Safe Haven by Wealth Effect Management o.c.p., a.s.









Key information

The current global economic development is characterized mainly by its unpredictability. Christine Lagarde, the new President of the European Central Bank (and formerly the Executive Director of the International Monetary Fund), captured current developments very well during "60 minute" debate on CBS channel, when she said that "market stability should not be the subject of a tweet here or a tweet there." ¹

The deteriorating economic development of the second biggest economy of the world China (which is actually largely determined by these "tweets"), introducing new tariffs for imported goods into the US from the European Union, growing number of military conflicts in the world, not addressing the serious challenges of social media regulation and globally operating firms, rise of extremism and far right movements as mainstream (which seems to be a logical evolution in an ever-widening income inequality between rich and poor), not addressing environmental issues, etc. . All these are negative trends that worsen the prerequisites for effective management of the world economy and increase the likelihood of financial and other crises.

Protecting assets and investments during economic shocks is extremely challenging as certain economic assumptions and economic models cease to function properly during financial turbulences (i.e. when we all need them), as the correlation of asset prices increases significantly at a given time, what eliminates otherwise positive effects of diversification. The choice of suitable assets to invest as a "hedge" against the crisis therefore appears to be both difficult and at the same time risky.

To properly set up a portfolio that would act as a "crisis hedge" (i.e. maintain value during crisis), it is first of all necessary to understand how assets have historically evolved in times of recession while analyzing whether similar developments can be expected to recur (or how likely it will be).

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava



¹https://www.cbsnews.com/news/incoming-european-central-bank-headchristine-lagarde-on-president-trump-twitter-habits-60-minutes-2019-10-18/; published on 21.10.2019



Proposal of assets for portfolio

- Gold is a non-yielding asset, but it has practically always increased in value during increased risk in the global financial markets.
- The Swiss Confederation bonds have long been one of the safest investments of its kind.
- Japan's government bonds provide a suitable haven for investors at times of economic downturn and crisis

Correlations over the past 16 years for Gold ², Swiss Government Bonds ³ and Japan Government Bonds comparing to the S&P 500 and STOXX Europe 600 indices are negative or close to zero ⁴.

	Gold	Swiss Government	Japan Government		
	Gold	Bond	Bond		
S&P 500 Index	0,031	-0,248	-0,381		
STOXX Europe 600 Index	-0,053	-0,177	-0,270		

Correlations over the past 16 years for Gold, Swiss Government Bonds and Japan Government Bonds to the S&P 500 Index and STOXX Europe 600 Index; source: author, Bloomberg Professional Terminal

Gold

Since 1970, gold has practically zero correlation with the development of the US stock index S&P 500⁵ (correlation -0,005), as well as the global stock index MSCI World Index⁶ (correlation 0,113).

²Gold Spot \$/O

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava office@wemocp.sk www.wemocp.sk WEALTH EFFECT MANAGEMENT o.c.p.

³ Swiss Domestic Government Bond, maturities from 7 to 15 years

⁴ Correlations for Japan Government Bonds are calculated on a 6-year basis

⁵ From 1.1.1970 to 21.10.2019, calculated on a monthly basis

⁶ From 1.1.1970 to 21.10.2019, calculated on a monthly basis

Safe Haven by Wealth Effect Management o.c.p., a.s.



During the crisis from 1971 to the present, the price of gold has developed positively, respectively it was stable during six recessions in the US and only slightly decreased during one financial crisis (during the short 1980 crisis).



Evolution of the value of gold from 1920 to October 2019; red bars indicate US financial crises⁷; source: author, Bloomberg Professional Terminal



The evolution of gold value from 1970 to October 2019; red bars indicate US financial crises; source: author, Bloomberg Professional Terminal

⁷Financial crises in the US make financial crises in the EU (on the contrary, this is not historically true).

