

# Remaco-Report | 2024 Q4 **Survey of Capital Market Assumptions in Swiss Francs**

A Remaco study based on institutional capital market assumptions

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In our quarterly study "Survey of Capital Market Assumptions in Swiss Francs", we collect and analyse all publicly available capital market assumptions published by institutional financial market experts from around the world (asset managers and consultants). We standardise these, convert them into Swiss francs and aggregate them into consolidated capital market assumptions. Our analysis is carried out from the perspective of a Swiss francs investor, with the result that any differences in returns and interest rates are taken into account accordingly. A detailed description of the methodology can be found in our first study Q1 2024. In this publication, we have updated the capital market assumptions in Swiss francs as of 30 June 2024 and take into account the expectations of a total of 24 institutional financial market experts.\footnote{1}

This and future studies on capital market assumptions can be found at: <a href="https://remaco.com/research-notes/">https://remaco.com/research-notes/</a>

Are you an institutional asset manager or consultant with "in-house" capital market assumptions and would like to be part of our survey?

Prof. Dr. Tim Kröncke (tim.kroencke@remaco.com) would be glad to hear from you.

# In this study

- **l. Bonds and equities:** The expected returns on bonds and equities continue to fall. They amount to 2.2% for bonds (Δ12M: -1.2%) and 6.1% for equities (Δ12M: -1.6%), respectively.
- **2. Alternative investments** are more stable and exhibit a smaller decline with an expected return of 3.3 % (Δ12M: -0.4 %) as compared to bonds and equities.
- 3. **Private markets**: The expected return for private equity, private debt and real estate is also falling and currently stands at 6.7% in Swiss francs (Δ12M: -0.5%).
- **4. Risk premia**: The expected returns on risky investments fall more sharply than the returns on risk-free investments. As a result, not only the interest rate level falls, but also the risk premiums on the capital markets in general.
- **5. Volatility:** The expected volatility of risky assets is declining, suggesting that the decline in risk premia is mainly due to a more favourable assessment of macroeconomic risk. The market movements in August have not yet had any impact on the long-term capital market expectations of institutional asset managers and consultants.
- **6. With a Sharpe Ratio** of 0.48, Swiss equities lead the ranking of asset classes ahead of private debt (0.47) and private equity (0.37).
- 7. Global market portfolio: Based on the consolidated capital market assumptions, the expected return of the Remaco global market portfolio equals 4.0 % p. a. with an expected volatility of 9.6 % p. a.
- 8. Horizon Actuarial survey: After Swiss franc adjustment, Horizon Actuarial's Capital Market Assumptions published in US dollars show a high degree of agreement with Remaco's capital market expectations.

# 1. Survey of Capital Market Assumptions

	Expected Return, p. a.	Expected Risk, p. a.	Change on E	Previous Year	R	ange, E(R)
Asset Class	E(R)	σ	ΔE(R)	Δσ	Min.	Max.
Swiss Government Bonds	0.50	3.66	-1.37	-1.84	0.08	0.74
Corporate Bonds Global, hedged	2.20	5.81	-0.81	-0.39	-0.01	3.62
High Yield Global, hedged	3.87	9.70	-1.32	-0.50	2.37	5.56
ø Bond Markets	2.19	6.39	-1.17	-0.91		
Equities US	4.40	15.70	-1.50	-1.30	-0.03	8.62
Equities Europe ex Switzerland	6.27	17.20	-0.68	-0.16	3.17	10.65
Equities Switzerland	7.29	13.60	-0.68	-0.10	6.08	9.11
Equities Japan	5.19	16.87	-2.59	0.45	1.17	12.43
Equities Pacific ex Japan	6.55	18.09	-2.21	-1.51	4.87	8.57
Equities Emerging Markets	7.11	20.79	-1.79	0.01	4.77	8.93
ø Equity Markets	6.14	17.04	-1.58	-0.44		
REITs Global	6.09	19.00	0.02	0.08	3.47	9.61
Inflation-linked Bonds, hedged	1.83	5.80	-0.80	-1.20	0.67	3.22
Commodities	3.23	16.00	-0.67	-0.52	0.88	5.33
Gold	1.93	14.81	-0.23	0.34	-2.86	4.49
ø Alternative Assets	3.27	13.90	-0.42	-0.33		
Equities Global	4.87	16.05	-1.35	-0.65	1.37	9.07
Equities Developed Markets	4.86	15.59	-0.94	-0.45	3.55	9.31
Private Equity	8.67	21.30	-1.37	-2.15	3.13	13.74
Private Credit	5.99	11.90	-0.67	-0.85	2.94	10.17
Real Estate Global	5.44	13.20	0.59	0.14	2.97	6.92
ø Private Markets	6.70	15.47	-0.48	-0.95		
Cash, CHF	0.77		-0.56			

