}$.
- Overlay the interpolated monthly returns of the benchmark series $\hat{r}_{b,m}$ with the detrended fluctuations of the related time series $\Delta r_{s,m}$. Choose the scale factor s such that the ratio of the dispersions (e.g. the standard deviation or the interquartile range) between the yearly $r_{b,a}$ and the resulting estimated monthly returns $\tilde{r}_{b,m}$ of the benchmark series is approximately equal to the same ratio using the yearly $r_{s,a}$ and the monthly $r_{s,m}$ returns of the related time series.

The problem can be summarized as follows:

$$\begin{aligned} \hat{r}_{b,m} &= g_{returns}(f_{spline}(I_{b,a})_m) \\ \Delta r_{s,m} &= r_{s,m} - g_{returns}(f_{spline}(I_{s,a})_m) \\ \tilde{r}_{b,m} &= \hat{r}_{b,m} + s\Delta r_{s,m} \end{aligned} \tag{1}$$

where s is the scaling factor calibrated according to Setz [2012]. $f_{spline}(\cdot)$ computes a monotone Hermite spline interpolation according to the method of Fritsch and Carlson [1980], and $g_{returns}(\cdot)$ calculates the logarithmic returns.

The following example demonstrates how the disaggragation of a financial time series works. Assume we have downloaded the end of year values of the MSCI Switzerland total return index from the Morgan Stanley [2012] web server. We like to disaggregate the index on a monthly base, using the fluctuations of the SBC Stock Index which we got fom the SNB [2012] web server. This example is of interest since we regard the fluctuations for the disaggregation coming from a different source than the true returns are coming from. We know that both indices describe the Swiss stock market and therefore are most likely highly correlated to each other. In fact we also know the monthly MSCI index values, and so we can judge at the end how close our approximation based on the SBC fluctuations compares to the true values, see figure 1.

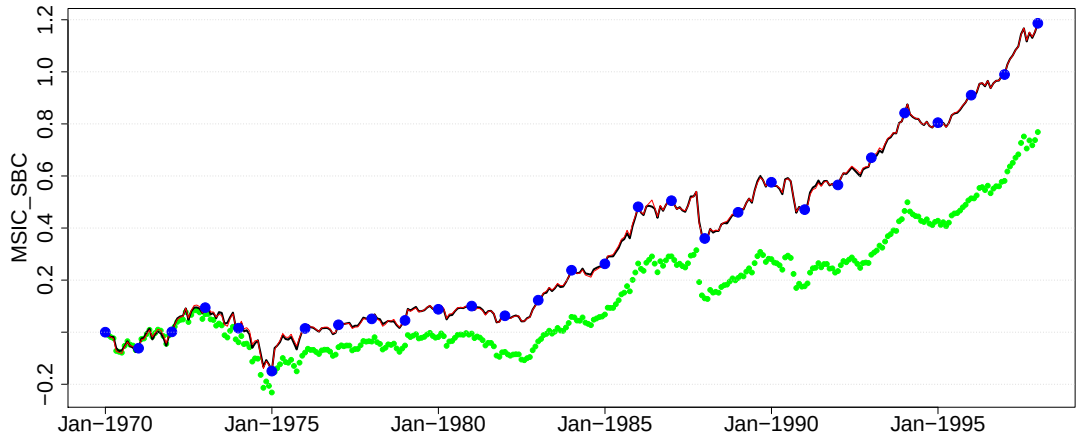

Figure 1: End of year values $I_{b,a}$ of the MSCI Switzerland TR (blue dots) and end of month values $I_{s,m}$ of the SBC price Index (green dots) on a logarithmic scale. The red line shows the disaggregated MSCI Index $\tilde{I}_{b,m}$ using the interpolated MSCI returns $\hat{r}_{b,m}$ overlaid with the fluctuations $s\Delta r_{s,m}$ extracted from the SBC Index. The underlying black line (which is almost covered everywhere by the red line) corresponds to the true monthly MSCI index values $I_{b,m}$.

2. SBBI

Now we are ready to create a set of monthly recorded long term Swiss benchmark series for stocks, bonds, bills and inflation. For bills and inflation monhtly values back to 1925 are available. This data can be used to directly create the indices. For stocks there are only monthly values available from January 1988 and for bonds from December 1983. Before those dates we disaggregated the well known Pictet stock index and Pictet bond index wich are available on an anual base.

2.1 Monthly Swiss Stock Market Index

To compose a monthly Swiss long term equity market index we have disaggregated the annually recorded *Pictet Swiss Share Index* [2012]. Pictet's index is the de facto benchmark for the Swiss stock market based on work of Rätzer [1983], Huber [1986] and Wydler [1989]. The index is updated once a year and published by Banque Pictet. The annual recorded time series is composed from the following indices: 1925–1959 from Ernst Rätzer's Stock Index, 1960–1983 from Gérard Huber's Stock Index, and since 1984 from the SWX Swiss Performance Index. Wydler [1998] has described how these indices were constructed, a brief summary can be found in the appendix.

Period	Time Serie(s) Used	Type	Source
1925-12-31 –	Pictet Swiss Share Index	Yearly Total Return Index	Pictet
1959-12-31	SNB Swiss Equity Index	Monthly Price Index	SNB
1960-01-31 –	Pictet Swiss Share Index	Yearly Total Return Index	Pictet
1988-01-31	SBC Swiss Equity Index	Monthly Price Index	SNB
1988-02-29 –	SWX Swiss Performance Index	Monthly Total Return Index	SWX
2010-12-31			

Table 1: Composition of the Swiss stock benchmark index. The values of all the indices used are taken at the "end-of-period".

Our new benchmark series will be disaggregated from the annually recorded *Pictet Share Index* using the monthly recorded *SNB Swiss Equity Index* and the monthly recorded *SBC Swiss Equity Index*, and completed by the SWX Swiss Performance Index. The periods are listed in Table 1.

The *SNB Swiss Equity Index* is available from January 1924 until August 1968 on a monthly basis published by the SNB [2007] (Capital and stock markets). The index values correspond to the market value, in percent of the paid-up capital, weighted by the share capital of the individual companies.

Since this is not a total return index we don't use this index directly but use it instead as a source of fluctuations to put on top of the yearly Pictet Swiss Share Index. Note that the Swiss National Bank's Equity Index was revised in 1968. It then became a Laspeyres index (see en.wikipedia.org) that took as its base the annual average price for 1966, see SNB [2007].

The *SBC Swiss Equity Index* is available from January 1959 until December 1997 on a monthly basis from the SNB [2007] (Capital and stock markets). The Swiss Bank Corporation began to calculate it in 1963. It was a Laspeyres index with December 1958 as its base. When it was introduced, the index included 65 companies and thus covered more than 90% of the Swiss stocks markets capitalisation. The index basket was expanded in April 1987 to include all stocks traded in Zurich, Geneva and Basel.

For the *SWX Swiss Performance Index* daily index values are published by the SWX Swiss Exchange [2012] from January 1988 up to the current date. Up to the year 2007 those values are also published by the SNB [2007] (Capital and stock markets). It was adopted as the most appropriate index for Switzerland in mid 1987. From then on, the SNB stopped calculating its own index. The SPI is a share performance index and so dividend-protected. Its index portfolio comprises all equity instruments listed on the SWX and issued by companies legally domiciled in Switzerland and Liechtenstein that have a minimum free float of 20%. The SPI is calculated in accordance with the Laspeyres method. Stocks are weighted by their free float market capitalisation and liquidity.

The logarithmic disaggregated wealth and return series are shown in figure 2 and figure 3, respectively. For the first period from December 1925 until December 1959 which was disaggregated with data from the *SNB Swiss Equity Index* we calculated a scaling factor of $s = 0.91$. For the second period from January 1960 until January 1988 which was disaggregated with data from the *SBC Swiss Equity Index* we calculated a scaling factor of $s = 0.99$. For the third period from February 1988 until December 2010 we used the monthly recorded *SWX Swiss Performance Index* with dividends included (SPIC). We just appended the returns of the SPIC to the returns calculated for the previous period and calculated the wealth index. The series can be updated from public available data from SWX.

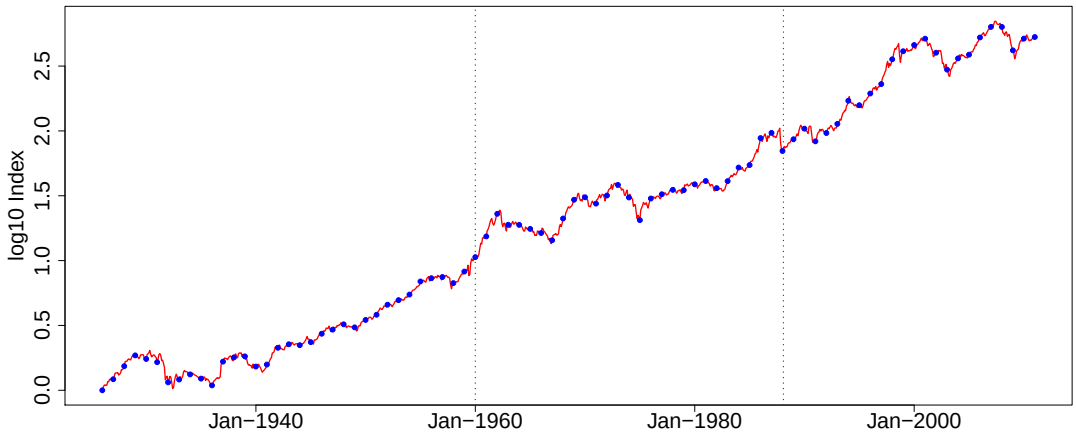

Figure 2: The monthly long term Swiss Stock Market Index (red line). Period I and period II belong to the disaggregated Pictet Share Index (blue dots). Period III follows the SPI total return Index. The periods are separated by the vertical green lines.

