THE INVESTMENT POTENTIAL OF SILVER

Josef Novotný[a], Lukáš Kruml[b]

[a] University of Pardubice, Faculty of Economics and Administration, [b] University of Pardubice, Faculty of Economics and Administration

josef.novotny@upce.cz, lukas.kruml@seznam.cz

Keywords:
silver – commodity – investment – potential – price

Abstract:
Nowadays, there are many investment products on financial markets, where investors can invest their own or foreign sources. In terms of the final investment plan, it is the particular investor's decision as to what they will invest in and on which markets. One way of appreciating monetary funds is to invest on commodity markets i.e. in silver. The main objective of this paper is to highlight the investment potential silver offers to investors. The problem is that most retail investors prefer gold rather than silver because of ignorance of its wide application and use not only for investment purposes.

JEL classification: G10; G17

Introduction

Nowadays, it is recommended that the younger generation saves more for their retirement. One of the offered options for the appreciation of monetary funds is to invest on commodity markets, i.e. in silver. An investor can ensure a better standard of living by investing in this precious metal and its appreciation. The money obtained from this commodity can be used to maintain or improve the standard of living mainly of the elderly e.g. to pay for better healthcare, spa visits. Another option is unexpected situations in life where this investment can cover e.g. loss of revenue from being made unemployed.

The main problem that occurs with silver is the ignorance especially of new and small investors who are unaware of the investment possibilities that this precious metal offers. The aim of this paper is to highlight the investment potential for retail investors, who represent the majority of the investment public. One of the main advantages of this metal, which is appreciating in the long-term, is that it generates real value assets. Another advantage of investing in real assets is that the investor can envisage what there are investing in compared to e.g. shares that may be purchased in dematerialized form. And that is another advantage of investing in silver. It should also not be forgotten that silver is widely used in certain industrial sectors, where the metal is currently irreplaceable i.e. in the manufacture of electronics.

1. The theoretical basis

Commodities are necessary for the daily life of everyone, without them we cannot exist. Every citizen consumes commodities every day, e.g. sugar, coffee, milk, to meet their basic needs. Some are encountered indirectly or we are unaware that we need them to live. An example could be a car, its construction and operation without the use of commodities would be completely impossible e.g. platinum, which is used in the manufacture of catalytic converters in the automotive industry. The exhaustion or non-replacement of this commodity in the future could lead to the restriction or cessation of certain industries, in the event that it is impossible to find an adequate substitute. Another factor that affects the overall development of the prices of various commodities on the markets is their consumption by businesses and consumers, accompanied by the annual increase in the world's total population.

Therefore, it is not only silver, with its long history, which can be rightly regarded as one of the key and irreplaceable metals for mankind. This assertion is supported by the fact that it has been mined in Asia since 2500 years BC. Its main use was in the production of silver coins and this has persisted to date because some countries still use this precious metal as a currency that is still in circulation. (Shipman, 2007)

Commodities are usually divided in two main groups, i.e. renewable (soft) and non-renewable (hard). (Fabozzi et. al., 2008) The first group comprises those that can be annually replenished. These commodities are divided in two main groups, namely agricultural products and livestock. Agricultural products include e.g. cotton or timber and livestock can involve e.g. the beef trade. Non-renewable commodities can also be divided in two major subgroups i.e. energy commodities and metals. Energy commodities are represented by e.g. oil and coal and metals can be divided in precious, which includes silver and gold, and industrial, which comprises e.g. copper and lead. Nesnídal and Podhajský (2007) highlight the growing importance of commodity transactions in the future, regardless of their classification.

Silver is a non-renewable commodity and is very important for commodity markets. This is highlighted by its 4% representation in the overall Rogers International Commodity Index (RICI index), which includes a further 36 commodities including sugar, zinc, coffee, and wheat. The highest weight value in this index is for oil, which reaches 16%. The significance of this commodity for industry and world trade is demonstrated by its representation in the index focused on industrial metals i.e. Rogers International Commodity Index Metals. Here, its importance is increasing. The Index consists of the following metals: copper, aluminum, gold, lead, zinc, platinum, nickel, tin, palladium and silver. Here, the weight of silver is 15.94%, the same as for copper and aluminum. Gold has the highest percentage with a value reaching 19.92%. The other metals achieve lower values of less than 8%. This index clearly points to the fact

that silver is valuable and irreplaceable among other industrial commodities. (RICI, 2015)

The investment opportunities of silver can be divided in three areas. The first area consists of investing in silver bullion, and the second area consists of coins. According to Veselá (2007, p. 268), *"The most famous silver coins include the American Eagle Silver Dollar, the Australian Kookaburra, the Canadian Maple Leaf and the Mexican Libertad"*. These areas represent physical investment plans without the entitlement to dividends. However, it is also possible to invest in silver in paper form or in dematerialized form, which is greatly expanding these days with the growing importance of non-cash payments, which reduce the transaction costs related to printing e.g. derivatives, futures, stocks. The advantage of this form is that the investor can be entitled to dividends if they invest in shares of companies that are engaged in e.g. silver mining. The issue of dividends is dealt with by e.g. Lease et al. (1999), Sejkora, Duspiva (2015).