Table 1: Consolidated capital market assumptions in Swiss francs, 2024 | Q4.

Consolidated capital market assumptions are based on the median of up to 24 individual expectations of globally active institutional asset managers and consultants. The cut-off date for the survey is 30.9.2024. Numbers are in % per annum, expressed in Swiss francs, and for an investment horizon of 10 years. The expected return is arithmetic. "Change on previous year" refers to 30.9.2024. The column labelled "Range" lists the highest and lowest expected return in the cross-section of institutional capital market assumptions for each asset class.

As in the previous quarters of this year, we are observing a further decline in expected returns for the bond and equity markets (Table 1 and Figure 1). The downward trend in expected returns has now continued since the start of the 2024 calendar year (Figure 2).

The consensus expectation of institutional financial market experts for the expected return on Swiss Confederation bonds is currently 0.50 %, which corresponds to a decline of 1.37 % compared to the previous year. The expected yield for investment-grade corporate bonds is 2.32 % (-0.81 % compared to the previous year) and for high-yield investments 3.87 % (-1.32 % compared to the previous year). For cash investments, institutional financial market experts expect an annual return of 0.77 % (-0.56 % compared to the previous year) over an investment horizon of 10 years. The expected returns on bonds with a longer maturity and a higher credit risk have fallen much more sharply. The maturity risk premium and the credit risk premium have therefore fallen compared to the previous year.

The expected return for equity investments is also continuing to fall. The expected return is declining for all six equity markets, falling by an average of 1.58% to 6.14%. As the decline in expected returns is higher than for investments in cash, the equity premium has fallen by 1.02% compared to the previous year. The US and Japanese markets (4.40% and 5.19%) have the lowest expected returns in a cross-sectional comparison, while Switzerland and the emerging markets (7.29% and 7.11%) are considered the most attractive.

The expected returns for alternative investments are more stable. Here we see virtually no change in expected returns for REITs compared to the previous year, and only a slight fall in expected returns for gold. Inflation-indexed bonds and commodity investments have fallen more sharply. For private market investments, we are observing a trend for private equity and private debt that is comparable to the decline in expected returns on the equity and bond markets. For real estate investments, the expected return has risen by 0.59 % to 5.44 %.

Overall, a decline in risk premiums for risky investments continues. Risk premiums are determined by two factors in particular: Investors' appetite for risk and macroeconomic risk, which is reflected in expected volatility. **Table 1** shows a decline in volatility for almost all asset classes. We therefore conjecture that the decline in risk premia is due entirely, or at least to a large extent, to a more favourable (long-term) assessment of macroeconomic risk. The volatile market movements in August have so far had no discernible impact on the long-term capital market expectations of institutional investors.