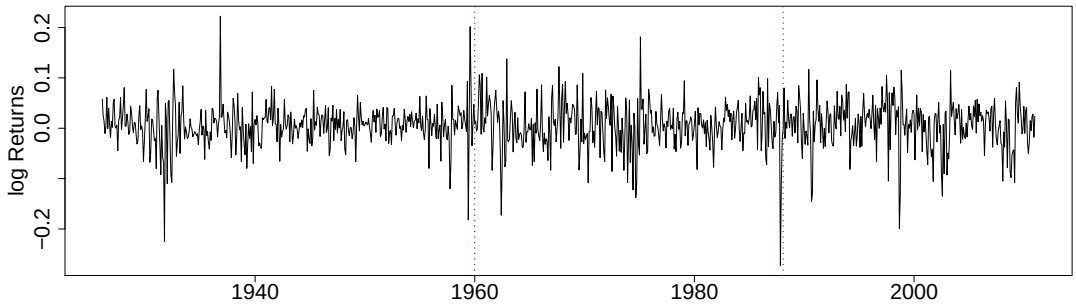

Figure 3: The logarithmic monthly returns of the long term Swiss Stock Market Index.

2.2 Monthly Swiss Bond Market Index

To compose a monthly Swiss long term bond index before 1984 we disaggregated the annually recorded *Pictet Swiss Bond Index* [2012]. This is the de facto benchmark for the Swiss bond market based on work from Rätzer [1983], Huber [1986] and Wydler [1989]. The index is updated once a year and published by Banque Pictet. The benchmark is composed from the following indices: 1925–1959 from Ernst Rätzer's Bond Index, 1960–1983 from Gérard Huber's Bond Index, and 1984 since today from Pictet's Swiss Franc Domestic Bond Index. Wydler [1998] has described how those indices were constructed, a brief summary can be found in the appendix. After 1984 we continued the series with the data obtained from the *Pictet General Bond Index* and the *SWX Swiss Bond Index*.

Period	Time Serie(s) Used	Type	Source
1925-12-31 –	Pictet Swiss Bond Index	Yearly Total Return Index	Pictet
1943-12-31	SNB Swiss Bond Yield Index	Monthly Yield Index	SNB
1944-01-31 –	Pictet Swiss Bond Index	Yearly Total Return Index	Pictet
1959-12-31	SNB Swiss Bond Price Index	Monthly Price Index	SNB
1960-01-31 –	Pictet Swiss Bond Index	Yearly Total Return Index	Pictet
1983-12-31	SNB Swiss Bond Price Index	Monthly Price Index	SNB
	SNB Swiss Bond Yields	Monthly Yields	SNB
1984-01-31 –	Pictet General Bond Index	Monthly Total Return Index	SWX
1996-01-31			
1996-02-29 –	SWX Swiss Bond Index	Monthly Total Return Index	SWX
2010-12-31			

Table 2: Composition of the Swiss bond benchmark index. The values of all the indices used are taken at the "end-of-period".

The *SNB Swiss Bond Yield Index* is available from January 1924 until December 1943 on a monthly basis and calculated on the basis of maturity. The historical values were published by the SNB [2007] (Capital and stock markets). A systematical calculation of the index began in 1924 with the *SNB Bond Index*. Its index portfolio comprised 12 Confederation and Swiss Federal Railways bonds with a residual maturity of at least 5 years. The portfolio yield was produced as the average of the individual yields weighted by the amount of each bond.

The *SNB Swiss Bond Price Index* is available from January 1943 until December 1981 on a monthly basis as a percentage of the nominal value. The values were published by the SNB [2007] (Capital and stock markets): In August 1944, the SNB published the first-ever market value as a percentage of the nominal value and thus made the change from a yield index to a price index. There was no fundamental change in the index portfolio. However, from 1977, only bonds with a residual maturity of 5 to 12 years were included. The SNB changed the composition of the index portfolio twice a year. The index level was calculated as the average of the quotients of the market and nominal value of the individual bonds, weighted by the amounts outstanding at the start of each year.

Monthly *SNB Swiss Bond Yields* on Swiss confederation bonds are available from January 1924 until December 1990 and were published by the SNB [2007]. The values were taken at the end of the period and calculated on the basis of maturity. This data was used since January 1960 in the available index data from the SNB. The period from 1982–1983 has a gap. To fill this gap the yields, together with the first and second derivatives, Setz

[2012], were used to predict the missing index values. Note that since 1982, all confederation bonds with a residual term between 5 and 12 years have been included in the yield calculation.

The *Pictet General Bond Index*, a performance index, is available from December 1983 until December 2003 on a daily basis and published by the SNB [2007] (Capital and stock markets). Pictet decided to discontinue the index from January 1, 2004. Its index portfolio contained a selection of bonds issued by Swiss borrowers. The choice of liquidity as a selection criterion ensured the validity of the prices used. The bonds were weighted in accordance with market capitalisations and the weightings were set every three months. The index was later rebased as 31 December 1987 = 100.

Daily values for the *SWX Swiss Bond Index*, a performance index, are available since January 1996 from the SWX Swiss Exchange [2012]. The SWX has been calculating the Swiss Bond Index (SBI) since October 2001. The portfolio contains all Swiss borrowers' Swiss franc bonds listed on the SWX. It is a capitalisation-weighted Laspeyres index with a 1 October 1998 = 100 base, see SNB [2007].

The logarithmic disaggregated wealth and return series for the bonds are shown in figure 4 and 5. For the first period from December 1925 until December 1943 which was disaggregated with data from the monthly *SNB Swiss Bond Yield Index* we calculated a scaling factor of $s = 0.11$. For the second period from January 1944 until December 1959 which was disaggregated with monthly data from the *SNB Swiss Bond Price Index* we calculated a scaling factor of $s = 0.49$. And for the third period from January 1960 until December 1983 which was disaggregated with data from the *SNB Swiss Bond Price Index* we calculated a scaling factor of $s = 0.78$. From January 1984 until January 1996 we appended the returns of the monthly *Pictet General Bond Index* to our benchmark series of bond returns, and from February 1996 until December 2010 we used the monthly returns from the *SWX Swiss Bond Index*. The series can be updated by using the public available SBI data set which can be obtained from the SWX web server.

2.3 The Swiss Bill Market Index

We set up a Swiss long term bill index by directly using monthly series from the Swiss National Bank: The SNB Discount Rates, the 3-Months Time Deposits, and most recently the 3-Month Confederation Debts

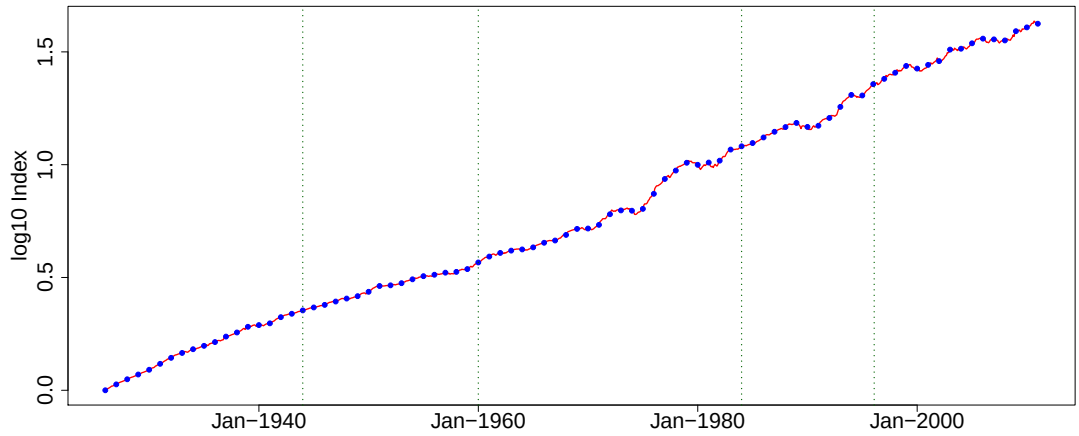

Figure 4: The monthly long term Swiss Bond Market Index (red line). Period I, II, and III belong to the disaggregated Pictet Bond Index (blue dots). Period IV follows the General Pictet Bond Index and period V the SWX Swiss Bond Index. The periods are separated by the vertical green lines.

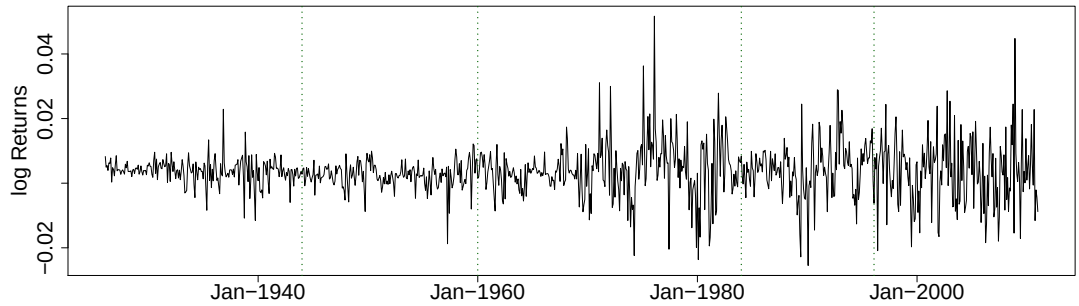

Figure 5: The logarithmic monthly returns of the Swiss Bond Market Index.

Period	Time Serie(s) Used	Type	Source
1925-12-31 – 1957-12-31	SNB Discount Rates	Monthly Interest Rates	SNB
1958-01-31 – 1979-12-31	3-Month Time Deposits	Monthly Interest Rates	SNB
1980-01-31 – 2010-12-31	3-Month Confederation Debts	Monthly Yields	SNB

Table 3: Composition of the Swiss Bill benchmark index. The values of all the indices used are taken at the "end-of-period".