Investment in silver these days suggests that there may be a sharp appreciation in the future. The main reason is its undervalued price. Compared to gold, the ratio should be 15:1, which means that the silver should be fifteen times cheaper than gold. Currently, the ratio is 60:1; hence the price of silver is currently greatly underestimated in comparison with gold. On the markets there are 5 times less silver reserves than gold. (GoldenGate, 2015) From this statement alone it is clear what investment potential this industrial and investment commodity conceals.

Rogers (2008) warns when investing in industrial metal and copper that if an investor decides to invest in a particular commodity then they should consider its potential in terms of supply and demand. As with copper, an investor investing in silver should identify certain factors that may affect the price and analyse in detail the potential of the commodity in which the investor wants to invest. In the case of silver, the supply side should be assessed e.g. how are mining costs increasing, what are the current reserves, how big are the current deposits? On the demand side, the investor should analyze e.g. substitutability, the existence of substitutes, and extent of applicability in industry. Mexico was the largest silver producer in the world in 2014, followed by Peru and China with relatively high levels of extraction. (The Silver Institute, 2015)

2. Applied scientific methods

In terms of scientific methods, the main analysis used in this article was through a search of literature and Internet sources, which was supplemented by synthesis linking knowledge gained from the available resources. This was followed by a comparison made when assessing three investment alternatives investors have when investing in silver. Furthermore, the principle of logical thinking was applied, especially when evaluating these investment alternatives and during the application of the methods used.

3. Investing in silver

If an investor decides to invest in silver on the commodity markets and utilizes the available information and recommendations, then their investment could greatly appreciate in the future. We will assume that the investor has decided to invest in this precious metal in a physical form. Nevertheless, it should be remembered that an investment in precious metals generally appreciates in the long term, which is usually more than three years.

Of course, the moment of purchase and sale should be correctly timed. Current knowledge, which is based on new information on the financial markets, encourages this investment. In which case, an investment could be very successful if it is confirmed that silver is really heavily undervalued. The development of silver for one ounce in US dollars for the chosen time horizon of the first eight months of 2015 is shown in Table 1.

TAB. 1: Monthly price of silver for 2015 in USD

Month	High	Low	Average
August	15.55	**14.27**	14.94
July	15.64	14.49	15.07
June	16.70	15.70	16.10
May	17.70	16.17	16.80
April	16.86	15.83	16.32
March	17.14	15.47	16.22
February	17.59	16.20	16.84
January	**18.23**	15.71	**17.10**

Source: The Silver Institute (2015)

In the event that in the future there will be a reduction in the ratio between gold and silver to a ratio of 15:1 as recommended by the experts, then the investor's investment silver would appreciate at least fourfold, because it is currently at a ratio with gold of 60:1. Investors who invested in the silver in the given duration according to the information included in Table 1 would generate profits based on the recommendations of experts. Again, the timing of the purchase is important because the rate of this commodity may begin to increase until it reaches the desired ratio to gold.

We will assume that the fourfold increase in the price of silver will begin from the highest average values shown in Table 1, i.e. 17.10 USD per ounce. Then, the following three situations may occur: an investor buys one ounce of silver at the average rate of 17.10, a lower than the average rate e.g. 14.27 or a higher than average rate e.g. 18.23, which is the highest rate stated in the table. The three investment options can be expressed mathematically to determine the expected gross return in monetary units and percentages as follows:

Alternative I

$$FV = P_A \times 4 = 17{,}10 \times 4 = 68{,}4\ USD/unce \quad (1)$$

$$Rb = P_1 - P_A = 68{,}4 - 17{,}10 = 51{,}3\ USD/unce \quad (2)$$

$$r_b = \frac{P_1 - P_A}{P_A} \times 100 = \frac{68{,}4 - 17{,}10}{17{,}10} \times 100 = 300\ \% \quad (3)$$

FV – future value,

Rb – gross return in monetary units,

r_b – gross return in percentage,

P_A – average price, for which the commodity was purchased,

4 – the expected fourfold increase in price,

P_1 – sale, where we assume that the investor sells an ounce of silver after reaching the fourfold appreciation,