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava office@wemocp.sk www.wemocp.sk



Swiss Confederation bonds

Only a few countries are able to maintain the highest AAA rating in the long term. January 20, 1980 Switzerland was first assigned a credit rating and immediately at the AAA level. The rating agency Moody's Investors Service has since then continuously (about 40 years) kept the Swiss rating at the highest possible level. Also, all of the relevant credit rating agencies give Switzer-land a AAA rating, in addition with a stable outlook (see figure below).

Credit Default Swap (CDS) insurance is found at the lowest possible level for Switzerland in all the countries under comparison, 9.47 bps⁸. Switzerland's debt-to-GDP ratio is 42.8%, which is also one of the lowest levels among developed nations.

JIt is highly probable that Switzerland will retain its public finances in excellent condition as well as its ability to attract foreign investment while focusing its banking services (traditionally provided in Switzerland to the world's richest) on wealth management in the coming years.zdroj: Bloomberg Professional Terminal

Swiss Confederation			
Moody's		Fitch	
1) Outlook	STABLE	16) Outlook	STABLE
2) CC LT Foreign Bank Depst	Aaau	17) LT Issuer Default Rating	AAA
3) CC LT Foreign Curr Debt	Aaau	18) LT LC Issuer Default	AAA
4) CC ST Foreign Bank Depst	P-1u	19) Foreign Currency LT Debt	AAA
5) CC ST Foreign Curr Debt	P-1u	20) Local Currency LT Debt	AAA
6) Long Term Rating	Aaa	21) ST Issuer Default Rating	F1+
7) LC Curr Issuer Rating	Aaau	22) ST LC Issuer Default	F1+
8) FC Curr Issuer Rating	Aaau		
9) Local Currency LT Debt	Aaau	DBRS	
		23) Outlook	STABLE
10) Standard & Poor's	!	24) Foreign Currency LT Debt	AAA
11) Outlook	STABLE	25) Local Currency LT Debt	AAA
12) Foreign Currency LT Debt	AAAu	26) Foreign Currency ST Debt	R-1H
13) Local Currency LT Debt	AAAu	27) Local Currency ST Debt	R-1H
14) Foreign Currency ST Debt	A-1+u		
15) Local Currency ST Debt	A-1+u	Rating And Investment	
		28) LT Foreign Crncy Outlook	STABLE
		29) Foreign Curr Issuer Rtg	AAA

The rating levels of the Swiss Confederation from the largest global rating agencies; Source: Bloomberg Professional Terminal

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava office@wemocp.sk www.wemocp.sk WEALTH EFFECT MANAGEMENT o.c.p.

^a For the national debt insurance of Switzerland in the amount of 10 mil. CHF investor needs to spend 9 470 CHF per year. bps = base points, ie. 1/100 percentage point.

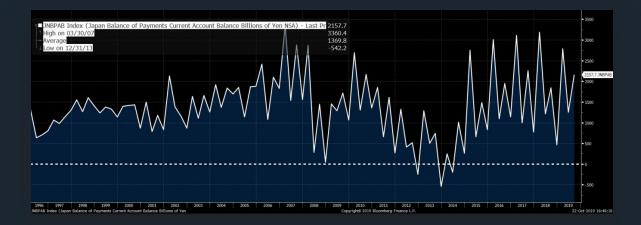


Japan bonds

The term "Safe haven" is used for investments in the Japanese currency as an asset which is usually strengthening in times of financial turmoil (see picture on next page).

The Japanese economy is largely open and dependent on foreign trade. Japan's balance of payments has been constantly in surplus since 1996, with the exception of three quarters (see picture below). The result is decades-long current account surpluses, making Japan the largest so-called net lenders in the world from countries that have an open market economy and free movement of capital⁹.

The consequences of this situation are as follows: at a time when global financial markets are becoming risk averse (equivalent to financial crisis, economic shocks, etc.), repatriation of capital (Japanese investors' money invested abroad in foreign currencies is converted to Yen) causes regular inflows of Japanese Yen, which paradoxically strengthens the currency in times of crisis.