For the *SNB Discount Rates* daily index values are published for the time range from June 1907 until December 1999 by the SNB [2007] (Interest rates and yields). The discount rate was the rate that banks had to pay for a discount credit from the SNB. In a discount credit transaction, the SNB would have purchased domestic securities from a bank and hold these securities until maturity. Those values thus express the short term interest rates, see SNB [2007].

The *3-Month Time Deposits* are available from January 1958 until October 2007 on a monthly basis also from the SNB [2007] (Interest rates and yields). In the case of time deposits, banks accept funds for a term which is fixed in advance. The level of interest paid on the time deposits is determined by the term of the deposit, by interest rates in the money market and by the amount of the deposit. The interest sum is paid out at the end of the term, which generally lasts between three and twelve months, see SNB [2007].

The *3-Month Confederation Debts* are available from January 1980 until October 2007 on a monthly basis and are also published by the SNB [2007] (Interest rates and yields). More recent values up to the current date are published by the SNB on a regular basis within their "Monthly Statistical Bulletin" [2012]. Money market debt register claims are the Confederation's most important instrument for obtaining funds in the short term. It has been issuing these claims since 1979 in order to raise money for three, six or twelve months.

The logarithmic increase in wealth and the log returns of our Swiss bill market index are shown in figure 6 and figure 7. For the construction all periods could be treated in the same way. Following Enz [2008] we computed the growth index directly from the annual rates as follows:

$$I_t = \prod_{\tau=1}^{t} (1 + \frac{r_\tau}{100})^{1/12} \tag{2}$$

where r_τ expresses the SNB Discount Rates from December 1925 until December 1957, the 3-Month Time Deposits from January 1958 until December 1979 and the 3-Month Confederation Debts from January 1980 until December 2010.

2.4 The Swiss Inflation Market Index

The Swiss inflation is described by the Swiss consumer price index (CPI) which measures the change in prices defined by a fixed basket of a represen-

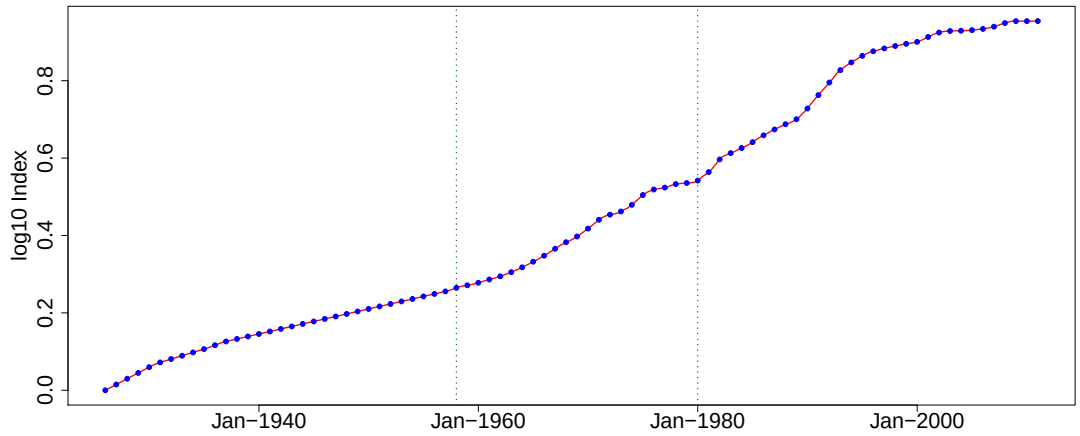

Figure 6: The monthly long term Swiss Bills Market Index (red line). The three periods are derived from the SNB Discount Rates, the 3-Months Time Deposits, and the 3-Months Confederation Debts. The periods are separated by the vertical green lines.

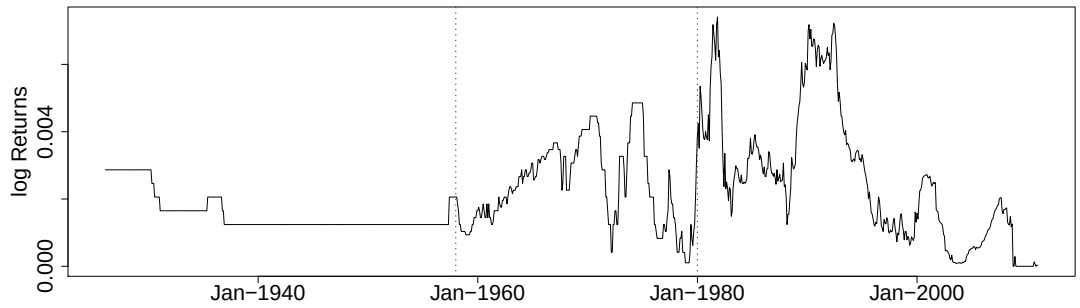

Figure 7: The logarithmic returns of the Swiss Bill Market Index.

tative selection of goods and services consumed by households.

Period	Time Serie(s) Used	Type	Source
1925-12-31 – 2010-12-31	Consumer Price Index (CPI)	Monthly Price Index	BFS

Table 4: Composition of the Swiss inflation benchmark index. The values for the CPI are monthly averages.

The *Consumer Price Index* is monthly recorded since January 1921. The Swiss Federal Statistical Office, BFS [2012], calculates the index and publishes it on its web site. The series is revised on a regular base including adjustments of the basis. We have indexed the CPI to December 1925 = 1. Note, that the CPI allows to calculate real or inflation adjusted time series.

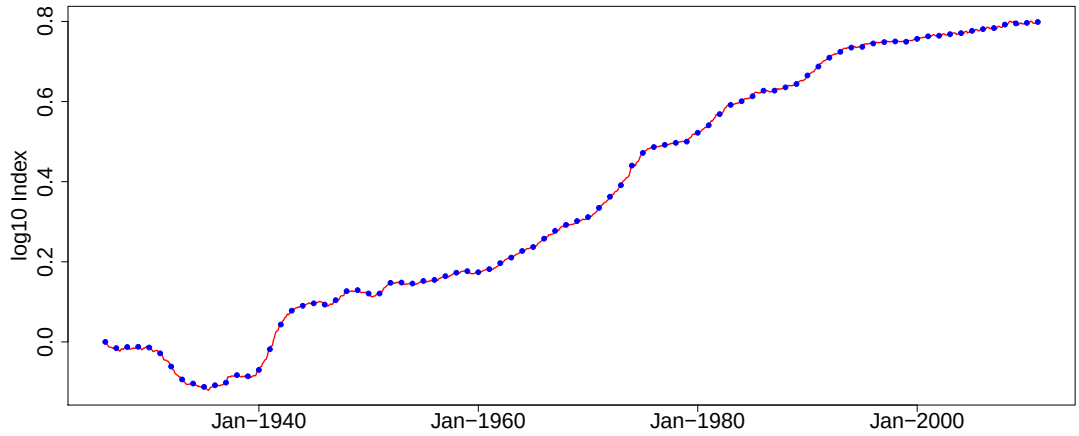

Figure 8: The logarithmic Swiss Inflation Market Index (red curve). The blue circles are the end of year values.

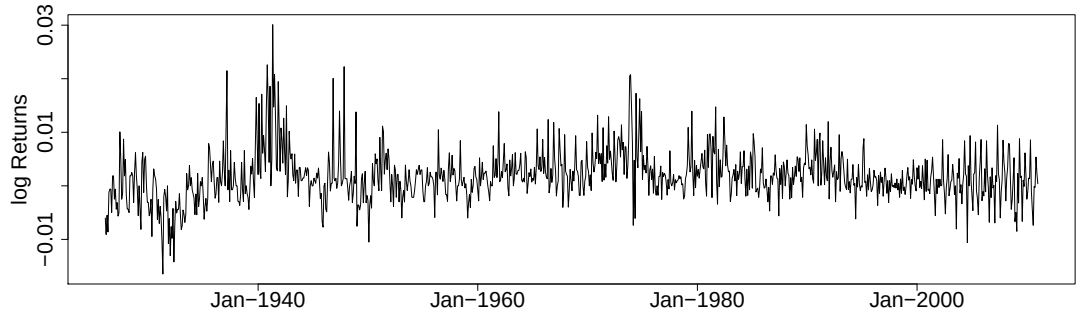

Figure 9: The logarithmic returns of the Swiss Inflation Index.

2.5 Historical Values and Updates

The historical index values are given in the Appendix to 5 significant digits. All four indices can be updated from public available sources. Note, the bills have to be calculated from equation (2), and all indices have to be properly indexed to the base December 1925 = 1. The sources on the Internet are:

- Stocks: SWX - www.six-swiss-exchange.com
- Bonds: SWX - www.six-swiss-exchange.com
- Bills: SNB - www.snb.ch
- Inflation: BFS - bfs.admin.ch

3. Appendix

3.1 Pictet Swiss Share Index Details

Ernst Rätzer's Stock Index 1926–1959 used a randomly selected portfolio comprising 50 shares. Replacement of issues was also decided on a random basis. The return, including the dividend, was calculated from equally weighted initial investments per share at the end of 1925 and with re-investment each year of annual income, see Pictet [1998].

Gérard Huber's Stock Index 1960–1983 used the SBC Index adjusted for dividend payments, see Pictet [1998].

The *Swiss Performance Index 1984 - 1987* used the Pictet Index, with dividends incorporated, calculated in the same way as the Swiss Performance Index (SPI), except that only 250 shares are included, see Pictet [1998]. After 1987 the index is based on the SPI total returns from the SWX.

3.2 Pictet Swiss Bond Index Details

Rätzer's Study, 1925–1979: The annual returns are based on theoretical prices calculated using the published average yields to maturity of new Swiss bond issues. The average life of a new issue was taken to be 10 years. Only the years up to 1959 in Rätzer's work have been used by Wydler; the period between 1960 and 1979 is covered in the research project conducted by Huber, in which the estimations are more reliable. The series of bond indices drawn up by Huber on the basis of actual prices should provide better estimations than those produced by Rätzer based on the yield to maturity of new issues, see Wydler [1998].