#### Consolidated Capital Market Assumptions and Risk / Return Trade-Off: 30.9.2024

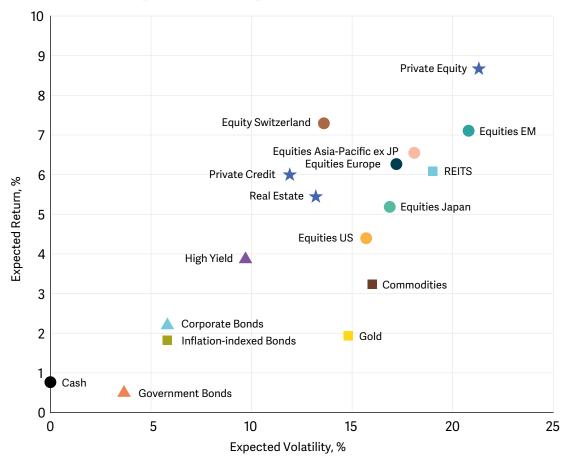
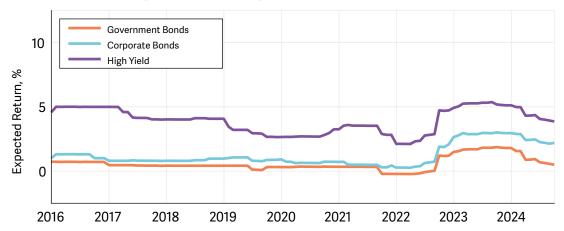
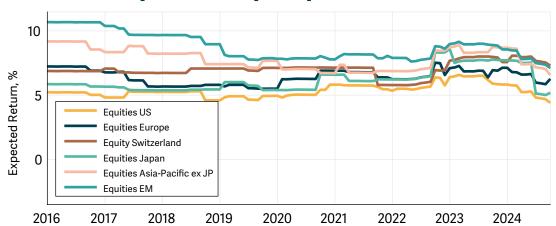


Figure 1: Risk-return diagram based on consolidated capital market assumptions, 2024 | Q4. Consolidated capital market assumptions are the median of up to 24 individual expectations of globally active institutional asset managers and consultants. Figures are in %, per annum, Swiss francs, and for an investment horizon of 10 years. The expected return is arithmetic. The cut-off date for the survey is 30.9.2024.

#### **Consolidated Capital Market Assumptions: Bonds**



#### **Consolidated Capital Market Assumptions: Equities**



#### **Consolidated Capital Market Assumptions: Liquid Alternatives**

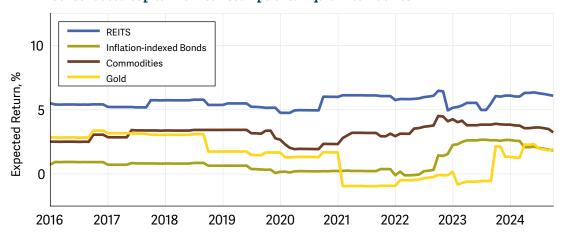


Figure 2: Consolidated capital market assumptions over time.
The figure shows the expected return on the asset classes from Table 1 and Figure 1 over time from 2016.

## 2. Remaco Global Market Portfolio

#### 2.1. Capital Market Assumptions Favour Global Diversification

Consolidated capital market assumptions provide information on how the attractiveness of individual asset classes is assessed by institutional asset managers and consultants. It is possible to compare asset classes with each other as well as with portfolios. Instead of looking in the rear-view mirror and using historical data, this is a look forward into the future. To this end, we show forward-looking performance indicators in Table 2, which we calculate on the basis of consolidated capital market assumptions.

The expected Sharpe ratio is calculated as the expected return minus the return on a risk-free investment divided by the expected volatility. This ratio can be used to evaluate the attractiveness of an individual asset class compared to cash, and in turn compared with other asset classes.

Most investors hold portfolios and are interested in how an additional investment in a particular asset contributes to the risk and return of their portfolio. For this purpose, the diversification potential and the correlation to a benchmark portfolio must also be taken into account. To this end, we calculate the expected information ratio of the individual investments compared to two alternatives. The first benchmark portfolio consists of 50% Swiss government bonds and 50% Swiss equities ("home bias portfolio"). The second benchmark portfolio invests the equity portion globally (simple "world portfolio"). If the expected information ratio is positive, increasing the weighting of the asset class compared to the benchmark portfolio would further increase the expected Sharpe ratio of the benchmark portfolio. For an investor who is already invested in the benchmark portfolio, possible diversification benefits become visible.

Indeed, Table 2 shows that an additional investment in most asset classes would increase the expected return of the benchmark portfolio. For the home bias portfolio, only the information ratios for Swiss government bonds and equities in the USA, Europe ex Switzerland and Japan are negative. A global portfolio can therefore be expected to improve the expected risk-return profile. With the exception of Swiss Confederation bonds, we also observe consistently positive expected information ratios for the simple global portfolio. In particular, investments in Pacific ex Japan equities, emerging market equities, REITs, IG corporate bonds and high yield bonds are expected to offer further diversification benefits.