Japan's balance of payments development from 1995 to August 2019, on a quarterly basis in JPY, the horizontal dashed line shows 0; source: author, Bloomberg Professional Terminal

⁹ Japan is also the world's most indebted state (in debt-to-GDP ratio), but Japan's high debt is almost entirely owned by the Japanese public.

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava



Safe Haven by Wealth Effect Management o.c.p., a.s.



Credit Default Swap (CDS) insurance for Japan is at very low levels of 21.76 bps. The country's debt to GDP ratio is 236.4%, the highest value among developed OECD countries. Japan's rating is at A1 (Moody's Investors Service), respectively. A + (S & P Global ratings).



Development of Japan's net foreign assets from 1971 to 2018, on an annual basis in bill. USD, the horizontal dashed line shows 0; source: author, Bloomberg Professional Terminal



Japan Yen appreciated to EUR by 40% during the last recession in Europe; Germany GDP growth in % - green curved line, Euro Area grow of GDP in % - yellow curved line, EUR/JPY development - white curved line; source: author, Bloomberg Professional Terminal

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava office@wemocp.sk www.wemocp.sk



Portfolio proposal

As it is not possible in this analysis to estimate how the selected assets will appreciate, they will have identical initial weights in the portfolio, i.e. each asset will have an identical starting weight of 33.33%.

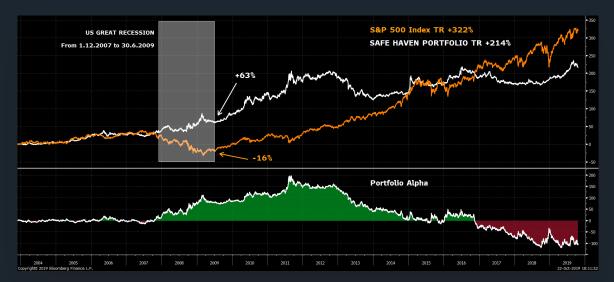
Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava





Portfolio Back-test

Comparison of development of portfolio appreciation for the period from 28.11.2003 to 22.10.2019



Comparison of the simulated cumulative portfolio performance in the past with the main US stock index S&P 500 from 28.11.2003 to 22.10.2019 (28.11.2003 = 0%). Source: author, Bloomberg Professional Terminal. The data shown is past. Past performance is not a reliable indicator of future results. All revenues are translated into EUR and are presented before deduction of fees, commissions and taxes.





Portfolio statistics compared to S&P 500

11) View 12) Actions 13) Settings	• 14) Trade S	14) Trade Simulation 🔸				Portfolio & Risk Analytics			
Intraday Holdings Characteristics	Attribution		Scenarios	Perform	ance Tr	acking Err	or/Volatility		
Main View Total Return Period Analys	is 🔰 Seasonal Ana	lysis St	atistical Sur	nmary					
SAFE HAVEN vs SPX Index	• by None	•	in <mark>EUR</mark>				As of 10/22	L/19 🗀	
Unit Percentage									
SAFE HAVEN									
	3 Month	S	6 Mon	nths	Year To	Date	5500 Day(s)) •	
Portfolio Statistics	Port	Bench	Port	Bench	Port	Bench	Port	Bench	
2. Return									
Total Return	1.30	2.20	9.65	5.45	10.56	25.00	207.85	307.36	
Maximum Return	1.49	2.04	1.49	2.04	1.49	3.27	7.37	10.92	
Minimum Return	-1.64	-3.69	-1.64	-3.69	-1.64	-3.69	-5.70	-8.69	
Mean Return (Annualized)	8.07	15.21	29.83	17.77	19 . 52	49.45	12.07	17.01	
Mean Excess Return (Annualized)	-6.20		10.25		-20.05		-4.22		
3. Risk									
Standard Deviation (Annualized)	9.67	17.42	8.07	14.98	7.39	14.12	11.67	19.49	
Downside Risk (Annualized)	6.80	13.63	5.65	11.54	5.07	10.65	8.15	14.06	
Skewness	0.05	-0.94	0.03	-0.87	0.20	-0.68	0.25	-0.06	
VaR 95% (ex-post)	-0.91	-1.87	-0.70	-1.41	-0.61	-1.28	-1.06	-1.81	
Tracking Error (Annualized)	23.17		19.26		17.86		23.12		
4. Risk/Return									
Sharpe Ratio	0.63	0.64	2.59	0.85	1 . 89	2.38	0.63	0.55	
Jensen Alpha	8.68		23.21		19.42		/.5/		
Information Ratio	-0.19		0.38		-0.83		-0.13		
Treynor Measure	-0.27		-1.15		-0.86		-3.00		
Beta (ex-post)	-0.23		-0.18		-0.16		-0.02		
Correlation	-0.4157		-0.3365		-0.3108		-0.0407		
Capture Ratio	-0.42		-0.19		-0.09		0.07		