Huber's Study, 1960–1983: A Confederation bond index including coupon interest payments was constructed; the index included all Confederation issues not redeemed in mid-year. The index was corrected to take account of the creditworthiness of bond issuers. The difference was estimated by adding 64 basis points to the average yield of Confederation bonds; this figure corresponds to the average yield spread for the period from 1975 to 1983, see Wydler [1998].

Pictet's Bond Index, since 1984: After 1984 Wydler used the Pictet Subindex *Domestic Bond Index* with coupon interest payments incorporated; the index is based on a sufficiently representative random sample covering 5 different classes of bond issuer according to their market capitalisation, see Wydler [1984].

3.3 Tables

Swiss Stock Market Index

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1925												1.0000
1926	1.0595	1.0867	1.1016	1.0903	1.0961	1.1653	1.1646	1.2121	1.2209	1.1982	1.2147	1.2169
1927	1.2789	1.3544	1.3601	1.3607	1.3696	1.3098	1.3305	1.3592	1.4445	1.4405	1.4670	1.5345
1928	1.6634	1.6701	1.6768	1.7246	1.7455	1.7242	1.7133	1.7886	1.8442	1.8517	1.8366	1.8585
1929	1.8780	1.8559	1.7990	1.7556	1.7981	1.8802	1.8756	1.8844	1.8759	1.7567	1.7105	1.7436
1930	1.8829	1.9089	1.9531	2.0305	1.8979	1.8090	1.8427	1.8727	1.8663	1.8202	1.7843	1.6467
1931	1.7465	1.8831	1.9181	1.8592	1.6953	1.7052	1.6095	1.5036	1.2005	1.2607	1.2849	1.1512
1932	1.2128	1.2815	1.2589	1.1482	1.0312	1.0555	1.1870	1.2742	1.3316	1.2596	1.2239	1.2106
1933	1.2745	1.2124	1.2417	1.2822	1.3945	1.4200	1.3899	1.3936	1.3832	1.3556	1.3328	1.3261
1934	1.3511	1.3545	1.3522	1.3295	1.3132	1.3043	1.2923	1.2731	1.2591	1.2185	1.2146	1.2300
1935	1.2770	1.2598	1.2654	1.2633	1.1876	1.2300	1.2118	1.2049	1.1727	1.1251	1.1171	1.0907
1936	1.1348	1.1788	1.1911	1.2149	1.2378	1.2539	1.2323	1.2441	1.2719	1.5888	1.6235	1.6635
1937	1.7448	1.7761	1.7606	1.7529	1.7200	1.7761	1.8187	1.8411	1.8156	1.7129	1.6899	1.7930
1938	1.8765	1.9079	1.8099	1.7831	1.9110	1.9422	1.9355	1.9411	1.8167	1.8931	1.8862	1.8252
1939	1.7319	1.7455	1.6120	1.5641	1.5779	1.5458	1.5507	1.4808	1.5914	1.4843	1.4978	1.5241
1940	1.5345	1.5733	1.5882	1.5339	1.4899	1.4334	1.3775	1.4065	1.4308	1.4604	1.4916	1.5793
1941	1.6008	1.6174	1.6834	1.7533	1.7838	1.9392	1.9490	1.9889	2.1485	2.1671	2.1842	2.1267
1942	2.2125	2.2308	2.0894	2.1051	2.0684	2.0555	2.0527	2.1740	2.1975	2.1936	2.2037	2.2634
1943	2.3137	2.2536	2.3276	2.3356	2.2644	2.2358	2.2767	2.2770	2.2886	2.2840	2.2385	2.2272
1944	2.2514	2.2564	2.2935	2.2968	2.3543	2.4075	2.4971	2.5972	2.4813	2.4783	2.4233	2.3513
1945	2.3962	2.3138	2.2677	2.4452	2.4365	2.4676	2.4823	2.5880	2.6599	2.7318	2.6881	2.7286
1946	2.8022	2.8729	2.8443	2.8904	3.0243	2.9980	3.0003	3.1249	2.9602	2.8365	2.8946	2.9357
1947	3.0727	2.9972	3.0573	3.0490	3.1652	3.1354	3.1927	3.1947	3.3152	3.2347	3.2173	3.2254
1948	3.3327	3.1998	3.0354	3.0832	3.1356	3.1241	3.0778	3.0837	3.0882	3.0255	2.9940	3.0572
1949	3.0667	2.8693	2.8921	3.0870	3.1575	3.1406	3.3054	3.3743	3.3968	3.4456	3.4612	3.4871
1950	3.5309	3.5617	3.5853	3.6558	3.6637	3.6261	3.5275	3.5832	3.7115	3.7577	3.8555	3.8247
1951	3.9738	4.0604	4.1593	4.3104	4.2370	4.1920	4.2876	4.4675	4.4614	4.4981	4.3875	4.5718
1952	4.7510	4.6100	4.5808	4.5610	4.4166	4.5263	4.6380	4.8249	4.8757	4.8089	4.8576	4.9544
1953	5.0513	5.0502	5.0667	4.9464	4.9785	4.9603	5.1524	5.2416	5.2003	5.2754	5.4002	5.4734
1954	5.6284	5.6479	5.8345	5.9270	5.9333	6.0144	6.1116	6.2987	6.2922	6.4129	6.4826	6.9043
1955	6.9268	6.8974	7.0667	7.0058	6.8471	6.8276	7.2789	7.4050	7.5333	6.9578	7.2336	7.3178
1956	7.2108	7.2776	7.3068	7.5099	7.4989	7.3475	7.7059	7.5486	7.5276	7.5732	7.0941	7.4729
1957	7.6465	7.5192	7.5731	7.7074	7.5912	7.4166	7.4456	7.2945	6.4688	6.0532	6.5906	6.7066
1958	6.8259	6.7356	6.8442	6.8882	6.8746	7.1872	7.4464	7.6378	7.8773	7.8694	7.9492	8.2333
1959	8.3833	8.4381	8.3788	9.1989	7.6686	7.8209	9.5679	10.339	9.9880	10.061	10.548	10.637
1960	10.793	10.731	10.728	11.238	12.495	13.603	13.444	14.989	15.019	14.907	15.214	15.366
1961	17.007	17.425	18.268	19.496	20.553	21.128	19.435	18.742	19.364	20.487	22.085	22.955
1962	23.229	24.034	24.485	23.401	19.691	18.260	19.288	19.444	18.013	16.885	19.377	18.889
1963	18.398	18.005	18.387	19.420	20.029	19.112	19.201	19.817	19.438	18.883	19.281	18.859
1964	18.635	18.470	18.212	17.536	16.889	16.902	18.170	17.672	17.552	17.433	17.591	17.552
1965	17.497	17.846	16.581	16.700	15.628	15.795	15.643	16.905	16.842	16.570	16.168	16.323
1966	17.791	17.612	16.818	16.663	16.143	15.810	15.428	14.473	14.807	14.684	13.510	14.349
1967	15.624	15.817	15.904	16.190	15.756	15.754	16.106	18.200	18.983	18.243	19.350	21.121
1968	20.544	21.320	23.391	24.089	25.308	26.009	25.389	25.919	26.200	26.884	28.193	29.462
1969	30.596	30.224	29.891	32.573	33.046	30.415	29.013	29.536	28.744	32.053	31.079	30.783
1970	30.092	29.620	29.309	26.306	26.140	25.974	27.605	28.782	27.971	27.809	26.783	27.505
1971	29.605	29.801	31.042	32.267	30.444	31.482	32.498	32.280	30.846	28.881	31.153	31.768
1972	33.746	35.252	35.900	36.117	38.646	35.475	37.815	39.376	39.450	38.830	36.740	38.354
1973	38.485	36.771	36.624	34.916	35.622	35.120	32.308	31.729	33.699	34.979	31.417	30.683
1974	32.450	30.321	30.504	29.614	26.203	26.998	27.005	23.529	21.106	22.386	21.639	20.515
1975	24.595	25.537	26.530	28.118	27.246	27.164	27.937	26.557	25.396	27.444	29.221	30.108
1976	31.195	30.947	31.031	30.547	30.093	31.109	31.384	31.453	31.018	29.976	30.375	32.482
1977	33.080	32.901	33.197	33.257	31.977	32.418	32.542	33.673	35.021	34.923	35.134	35.110
1978	36.549	35.074	34.645	33.075	33.670	34.749	34.682	35.157	33.796	32.907	33.937	34.931
1979	38.385	37.805	38.364	38.933	37.634	37.930	38.353	39.231	39.882	38.940	38.437	38.748
1980	40.063	39.223	36.143	37.646	37.904	39.044	40.180	40.385	40.398	41.071	40.625	41.099
1981	39.622	40.253	39.970	39.172	37.514	38.488	38.560	37.551	34.754	34.486	35.970	36.206