To illustrate the attractiveness of a globally diversified portfolio, we calculate the Remaco global market portfolio as part of this report. This is a rule-based approach that utilises consensus capital market assumptions. Specifically, we start with a predefined initial portfolio ("Initial portfolio" column in Table 3) and use a capital market model to overweight attractive asset classes and underweight unattractive asset classes based on rules ("Remaco global market portfolio" column in Table 3). In doing so, we take into account the extent to which institutional capital market assumptions differ. As shown in Table 1 and graphically illustrated in Figure 3, the return expectations between different institutions can be very different. Therefore, we weight the signal more heavily when expectations are closer together and less heavily when expectations are further apart. In addition, when optimising, we ensure that the optimised global portfolio has a similar overall risk as the initial portfolio.

From a technical perspective, the Remaco global market portfolio is rule-based similar to a world portfolio with fixed weights. But in contract to a static world portfolio, it is able to adapt to changing conditions. Discretionary world portfolios can also adapt to changing conditions. However, they are typically based on the judgement of a small number of financial market experts and are more prone to reflect a more extreme assessment of the capital markets, which often leads to unsatisfactory results.

	<b>Sharpe Ratio</b>	Alpha, %	Beta	<b>Information Ratio</b>	<b>Information Ratio</b>
Benchmark	"Cash"	"Home-Bias"	"Home-Bias"	"Home-Bias"	"World"
Swiss Government Bonds	-0.07	-0.71	0.14	-0.20	-0.13
Corporate Bonds Global, hedged	0.25	0.36	0.34	0.07	0.15
High Yield Global, hedged	0.32	0.55	0.81	0.07	0.22
Equities US	0.23	-1.23	1.55	-0.11	0.04
Equities Europe ex Switzerland	0.32	-0.76	2.00	-0.08	0.22
Equities Switzerland	0.48	0.71	1.86	0.20	0.47
Equities Japan	0.26	-0.11	1.45	-0.01	0.14
Equities Pacific ex Japan	0.32	0.13	1.81	0.01	0.22
<b>Equities Emerging Markets</b>	0.30	0.98	1.71	0.06	0.20
REITs Global	0.28	0.22	1.63	0.01	0.16
Inflation-linked Bonds, hedged	0.18	0.18	0.28	0.03	0.11
Commodities	0.15	0.80	0.53	0.05	0.06
Gold	0.08	0.90	0.09	0.06	0.05
Private Equity	0.37	3.15	1.52	0.17	0.30
Private Credit	0.44	2.55	0.86	0.25	0.37
Real Estate Global	0.35	1.82	0.91	0.16	0.28

Table 2: Performance indicators based on consolidated capital market assumptions, 2024 | Q4.

Reported performance indicators are based on consolidated capital market assumptions and are forward-looking. Sharpe ratio is the expected return minus the return for an investment in cash, divided by the expected risk (standard deviation). The remaining performance indicators are calculated against a benchmark portfolio. The "home bias" benchmark consists of 50 % Swiss government bonds and 50 % Swiss equities. The "world" benchmark consists of 50 % Swiss government bonds and 50 % global equities. The Alpha is the expected return based on consolidated expectations less the risk-adjusted return according to the benchmark. Beta measures the systematic risk of an asset class relative to the benchmark. The Information ratio is the Alpha divided by the tracking error calculated against a benchmark. The cut-off date for the survey is 30.9.2024.

#### Consolidated Capital Market Assumptions and Disagreement-Range: 30.9.2024

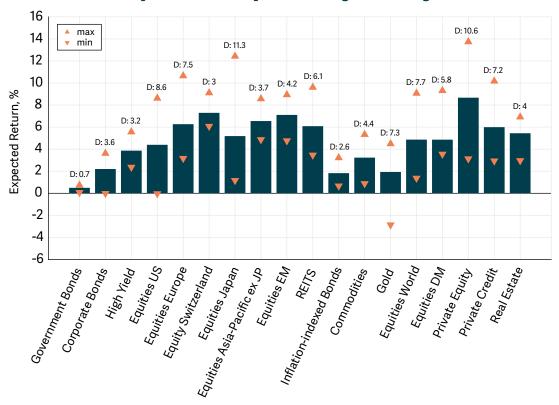


Figure 3: Consolidated capital market assumptions and disagreement range.