Historical statistical overview of portfolio and S&P 500 index as of 22.10.2019 for the last 3 and 6 months, YTD and for the last 5500 days, i.e. 15 years (all data are converted into EUR); source: author, Bloomberg Professional Terminal





Investment proposal

Share the investment for well diversified portfolio: MAX 50\%

Investment instruments

33,33% CSBGCO SW Equity - iShares Swiss Domestic Government Bond 7-15 ETF 33,33% XJSE GR Equity - Xtrackers II Japan Government Bond UCITS ETF 33,33% GLD US Equity - SPDR Gold Shares

Currency of investment: EUR Minimum investment: 15 000 EUR Benchmark (pro-forma): S&P 500 Index Expected return: 5% p.a.

Apollo Business Center II blok D Prievozská 4/C, 821 09 Bratislava





Risk of investment

The Standard Deviation portfolio calculated over a historical two-year period in EUR is 6.57%. The Deviation standard for the S&P 500, calculated on the same time period and in EUR, reaches 15.74%.

The Monte Carlo VaR95 (10,000 simulations) calculated on a monthly basis in EUR is -3.19% for the Portfolio. Monte Carlo VaR95 for S&P 500 Index

(10,000 simulations) calculated on the same time base in EUR is -7.09%.

Investment efficiency

The Sharpe Ratio of the portfolio calculated over the historical two-year period in EUR is 1.27, for the S&P 500 the Sharpe Ratio calculated over the same period in EUR is 0.96.





Type of document

This document represents an investment survey by the company Wealth Effect Management o.c.p., a.s., seat: Prievozska 4C, 821 09 Bratislava, ID No.: 51 127 113, registered in the Business Register of the District Court Bratislava I., Section: Sa, File No.: 6652/B, in accordance with § 73c and the related law no. 566/2001 Coll. of Laws on shares and investment services and amending certain other acts, as amended. This investment survey serves only for informative purposes and information provided in it is neither investment advice nor personal recommendation.

The investment strategy presented in this investment survey does not have to be suitable or appropriate for each client or a potential client, depending on their familiarity with and experience in the field of investment concerning the particular investment strategy, their financial situation, including ability to bear losses, and on their risk tolerance, and investment objective.





Risk warnings

Investment in financial tools included in the investment strategy presented in this investment survey is connected with risk. The investment value and the revenue from it can fall as well as rise and there is no guarantee of return of the originally invested sum. Profitability in the past is not a reliable indicator of future profitability. This document cannot be taken as an explanation of all risks connected with investment in the particular investment strategy and the related financial tools or with use of an investment service. All risks presented in this document can combine, which can result in a higher total risk connected with the particular investment. Due to the fact that the investor's property is invested in shares according to a particular investment strategy, the investment is subject to risks concerning share investment.

This document is property of the company Wealth Effect Management o.c.p., a.s. Any further use, reproduction, publishing, copying of this document or any of its part is subject to prior approval of the company.