1982 35.546 35.248 35.709 35.894 35.956 34.458 34.350 35.054 35.494 37.763 39.107 41.006
1983 41.979 43.540 44.126 45.459 44.426 45.298 46.878 45.971 45.941 47.371 49.371 52.198
1984 52.079 50.733 50.709 52.221 49.947 49.484 48.970 51.443 52.104 52.901 53.334 54.557
1985 58.174 58.325 58.562 60.656 62.968 66.449 67.606 71.692 68.702 76.031 81.232 88.032
1986 84.225 83.023 89.298 91.861 94.790 89.267 83.035 91.616 88.314 92.798 96.257 96.582
1987 93.749 90.038 91.290 89.683 88.894 92.498 99.288 100.35 104.97 79.931 71.548 70.039
1988 69.987 75.819 74.312 75.222 75.220 79.542 80.938 81.012 83.332 85.672 84.328 86.227
1989 88.231 87.426 91.314 94.699 91.973 100.13 106.53 110.64 107.65 101.35 104.37 104.10
1990 100.84 100.28 98.770 95.513 107.37 109.11 107.80 93.208 81.836 84.681 82.458 83.098
1991 84.608 93.126 96.895 98.231 102.77 99.850 102.76 102.69 98.697 98.697 95.166 96.318
1992 101.68 105.17 104.19 107.00 110.11 107.49 103.88 100.27 104.82 105.46 105.32 113.31
1993 115.65 117.72 122.93 121.10 129.37 136.64 138.87 143.97 142.95 155.89 159.06 170.88
1994 183.66 169.27 165.17 162.95 163.75 158.18 156.42 159.58 154.01 151.94 156.33 157.86
1995 151.98 155.56 150.11 155.28 166.34 170.76 171.20 174.73 179.95 183.82 190.81 194.26
1996 194.16 199.23 212.75 215.18 210.35 220.21 206.02 214.35 219.01 219.02 228.00 229.80
1997 249.61 260.88 269.54 283.12 292.35 324.63 343.32 309.12 331.74 317.90 332.52 356.63
1998 373.12 404.94 431.51 426.11 441.33 451.25 470.86 385.77 337.81 379.06 408.30 411.43
1999 414.64 408.99 415.28 431.32 411.17 414.52 414.58 421.50 418.15 430.47 446.23 459.53
2000 431.57 434.65 464.37 463.18 482.11 484.27 503.56 519.82 496.19 509.85 506.22 514.26
2001 509.04 486.79 453.07 463.30 474.22 458.04 432.98 415.42 373.77 378.57 389.76 400.98
2002 390.21 396.40 417.33 413.45 415.91 379.39 331.50 334.15 305.22 314.95 325.85 296.92
2003 282.66 265.96 263.70 295.99 302.87 314.51 331.22 336.19 331.77 344.86 351.56 362.43
2004 379.88 386.19 374.92 389.04 380.71 381.18 374.97 367.44 371.19 364.78 370.77 387.41
2005 393.92 405.79 407.73 406.57 424.99 434.78 459.72 455.35 482.23 488.40 512.48 525.36
2006 542.42 550.05 563.87 571.94 542.02 544.87 564.95 581.67 600.85 613.00 609.65 633.93
2007 662.53 638.08 657.20 697.15 702.84 687.44 665.27 661.59 664.43 674.46 654.57 633.59
2008 570.35 566.18 545.40 575.88 579.44 535.71 545.68 554.58 509.03 461.54 437.34 417.87
2009 400.32 359.54 378.51 410.55 422.23 426.57 467.45 489.11 499.64 494.27 492.97 514.75
2010 509.60 527.27 549.64 534.96 508.90 494.75 502.25 500.00 511.84 526.48 517.13 529.77

Swiss Bond Market Index

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1925												1.0000
1926	1.0083	1.0133	1.0188	1.0228	1.0293	1.0356	1.0437	1.0440	1.0491	1.0535	1.0559	1.0620
1927	1.0711	1.0752	1.0797	1.0842	1.0886	1.0916	1.0956	1.1002	1.1041	1.1071	1.1137	1.1190
1928	1.1266	1.1308	1.1348	1.1390	1.1433	1.1457	1.1504	1.1553	1.1588	1.1641	1.1697	1.1747
1929	1.1813	1.1846	1.1888	1.1952	1.1995	1.2025	1.2072	1.2119	1.2167	1.2198	1.2267	1.2332
1930	1.2410	1.2475	1.2540	1.2574	1.2597	1.2687	1.2809	1.2848	1.2945	1.2959	1.3025	1.3102
1931	1.3186	1.3248	1.3307	1.3404	1.3486	1.3555	1.3627	1.3752	1.3755	1.3840	1.3920	1.3928
1932	1.4062	1.4148	1.4199	1.4293	1.4350	1.4370	1.4427	1.4487	1.4510	1.4568	1.4584	1.4639
1933	1.4746	1.4827	1.4863	1.4818	1.4778	1.4744	1.4820	1.4960	1.5042	1.5106	1.5154	1.5206
1934	1.5297	1.5291	1.5223	1.5324	1.5377	1.5393	1.5470	1.5536	1.5606	1.5663	1.5720	1.5741
1935	1.5839	1.5925	1.5896	1.5763	1.5864	1.6078	1.6092	1.6185	1.6163	1.6233	1.6245	1.6358
1936	1.6508	1.6587	1.6601	1.6628	1.6613	1.6559	1.6659	1.6705	1.6743	1.7131	1.7238	1.7298
1937	1.7332	1.7375	1.7428	1.7461	1.7532	1.7605	1.7677	1.7725	1.7803	1.7837	1.7937	1.8040
1938	1.8147	1.8279	1.8269	1.8334	1.8460	1.8603	1.8765	1.8801	1.8599	1.8896	1.9020	1.9118
1939	1.9127	1.9291	1.9200	1.9210	1.9379	1.9415	1.9491	1.9422	1.9199	1.9371	1.9440	1.9455
1940	1.9549	1.9501	1.9445	1.9405	1.9316	1.9446	1.9567	1.9672	1.9722	1.9857	1.9868	1.9805
1941	1.9953	2.0045	2.0147	2.0237	2.0324	2.0513	2.0680	2.0775	2.0873	2.0963	2.1005	2.1091
1942	2.1276	2.1320	2.1404	2.1506	2.1558	2.1578	2.1651	2.1700	2.1799	2.1878	2.1748	2.1840
1943	2.1932	2.1990	2.1970	2.2065	2.2114	2.2216	2.2321	2.2355	2.2393	2.2456	2.2537	2.2600
1944	2.2702	2.2809	2.2791	2.2816	2.2926	2.2975	2.3079	2.3146	2.3180	2.3188	2.3227	2.3289
1945	2.3455	2.3369	2.3426	2.3486	2.3553	2.3587	2.3713	2.3715	2.3755	2.3799	2.3848	2.3911
1946	2.4034	2.4159	2.4263	2.4371	2.4517	2.4549	2.4589	2.4683	2.4735	2.4740	2.4726	2.4741
1947	2.4874	2.4945	2.5052	2.5171	2.5311	2.5426	2.5534	2.5495	2.5466	2.5409	2.5277	2.5507
1948	2.5588	2.5559	2.5411	2.5493	2.5638	2.5678	2.5741	2.5868	2.5920	2.5903	2.5962	2.6133
1949	2.6350	2.6415	2.6603	2.6788	2.6915	2.6926	2.7026	2.6961	2.6726	2.6884	2.7134	2.7330
1950	2.7511	2.7754	2.7862	2.8140	2.8361	2.8454	2.8612	2.8771	2.8893	2.8928	2.8951	2.8995