Black bars represent the median of the individual expected return of an asset class. The red triangles correspond to the lowest and highest expected return in the survey. We show the disagreement between the financial market experts as a range between the lowest and highest value (disagreement range, D).

Asset Class	Initial portfolio	Min.	Max.	Remaco global market
Swiss Government Bonds	15.0	10.0	20.0	10.0
Corporate Bonds Global, hedged	10.0	5.0	15.0	15.0
High Yield Global, hedged	5.0	2.0	10.0	10.0
Bonds	30.0			35.0
Equities US	30.0	22.0	39.0	23.5
Equities Europe ex Switzerland	7.5	4.0	12.0	4.3
Equities Switzerland	5.0	2.0	12.0	5.2
Equities Japan	2.5	1.2	6.0	1.3
Equities Pacific ex Japan	2.5	1.2	6.0	4.2
Equities Emerging Markets	2.5	1.2	6.0	4.3
Equities	50.0			42.7
REITs Global	5.0	2.0	10.0	10.0
Inflation-linked Bonds, hedged	5.0	2.0	10.0	6.2
Commodities	5.0	2.0	10.0	4.1
Gold	5.0	2.0	10.0	2.0
Alternative Assets	20.0			22.3
Total	100.0			100.0

#### Table 3: Remaco global market portfolio, 2024 | Q4.

Starting with an initial portfolio, we use the consolidated capital market assumptions to optimise the weighting of the individual asset classes ("Remaco global market"). The optimisation approach is based on Treynor and Black (1973) and Black and Litterman (1992) and takes into account the dispersion in the expectations of financial market experts. Minimum and maximum portfolio weights are taken into account during the optimisation. The Beta of the Remaco global market portfolio to the initial portfolio is 1.0 and the maximum permitted tracking error is 5%. The cut-off date for the survey used to find the Remaco global market portfolio is 30.9.2024.

#### 2.2. Historical Performance

**Table 4** and **Figure 4** show the performance of the **Remaco global market portfolio**. The performance of the home bias portfolio and the simple world portfolio is also shown for comparison.

In the past quarter (Q3 2024), the Remaco global market portfolio achieved a return of +3.3%, putting it ahead of the home bias portfolio (+1.9%) and the simple world portfolio (+2.3%). In calendar year 2024 (year-to-date, YTD), the Remaco global market portfolio has so far achieved a return of +8.3%, compared with +7.7% for the home bias portfolio and +9.5% for the simple world portfolio.

The decisive factor is the long-term investment success. The cumulative performance indicates by how much Swiss francs a hypothetical investment of 100 Swiss francs would have gained in value in the period from 1 January 2016 to 30 September 2024. An investment of 100 Swiss francs in the Remaco global market portfolio would be worth 160 Swiss francs today. An investment of the same amount in the home bias portfolio would only be worth 134 Swiss francs today. The simple world portfolio would be worth 144 Swiss francs. The advantages of a broadly diversified global portfolio and an evidence-based investment approach are clearly evident in the historical data and over long observation periods.