1951 2.9064 2.9089 2.9008 2.8973 2.9023 2.9017 2.9114 2.9108 2.9127 2.9116 2.9192 2.9187
1952 2.9259 2.9368 2.9423 2.9426 2.9308 2.9394 2.9482 2.9541 2.9588 2.9657 2.9728 2.9837
1953 3.0054 3.0140 3.0195 3.0263 3.0491 3.0541 3.0582 3.0698 3.0778 3.0906 3.0920 3.1036
1954 3.1189 3.1350 3.1452 3.1306 3.1396 3.1469 3.1695 3.1752 3.1820 3.1897 3.1966 3.2047
1955 3.2197 3.2193 3.2122 3.2185 3.2033 3.1994 3.2115 3.2125 3.2008 3.2126 3.2382 3.2528
1956 3.2617 3.2757 3.2746 3.2687 3.2641 3.2690 3.2794 3.2802 3.2947 3.3022 3.3119 3.3223
1957 3.3289 3.3455 3.2834 3.3006 3.2700 3.2838 3.2898 3.2850 3.2838 3.2904 3.3136 3.3488
1958 3.3761 3.3850 3.3939 3.4145 3.4150 3.4390 3.4316 3.4279 3.4283 3.4323 3.4318 3.4455
1959 3.4613 3.4884 3.5216 3.5461 3.5179 3.5300 3.5732 3.6151 3.6264 3.6528 3.6805 3.6860
1960 3.6931 3.7108 3.7458 3.7820 3.8126 3.8314 3.8654 3.8873 3.8798 3.8807 3.8943 3.9149
1961 3.9438 3.9826 3.9992 4.0175 4.0173 3.9993 3.9650 3.9869 4.0349 4.0455 4.0429 4.0638
1962 4.0798 4.0841 4.0626 4.0366 4.0748 4.0550 4.0860 4.1096 4.1285 4.1375 4.1525 4.1600
1963 4.1686 4.1830 4.2030 4.2161 4.2175 4.2269 4.2259 4.2315 4.2227 4.2094 4.2274 4.2109
1964 4.2040 4.1808 4.1757 4.1998 4.1828 4.1922 4.2187 4.2328 4.2516 4.2647 4.2809 4.3005
1965 4.3187 4.3552 4.3771 4.3976 4.4110 4.4257 4.4432 4.4584 4.4678 4.4825 4.4929 4.5080
1966 4.5518 4.5640 4.5772 4.5909 4.6039 4.6127 4.6086 4.6042 4.6134 4.6168 4.6212 4.6123
1967 4.6299 4.6456 4.6666 4.7014 4.7259 4.7285 4.7868 4.8289 4.8804 4.8769 4.8785 4.8836
1968 4.9692 5.0382 5.0601 5.0760 5.0965 5.1167 5.1321 5.1452 5.1583 5.1650 5.1858 5.1925
1969 5.2405 5.2437 5.2052 5.2097 5.2567 5.2466 5.2004 5.1660 5.1402 5.2021 5.1972 5.2127
1970 5.2685 5.2090 5.1920 5.1435 5.1714 5.1914 5.2389 5.2847 5.3187 5.3426 5.3923 5.4114
1971 5.5822 5.6268 5.6760 5.7557 5.7613 5.7654 5.7593 5.8286 5.9253 5.9951 6.0531 6.0307
1972 6.2142 6.2959 6.2488 6.2087 6.2373 6.2104 6.2732 6.3035 6.3078 6.2955 6.2418 6.2706
1973 6.2753 6.3143 6.3498 6.3270 6.3693 6.3977 6.4225 6.3488 6.3815 6.3654 6.2798 6.2518
1974 6.2011 6.1593 6.0229 6.0162 6.0382 6.0942 6.1562 6.1638 6.1906 6.2598 6.3353 6.3713
1975 6.6068 6.7046 6.6994 6.7087 6.7926 6.9341 7.0063 7.1581 7.1946 7.2866 7.3726 7.4277
1976 7.8218 7.9548 8.0564 8.0635 8.0839 8.1489 8.1896 8.2651 8.3405 8.5055 8.6293 8.6426
1977 8.7710 8.8457 8.9007 8.9565 8.7754 8.8024 8.9799 9.0957 9.2087 9.3033 9.3484 9.4177
1978 9.6205 9.7520 9.7693 9.8433 9.8286 9.8992 9.9356 9.9880 10.035 10.150 10.185 10.198
1979 10.394 10.427 10.342 10.345 10.361 10.219 10.198 10.192 10.200 10.158 9.9583 9.9891
1980 9.7555 9.6813 9.5212 9.6356 9.7628 9.8661 9.9895 9.9081 9.9648 10.117 10.179 10.220
1981 10.024 9.8570 9.7765 9.8366 9.7139 9.9084 10.036 9.9374 9.8539 9.9908 10.273 10.418
1982 10.440 10.578 10.770 10.884 10.854 10.884 11.110 11.301 11.448 11.533 11.603 11.668
1983 11.712 11.673 11.654 11.686 11.676 11.720 11.723 11.710 11.805 11.887 11.963 12.064
1984 12.089 12.086 12.157 12.170 12.116 12.195 12.236 12.289 12.302 12.290 12.412 12.471
1985 12.519 12.466 12.487 12.601 12.685 12.728 12.780 12.880 12.949 13.027 13.073 13.203
1986 13.331 13.467 13.567 13.580 13.575 13.551 13.611 13.746 13.757 13.861 13.940 13.994
1987 14.122 14.157 14.204 14.273 14.342 14.367 14.463 14.463 14.372 14.369 14.570 14.678
1988 14.805 14.969 15.045 15.167 15.101 15.111 15.053 15.106 15.139 15.260 15.298 15.316
1989 15.166 15.075 15.018 14.781 14.448 14.806 14.869 14.843 14.775 14.702 14.772 14.705
1990 14.335 14.323 14.334 14.314 14.494 14.761 14.877 14.662 14.708 14.790 14.825 14.885
1991 15.169 15.434 15.534 15.705 15.837 15.875 15.954 16.003 16.032 15.891 15.953 16.107
1992 16.397 16.541 16.468 16.519 16.452 16.387 16.544 16.613 17.100 17.598 17.702 18.043
1993 18.325 18.743 19.081 19.185 19.271 19.480 19.669 19.798 19.907 20.164 20.267 20.386
1994 20.478 20.383 20.311 20.173 20.135 19.882 20.038 19.936 19.879 19.941 20.154 20.267
1995 20.453 20.591 20.835 21.125 21.329 21.460 21.629 21.798 22.085 22.361 22.742 22.755
1996 22.614 22.794 22.895 23.105 22.628 22.746 22.929 23.160 23.558 23.788 23.786 24.017
1997 24.257 24.856 24.538 24.760 25.050 25.160 25.141 25.036 25.057 25.016 25.169 25.562
1998 26.092 26.336 26.165 25.937 26.190 26.012 26.174 26.608 26.826 27.068 27.280 27.395
1999 27.570 27.628 27.607 27.824 27.639 27.100 27.081 26.949 26.631 26.339 26.490 26.666
2000 26.426 26.362 25.959 26.058 26.021 26.332 26.464 26.711 26.750 26.878 27.166 27.698
2001 27.840 27.922 28.283 27.941 28.039 28.357 28.539 28.747 29.008 29.707 29.257 28.777
2002 28.788 28.898 28.882 29.227 29.431 29.872 30.331 30.477 31.362 31.339 31.554 32.365
2003 32.429 32.630 32.392 32.161 32.842 32.559 32.401 32.038 32.465 32.255 32.077 32.664
2004 32.692 33.121 33.290 32.989 32.744 32.568 32.888 33.265 33.421 33.939 34.428 34.520
2005 35.073 34.801 34.997 35.674 36.019 36.010 36.021 36.266 36.332 35.893 35.756 36.199
2006 35.861 35.939 35.283 34.847 34.933 34.691 35.018 35.630 35.907 35.978 36.309 35.932
2007 35.651 35.927 35.662 35.614 34.981 34.618 35.013 35.315 35.438 35.528 35.841 35.544
2008 36.167 35.985 36.046 35.733 35.681 35.594 36.241 36.675 37.584 37.008 38.704 39.060
2009 39.175 39.195 39.447 39.508 38.839 39.070 39.970 39.865 40.009 40.013 40.569 40.608
2010 40.834 41.183 41.110 41.337 42.095 42.349 42.324 43.300 42.801 42.712 42.529 42.157

Swiss Bill Market Index

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1925												1.0000
1926	1.0029	1.0057	1.0086	1.0115	1.0144	1.0173	1.0203	1.0232	1.0261	1.0291	1.0320	1.0350
1927	1.0380	1.0410	1.0439	1.0469	1.0499	1.0530	1.0560	1.0590	1.0621	1.0651	1.0682	1.0712
1928	1.0743	1.0774	1.0805	1.0836	1.0867	1.0898	1.0929	1.0961	1.0992	1.1024	1.1055	1.1087
1929	1.1119	1.1151	1.1183	1.1215	1.1247	1.1280	1.1312	1.1344	1.1377	1.1410	1.1442	1.1475
1930	1.1508	1.1541	1.1574	1.1603	1.1632	1.1660	1.1684	1.1708	1.1732	1.1757	1.1781	1.1805
1931	1.1825	1.1844	1.1864	1.1883	1.1903	1.1923	1.1942	1.1962	1.1982	1.2001	1.2021	1.2041
1932	1.2061	1.2081	1.2101	1.2121	1.2141	1.2161	1.2181	1.2201	1.2221	1.2242	1.2262	1.2282
1933	1.2302	1.2323	1.2343	1.2363	1.2384	1.2404	1.2425	1.2445	1.2466	1.2486	1.2507	1.2528
1934	1.2548	1.2569	1.2590	1.2611	1.2631	1.2652	1.2673	1.2694	1.2715	1.2736	1.2757	1.2778
1935	1.2799	1.2820	1.2842	1.2863	1.2889	1.2916	1.2942	1.2969	1.2996	1.3023	1.3049	1.3076
1936	1.3103	1.3130	1.3157	1.3184	1.3212	1.3239	1.3266	1.3293	1.3315	1.3337	1.3354	1.3370
1937	1.3387	1.3404	1.3420	1.3437	1.3454	1.3470	1.3487	1.3504	1.3521	1.3537	1.3554	1.3571
1938	1.3588	1.3605	1.3622	1.3638	1.3655	1.3672	1.3689	1.3706	1.3723	1.3740	1.3757	1.3775
1939	1.3792	1.3809	1.3826	1.3843	1.3860	1.3877	1.3895	1.3912	1.3929	1.3946	1.3964	1.3981
1940	1.3999	1.4016	1.4033	1.4051	1.4068	1.4086	1.4103	1.4121	1.4138	1.4156	1.4173	1.4191
1941	1.4208	1.4226	1.4244	1.4261	1.4279	1.4297	1.4315	1.4332	1.4350	1.4368	1.4386	1.4404
1942	1.4422	1.4440	1.4457	1.4475	1.4493	1.4511	1.4529	1.4547	1.4565	1.4584	1.4602	1.4620
1943	1.4638	1.4656	1.4674	1.4693	1.4711	1.4729	1.4747	1.4766	1.4784	1.4802	1.4821	1.4839
1944	1.4857	1.4876	1.4894	1.4913	1.4931	1.4950	1.4969	1.4987	1.5006	1.5024	1.5043	1.5062
1945	1.5080	1.5099	1.5118	1.5137	1.5155	1.5174	1.5193	1.5212	1.5231	1.5250	1.5269	1.5288
1946	1.5307	1.5326	1.5345	1.5364	1.5383	1.5402	1.5421	1.5440	1.5459	1.5478	1.5498	1.5517
1947	1.5536	1.5555	1.5575	1.5594	1.5613	1.5633	1.5652	1.5672	1.5691	1.5711	1.5730	1.5750
1948	1.5769	1.5789	1.5808	1.5828	1.5848	1.5867	1.5887	1.5907	1.5927	1.5946	1.5966	1.5986
1949	1.6006	1.6026	1.6046	1.6065	1.6085	1.6105	1.6125	1.6145	1.6165	1.6185	1.6206	1.6226
1950	1.6246	1.6266	1.6286	1.6306	1.6327	1.6347	1.6367	1.6388	1.6408	1.6428	1.6449	1.6469
1951	1.6490	1.6510	1.6530	1.6551	1.6572	1.6592	1.6613	1.6633	1.6654	1.6675	1.6695	1.6716
1952	1.6737	1.6758	1.6778	1.6799	1.6820	1.6841	1.6862	1.6883	1.6904	1.6925	1.6946	1.6967
1953	1.6988	1.7009	1.7030	1.7051	1.7072	1.7094	1.7115	1.7136	1.7157	1.7179	1.7200	1.7221
1954	1.7243	1.7264	1.7286	1.7307	1.7329	1.7350	1.7372	1.7393	1.7415	1.7436	1.7458	1.7480
1955	1.7501	1.7523	1.7545	1.7567	1.7588	1.7610	1.7632	1.7654	1.7676	1.7698	1.7720	1.7742
1956	1.7764	1.7786	1.7808	1.7830	1.7852	1.7874	1.7897	1.7919	1.7941	1.7963	1.7986	1.8008
1957	1.8030	1.8053	1.8075	1.8098	1.8135	1.8172	1.8210	1.8247	1.8285	1.8322	1.8360	1.8398
1958	1.8436	1.8470	1.8501	1.8524	1.8547	1.8566	1.8585	1.8604	1.8624	1.8643	1.8660	1.8678
1959	1.8695	1.8713	1.8730	1.8750	1.8769	1.8792	1.8816	1.8843	1.8870	1.8897	1.8929	1.8960
1960	1.8993	1.9025	1.9052	1.9080	1.9111	1.9147	1.9178	1.9206	1.9234	1.9269	1.9297	1.9333
1961	1.9361	1.9389	1.9413	1.9437	1.9464	1.9496	1.9528	1.9560	1.9592	1.9625	1.9665	1.9702
1962	1.9736	1.9771	1.9810	1.9849	1.9890	1.9931	1.9972	2.0009	2.0050	2.0095	2.0143	2.0191
1963	2.0236	2.0280	2.0326	2.0372	2.0418	2.0466	2.0515	2.0564	2.0618	2.0673	2.0729	2.0788
1964	2.0839	2.0895	2.0951	2.1011	2.1071	2.1128	2.1184	2.1243	2.1302	2.1363	2.1428	2.1494
1965	2.1549	2.1605	2.1663	2.1720	2.1783	2.1852	2.1921	2.1989	2.2059	2.2131	2.2203	2.2276
1966	2.2347	2.2418	2.2491	2.2567	2.2643	2.2722	2.2801	2.2880	2.2960	2.3039	2.3124	2.3209
1967	2.3294	2.3380	2.3466	2.3547	2.3629	2.3711	2.3784	2.3838	2.3897	2.3975	2.4054	2.4132
1968	2.4187	2.4242	2.4297	2.4351	2.4416	2.4491	2.4567	2.4642	2.4718	2.4799	2.4885	2.4971
1969	2.5053	2.5143	2.5240	2.5338	2.5436	2.5540	2.5644	2.5748	2.5853	2.5959	2.6064	2.6171
1970	2.6277	2.6384	2.6502	2.6621	2.6740	2.6859	2.6980	2.7100	2.7221	2.7343	2.7460	2.7577
1971	2.7684	2.7791	2.7877	2.7957	2.8037	2.8118	2.8198	2.8256	2.8315	2.8361	2.8397	2.8432
1972	2.8467	2.8479	2.8491	2.8526	2.8562	2.8609	2.8656	2.8692	2.8727	2.8786	2.8881	2.8975
1973	2.9070	2.9165	2.9261	2.9345	2.9405	2.9466	2.9550	2.9659	2.9768	2.9877	3.0011	3.0145
1974	3.0292	3.0439	3.0587	3.0736	3.0886	3.1036	3.1187	3.1339	3.1492	3.1645	3.1799	3.1954
1975	3.2097	3.2202	3.2307	3.2413	3.2519	3.2599	3.2680	3.2747	3.2814	3.2882	3.2950	3.3018
1976	3.3059	3.3100	3.3134	3.3161	3.3189	3.3216	3.3244	3.3272	3.3299	3.3327	3.3368	3.3410
1977	3.3444	3.3479	3.3527	3.3583	3.3679	3.3769	3.3838	3.3901	3.3964	3.4013	3.4063	3.4105
1978	3.4133	3.4147	3.4161	3.4176	3.4204	3.4232	3.4268	3.4282	3.4296	3.4311	3.4314	3.4318
1979	3.4321	3.4325	3.4328	3.4343	3.4385	3.4414	3.4435	3.4471	3.4514	3.4585	3.4691	3.4826
1980	3.4974	3.5097	3.5285	3.5463	3.5625	3.5770	3.5906	3.6041	3.6186	3.6324	3.6461	3.6626
1981	3.6763	3.6957	3.7177	3.7410	3.7680	3.7940	3.8192	3.8427	3.8703	3.8991	3.9235	3.9487
1982	3.9714	3.9931	4.0095	4.0221	4.0316	4.0452	4.0545	4.0647	4.0740	4.0820	4.0915	4.1009
1983	4.1070	4.1137	4.1232	4.1338	4.1452	4.1576	4.1697	4.1818	4.1930	4.2037	4.2142	4.2256