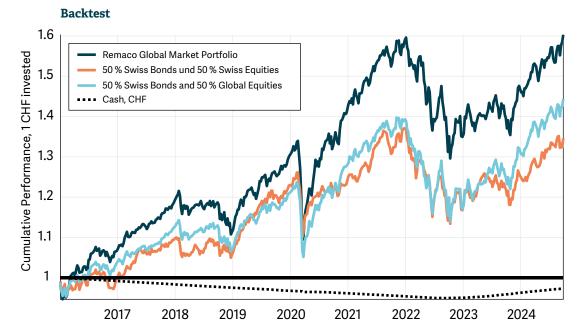
	Remaco global market	Home-Bias-Portfolio (50:50)	Simple global portfolio (50:50)
Time period	(in %)	(in %)	(in %)
2016	6.6	0.0	3.6
2017	11.5	9.1	8.2
2018	-6.8	-3.4	-4.6
2019	17.4	15.6	12.6
2020	9.8	2.5	6.9
2021	11.8	9.7	8.5
2022	-15.3	-15.2	-16.3
2023	9.3	7.7	12.8
2024, YTD 30.9.	8.3	7.3	9.5
Q4 2023	5.8	2.6	5.4
Q1 2024	3.7	3.5	5.4
Q2 2024	1.1	1.8	1.6
Q3 2024	3.3	1.9	2.3
geometric average, p. a.	5.5	3.4	4.2
cumulative performance, 2016–2024, YTD 30.9.	60.0	34.3	44.2

Table 4: Historical performance in Swiss francs, 1.1.2016 to 30.9.2024.

The historical performance of the Remaco global market portfolio and alternative global portfolios is determined using a hypothetical realisation with ETFs. The respective return is calculated over a calendar year (in the case of 2024 until 30.9.) or a quarter. The cumulative performance indicates how much a CHF 100 investment on 1 January 2016 would have risen by 30.9.2024.

**Remaco global market:** Rule-based approach based on consolidated capital market assumptions. 2016–2023: Performance in the backtest.

From 2024: Performance of the optimised global market portfolio published in this series. **Home bias portfolio:** Portfolio consisting of 50 % Swiss government bonds and 50 % Swiss equities. **Simple global portfolio:** Portfolio consisting of 50 % Swiss government bonds and 50 % global equities. Past performance is not necessarily a guide to future performance.



**Figure 4: Remaco global market portfolio and alternatives.**Cumulative performance of an investment of one Swiss franc invested on 1.1.2016 through 30.9.2024. Past performance is not necessarily a guide to future performance.

#### 2.3. Expected Long-Term Return And Risk

Institutional capital market assumptions are not point forecasts, but an estimate of the distribution of expected future returns. Based on the consolidated capital market expectations, the expected return of the **Remaco global market portfolio** is currently 4.0 % p. a. with an expected volatility of 9.6 % p. a.

A simulation (see **Figure 5** and **Table 5**) makes it possible to estimate the expected evolution of portfolios, taking into account the distribution of returns over long-term investment horizons. For a time horizon of 10 years, the expected return in the median of the simulations is 43 %, with a loss probability of 11.1%. In 12.5 % of the simulations, the capital invested doubles.

Consolidated capital market assumptions can be used to estimate whether a portfolio is in line with an investor's return and risk expectations and how plausible it is that certain performance targets can be achieved.

#### Simulated distribution: Remaco Global Market Portfolio

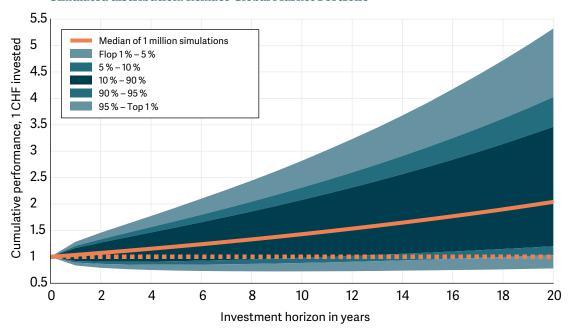


Figure 5: Expected distribution of the Remaco global market portfolio.

The consolidated capital market expectations are used in a simulation to estimate the distribution of the expected performance over an investment horizon of 1 year to 20 years.

Investment horizon	1 year	5 years	10 years	20 years
1%	0.84	0.74	0.72	0.78
5%	0.89	0.85	0.88	1.03
10%	0.92	0.92	0.98	1.20
median	1.04	1.19	1.43	2.04
90%	1.17	1.56	2.08	3.46
95%	1.21	1.68	2.31	4.02
99%	1.29	1.93	2.82	5.32
Probability of loss, % (<100%)	35.0	19.4	11.1	4.2
Probability of doubling, % (>200%)	0.0	0.6	12.5	51.9

Table 5:

Based on the consolidated capital market assumptions, an investment of CHF 1 in the Remaco global market portfolio is simulated one million times. The table shows the distribution of the portfolio value after 1 to 20 years.