1984	4.2361	4.2465	4.2571	4.2676	4.2783	4.2894	4.3032	4.3170	4.3313	4.3479	4.3625	4.3770
1985	4.3923	4.4089	4.4261	4.4424	4.4582	4.4740	4.4894	4.5037	4.5186	4.5329	4.5461	4.5586
1986	4.5720	4.5843	4.5965	4.6098	4.6232	4.6390	4.6546	4.6685	4.6815	4.6945	4.7070	4.7201
1987	4.7324	4.7440	4.7576	4.7697	4.7822	4.7953	4.8074	4.8196	4.8320	4.8468	4.8583	4.8701
1988	4.8801	4.8862	4.8937	4.9013	4.9109	4.9223	4.9382	4.9531	4.9675	4.9821	4.9972	5.0163
1989	5.0378	5.0603	5.0845	5.1094	5.1373	5.1685	5.1967	5.2244	5.2531	5.2849	5.3163	5.3474
1990	5.3849	5.4237	5.4605	5.4991	5.5352	5.5715	5.6093	5.6472	5.6837	5.7175	5.7543	5.7922
1991	5.8300	5.8648	5.9011	5.9382	5.9747	6.0108	6.0476	6.0847	6.1227	6.1626	6.2013	6.2408
1992	6.2773	6.3157	6.3592	6.4034	6.4498	6.4960	6.5404	6.5819	6.6178	6.6504	6.6848	6.7175
1993	6.7476	6.7776	6.8058	6.8330	6.8598	6.8875	6.9125	6.9378	6.9629	6.9874	7.0116	7.0337
1994	7.0556	7.0779	7.1005	7.1227	7.1466	7.1711	7.1959	7.2205	7.2434	7.2666	7.2892	7.3134
1995	7.3367	7.3588	7.3796	7.3996	7.4182	7.4360	7.4509	7.4674	7.4815	7.4934	7.5051	7.5157
1996	7.5250	7.5340	7.5438	7.5535	7.5660	7.5816	7.5963	7.6085	7.6176	7.6263	7.6342	7.6449
1997	7.6547	7.6644	7.6754	7.6859	7.6937	7.7013	7.7096	7.7176	7.7256	7.7358	7.7468	7.7557
1998	7.7633	7.7689	7.7766	7.7839	7.7933	7.8053	7.8175	7.8271	7.8354	7.8416	7.8497	7.8578
1999	7.8640	7.8710	7.8776	7.8825	7.8879	7.8948	7.9014	7.9075	7.9143	7.9270	7.9375	7.9500
2000	7.9612	7.9758	7.9937	8.0118	8.0309	8.0519	8.0734	8.0951	8.1170	8.1391	8.1613	8.1828
2001	8.2043	8.2263	8.2473	8.2670	8.2870	8.3077	8.3282	8.3489	8.3629	8.3767	8.3902	8.4016
2002	8.4127	8.4235	8.4341	8.4442	8.4523	8.4598	8.4637	8.4677	8.4716	8.4751	8.4782	8.4801
2003	8.4818	8.4846	8.4858	8.4868	8.4878	8.4886	8.4893	8.4901	8.4910	8.4918	8.4928	8.4935
2004	8.4943	8.4954	8.4964	8.4976	8.4988	8.5012	8.5041	8.5073	8.5115	8.5156	8.5201	8.5246
2005	8.5293	8.5343	8.5393	8.5435	8.5484	8.5531	8.5577	8.5625	8.5674	8.5727	8.5789	8.5853
2006	8.5918	8.5989	8.6067	8.6149	8.6239	8.6334	8.6429	8.6530	8.6643	8.6763	8.6886	8.7021
2007	8.7164	8.7311	8.7463	8.7621	8.7782	8.7958	8.8137	8.8317	8.8464	8.8602	8.8752	8.8902
2008	8.9055	8.9210	8.9327	8.9438	8.9548	8.9680	8.9785	8.9898	8.9898	8.9898	8.9924	8.9924
2009	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924
2010	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9924	8.9936	8.9942	8.9942	8.9945	8.9948

Swiss Inflation Index

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1925												1.0000
1926	0.9940	0.9850	0.9796	0.9712	0.9700	0.9694	0.9688	0.9640	0.9658	0.9676	0.9652	0.9646
1927	0.9604	0.9574	0.9520	0.9472	0.9568	0.9616	0.9592	0.9580	0.9664	0.9682	0.9730	0.9712
1928	0.9670	0.9628	0.9580	0.9598	0.9616	0.9640	0.9658	0.9628	0.9652	0.9712	0.9730	0.9724
1929	0.9670	0.9670	0.9628	0.9550	0.9592	0.9652	0.9640	0.9688	0.9742	0.9742	0.9712	0.9682
1930	0.9628	0.9580	0.9556	0.9466	0.9460	0.9490	0.9508	0.9520	0.9514	0.9454	0.9430	0.9365
1931	0.9329	0.9275	0.9179	0.9029	0.9011	0.9005	0.8987	0.8945	0.8945	0.8849	0.8795	0.8681
1932	0.8615	0.8531	0.8495	0.8375	0.8315	0.8291	0.8249	0.8213	0.8177	0.8165	0.8124	0.8058
1933	0.7998	0.7962	0.7920	0.7866	0.7824	0.7842	0.7836	0.7836	0.7866	0.7866	0.7878	0.7872
1934	0.7860	0.7842	0.7800	0.7788	0.7746	0.7764	0.7734	0.7716	0.7722	0.7722	0.7734	0.7722
1935	0.7674	0.7644	0.7626	0.7590	0.7572	0.7632	0.7686	0.7716	0.7722	0.7752	0.7788	0.7794
1936	0.7776	0.7764	0.7776	0.7788	0.7764	0.7800	0.7806	0.7806	0.7824	0.7890	0.7914	0.7914
1937	0.8004	0.8177	0.8171	0.8195	0.8171	0.8225	0.8219	0.8213	0.8213	0.8249	0.8261	0.8261
1938	0.8261	0.8237	0.8213	0.8183	0.8171	0.8207	0.8201	0.8177	0.8231	0.8219	0.8219	0.8207
1939	0.8189	0.8153	0.8147	0.8177	0.8195	0.8237	0.8243	0.8225	0.8285	0.8423	0.8495	0.8513
1940	0.8645	0.8669	0.8681	0.8831	0.8885	0.8969	0.9029	0.9053	0.9185	0.9394	0.9544	0.9586
1941	0.9766	0.9766	0.9814	1.0114	1.0264	1.0480	1.0618	1.0653	1.0683	1.0893	1.1019	1.1049
1942	1.1169	1.1265	1.1313	1.1457	1.1529	1.1553	1.1727	1.1703	1.1715	1.1835	1.1906	1.1966
1943	1.2038	1.2062	1.2074	1.2146	1.2152	1.2188	1.2224	1.2200	1.2242	1.2284	1.2296	1.2308
1944	1.2326	1.2344	1.2374	1.2416	1.2440	1.2482	1.2518	1.2470	1.2470	1.2482	1.2482	1.2482
1945	1.2500	1.2512	1.2518	1.2548	1.2566	1.2608	1.2620	1.2590	1.2572	1.2488	1.2392	1.2392
1946	1.2398	1.2344	1.2284	1.2296	1.2374	1.2428	1.2416	1.2422	1.2428	1.2680	1.2698	1.2710
1947	1.2728	1.2722	1.2728	1.2782	1.2962	1.3034	1.3034	1.3040	1.3058	1.3351	1.3369	1.3387
1948	1.3405	1.3399	1.3363	1.3363	1.3375	1.3411	1.3369	1.3351	1.3375	1.3381	1.3567	1.3465
1949	1.3417	1.3369	1.3309	1.3261	1.3279	1.3309	1.3267	1.3273	1.3309	1.3267	1.3243	1.3207
1950	1.3070	1.3022	1.2998	1.2944	1.2998	1.3010	1.3010	1.3088	1.3141	1.3207	1.3219	1.3207
1951	1.3327	1.3369	1.3357	1.3507	1.3645	1.3675	1.3741	1.3825	1.3867	1.3963	1.4035	1.4047
1952	1.4005	1.4035	1.4035	1.3981	1.4035	1.4077	1.4047	1.4077	1.4107	1.4065	1.4077	1.4065

1953 1.3981 1.3951 1.3939 1.3897 1.3951 1.3963 1.3951 1.3963 1.4005 1.4017 1.4017 1.3987
1954 1.3957 1.3927 1.3915 1.3927 1.3969 1.3999 1.4041 1.4095 1.4125 1.4167 1.4209 1.4197
1955 1.4155 1.4113 1.4113 1.4125 1.4173 1.4173 1.4179 1.4215 1.4239 1.4263 1.4281 1.4281
1956 1.4197 1.4233 1.4269 1.4245 1.4394 1.4424 1.4442 1.4490 1.4520 1.4532 1.4574 1.4592
1957 1.4568 1.4544 1.4502 1.4550 1.4640 1.4652 1.4682 1.4766 1.4796 1.4844 1.4886 1.4886
1958 1.4844 1.4844 1.4844 1.4862 1.4988 1.5006 1.5006 1.5018 1.5042 1.5036 1.5042 1.5018
1959 1.4928 1.4880 1.4856 1.4796 1.4814 1.4796 1.4796 1.4844 1.4898 1.4922 1.4940 1.4928
1960 1.4886 1.4964 1.4964 1.4988 1.5054 1.5072 1.5108 1.5144 1.5186 1.5210 1.5210 1.5192
1961 1.5150 1.5162 1.5162 1.5162 1.5276 1.5300 1.5330 1.5408 1.5432 1.5498 1.5713 1.5725
1962 1.5743 1.5785 1.5809 1.5881 1.6007 1.6049 1.6097 1.6163 1.6157 1.6127 1.6205 1.6235
1963 1.6289 1.6385 1.6385 1.6409 1.6511 1.6547 1.6583 1.6631 1.6679 1.6745 1.6847 1.6865
1964 1.6877 1.6900 1.6912 1.7020 1.7110 1.7086 1.7092 1.7134 1.7164 1.7218 1.7230 1.7254
1965 1.7272 1.7332 1.7338 1.7398 1.7584 1.7650 1.7704 1.7800 1.7848 1.7908 1.8064 1.8106
1966 1.8201 1.8249 1.8279 1.8303 1.8531 1.8507 1.8507 1.8567 1.8579 1.8615 1.8837 1.8933
1967 1.8987 1.8951 1.8951 1.8969 1.9173 1.9305 1.9377 1.9454 1.9377 1.9359 1.9544 1.9598
1968 1.9640 1.9676 1.9598 1.9580 1.9640 1.9658 1.9640 1.9694 1.9712 1.9784 1.9970 2.0030
1969 2.0084 2.0120 2.0084 2.0048 2.0138 2.0234 2.0234 2.0198 2.0216 2.0252 2.0420 2.0492
1970 2.0546 2.0546 2.0588 2.0570 2.0773 2.0863 2.0917 2.0995 2.1127 2.1235 2.1517 2.1607
1971 2.1739 2.1829 2.1960 2.1978 2.2218 2.2242 2.2332 2.2368 2.2536 2.2632 2.2926 2.3040
1972 2.3189 2.3297 2.3351 2.3375 2.3615 2.3747 2.3765 2.3855 2.4059 2.4281 2.4484 2.4616
1973 2.4898 2.5066 2.5270 2.5324 2.5510 2.5695 2.5731 2.5827 2.6049 2.6589 2.7146 2.7554
1974 2.7776 2.7572 2.7704 2.7536 2.8016 2.8165 2.8261 2.8537 2.9005 2.9191 2.9598 2.9634
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1976 3.0821 3.0803 3.0749 3.0749 3.0695 3.0749 3.0803 3.0917 3.0839 3.0917 3.0971 3.1043
1977 3.1103 3.1121 3.1067 3.1103 3.1085 3.1289 3.1307 3.1307 3.1325 3.1391 3.1367 3.1403
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1980 3.3375 3.3423 3.3525 3.3675 3.3879 3.3999 3.4107 3.4335 3.4353 3.4287 3.4616 3.4736
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1983 3.8999 3.9053 3.9131 3.9251 3.9287 3.9442 3.9371 3.9478 3.9526 3.9622 3.9874 3.9892
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1994 5.4371 5.4586 5.4592 5.4616 5.4281 5.4365 5.4353 5.4568 5.4592 5.4544 5.4544 5.4532
1995 5.4922 5.5408 5.5444 5.5492 5.5384 5.5498 5.5456 5.5635 5.5683 5.5624 5.5582 5.5594
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2002 5.8201 5.8201 5.8207 5.8711 5.8765 5.8687 5.8381 5.8363 5.8447 5.8789 5.8681 5.8645
2003 5.8693 5.8753 5.8987 5.9107 5.9011 5.9011 5.8537 5.8675 5.8759 5.9059 5.8981 5.8993
2004 5.8795 5.8807 5.8933 5.9430 5.9562 5.9670 5.9041 5.9263 5.9263 5.9820 5.9880 5.9778
2005 5.9502 5.9634 5.9778 6.0270 6.0210 6.0072 5.9748 5.9832 6.0096 6.0618 6.0450 6.0384
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2010 6.2518 6.2608 6.2692 6.3231 6.3165 6.2890 6.2428 6.2422 6.2404 6.2740 6.2890 6.2914

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SUMMARY

The goal of this paper was twofold. First we presented a method that allows to disaggregate an annual time series (usually a benchmark series) to a series with a finer granularity of monthly records. The second part of the paper was dedicated to create a monthly SBBI data base for the Swiss economy and financial market ranging back until 1925 based on public available information.

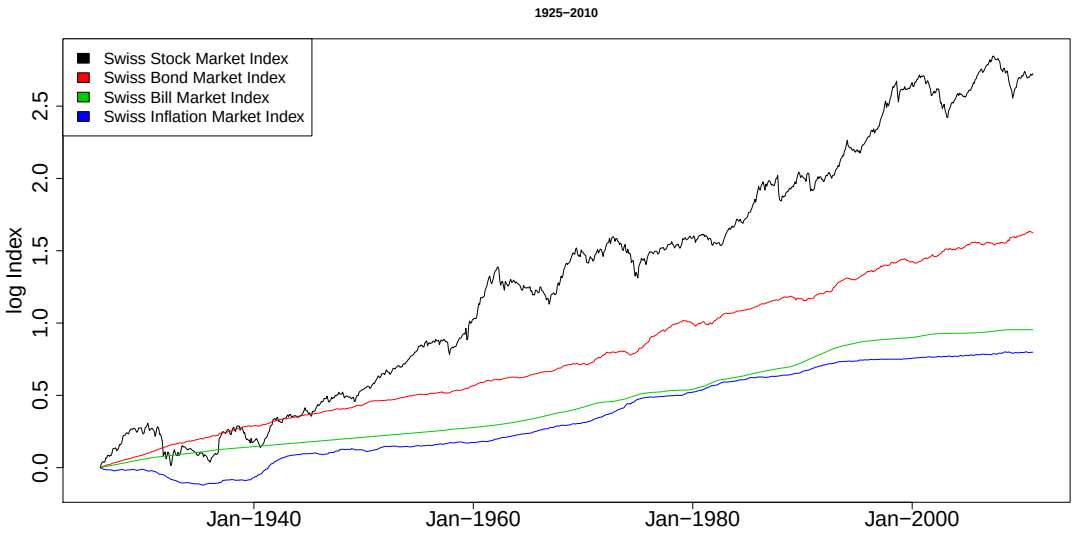

Figure 10: The new set of long term Swiss SBBI Indices.

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