# 3. Methodology

Our study is based on the published capital market assumptions of 24 globally active institutional asset managers and consultants (e.g. Amundi, BlackRock, Callan, Invesco, JP Morgan, Meketa, Research Affiliates, RowePrice, StateStreet, Verus). We only consider institutions that actually use capital market assumptions for investment decisions or for advising professional investors. Institutional capital market assumptions are produced by research teams who generally disclose their methodology in the respective reports.

All capital market assumptions refer to a long-term time horizon of five to fifteen years, with a time horizon of ten years being the most common. Many original sources provide either only the geometric or only the arithmetic expected return. In these cases, we calculate the missing information. We convert the capital market assumptions in foreign currency into Swiss francs (based on full hedging by forward contracts).

An individual capital market assumption remains in our sample until a more up-to-date assumptions is published, up to a maximum of 18 months. All forecasts are currently updated at least once a year by the respective institutions, and in many cases also during the year, e.g. quarterly. As not all asset classes are covered by all institutions, the number of individual capital market assumptions available varies.

For the asset class "Cash CHF, short-term risk-free investment in Swiss francs", we have relatively few observations (#3) in our sample. We report here the mean value of the consolidated capital market assumptions and the current value for "Fixed-term deposits and time deposits, 12 months", which is available on the Swiss National Bank's website.

Finally, we aggregate the individual expectations into consolidated expectations by calculating the median of all available observations. Our methodology is comparable to the regularly published study by Horizon Actuarial Services, which provides consolidated capital market expectations for the US, as well as recent research by Dahlquist & Ibert (2024) and Couts, Goncalves and Loudis (2024).<sup>2</sup>

In Figure 6, we compare the results of our study (as at 30.9.2024) with the results of the most recent study by Horizon Actuarial Services from August 2024. The expected returns in the Horizon study are stated in US dollars and we have converted them into Swiss francs in the figure in order to be able to compare the results. The asset classes we consider are somewhat more granular than in the Horizon study, and we can only meaningfully compare five of the 13 asset classes. Up to 41 institutional asset managers and consultants take part in the Horizon Study. We are currently surveying 24 institutional capital market assumptions. The list of participants overlaps, but is not identical. Nevertheless, the results for the five asset classes compared in the chart are very similar. This illustrates that our sample is not biased compared to the Horizon study and shows that our methodology leads to comparable results in Swiss francs.

<sup>&</sup>lt;sup>2</sup> See Dahlquist & Ibert (2024): "Equity return expectations and portfolios: Evidence from large asset managers", Review of Financial Studies); Couts, Goncalves & Loudis (2024): "The subjective risk and return expectations of institutional investors", SSRN Working Paper).

#### Comparison with Horizon Survey: 30.9.2024

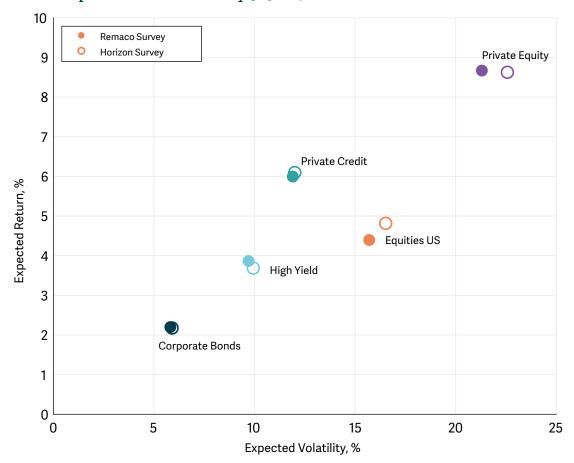


Figure 6: Comparison with the Horizon Actuarial Survey.

Comparison of the results from our study with the survey conducted by Horizon Actuarial Services in August 2024. We converted the data from the Horizon study into Swiss francs in order to be able to compare the results.

# Get in touch with us to find out more about evidence-based portfolio management at Remaco.



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