Alternative II

$$Rb = P_A \times 4 - L_A + (P_A - L_A) = 17{,}10 \times 4 - 14{,}27 + (17{,}10 - 14{,}27) = 56{,}96\ USD/unce \quad (4)$$

$$r_b = \frac{P_1 - L_A}{L_A} \times 100 = \frac{68{,}4 - 14{,}27}{14{,}27} \times 100 = 379{,}33\ \% \quad (5)$$

L_A – below-average price at which the commodity was purchased,

Alternative III

$$Rb = P_A \times 4 - H_A + (P_A - H_A) = 17{,}10 \times 4 - 18{,}23 + (17{,}10 - 18{,}23) = 49{,}04\ USD/unce \quad (6)$$

$$r_b = \frac{P_1 - H_A}{H_A} \times 100 = \frac{68{,}4 - 18{,}23}{18{,}23} \times 100 = 275{,}21\ \% \quad (7)$$

H_A – above-average price at which the commodity was purchased.

For all three alternatives, the investor sees a positive gross return. It also shows how important correct timing of the investment is for the purchase of the commodity in question, since each of the alternatives show different results in the achieved gross

return. In practice, it will depend on the price from which the projected fourfold increase in silver will begin.

4. Discussion

As with all investments, silver is not without its risks. One such risk is when the recommended ratio to gold, i.e. 15: 1 is reached. This may be within a time horizon of five, ten or fifteen years. An investor who chooses to invest in this commodity will have to be very patient in order for their investment to appreciate fourfold and more. If an investor decides to invest in silver bullion and coins, then they must have sufficient space for their storage. This storage service is offered by professional firms but for a fee, which can greatly increase a retail investor's costs or directly discourage them from this type of investment. The intention to invest in silver can also be dampened by the current existence of a tax burden. In the Czech Republic, a physical purchase and sale of commodities is burdened by VAT, unlike gold, which is exempt from such tax. Retail investors in particular must be familiar with the terms of VAT and also with income tax because the return on investment in silver could be considerably reduced.

On the other hand, the future predictions of experts of the appreciation of silver are very positive. Some estimates from analysts even speak of a 100-fold increase in prices over the next 10 to 15 years. Silver is currently considered to be the best investment. (GoldenGate, 2015)

Conclusion

In today's globalized world, there are frequent changes on financial markets. Some events are very difficult to estimate due to globalization processes, and this has an impact on the investment behaviour of investors. One of the ways investors can appreciate their own or foreign sources is to invest in silver on the commodity markets. Expert recommendations on this issue also support investment in this precious and industrial metal. Investing in this metal has a range of indisputable characteristics and benefits for investors, which include e.g. it being irreplaceable in industry as well as it being the most undervalued metal.

Of course, it is still true that investors should diversify their investment portfolio. Therefore, it is certainly not recommended that an investor invests all of their available cash resources in only one commodity. This would mean that the investor would become too dependent on one investment, which is highly risky. As with any other investment, silver has an assumption of risk that may arise in the future, e.g. the discovery of new deposits, being replaced by another substitute in industry and the tax burden. Due to the fact that silver is a long-term investment, the question is whether the current tax laws will still apply in five to ten years.

Acknowledgement:
This paper was created within the project SGSFES_2015001.

References:

Books

Fabozzi, J. F., Füss, R., & Kaiser, G. D. (2008). *The Handbook of Commodity Investing.* 1st ed. New Jersey: John Wiley & Sons.

Lease, R. C., John, K., Kalay, A., Loewenstein, U., & Sarig, O. H. (1999). *Dividend Policy: Its Impact on Firm Valu*e. Oxford University Press: OUP Catalogue.

Nesnídal, T., & Podhajský, P. (2007). *Obchodování na komoditních trzích průvodce spekulanta.* Praha: Grada Publishing.

Rogers, J. (2008). *Žhavé komodity jak může kdokoliv investovat se ziskem na světových trzích.* Praha: Grada Publishing.

Shipman, M. (2007). *Komodity jak investovat a vydělat.* Brno: Computer Press.

Veselá, J. (2007). *Investování na kapitálových trzích.* Praha: ASPI.

Article

Sejkora, F., & Duspiva, P. (2015). *The Position of Management of Czech Joint-Stock Companies on Dividend Policy*. 18 (2), 73-88. dx.doi.org/10.15240/tul/001/2015-2-006

Other sources

GoldenGate (2015) *Stříbro nejlepší investice této dekády*. Retrieved March 31, 2015 from: http://www.goldengate.cz/stribro-nejlepsi-investice-teto-dekady/

RICI index (2015) *Rogers International Commodity Index.* Retrieved September 29, 2015 from: http://www.rogersrawmaterials.com/weight.asp

The Silver Institute (2015) *Silver production.* Retrieved September 28, 2015 from: https://www.silverinstitute.org/site/supply-demand/silver-production/

Ing. Josef Novotný, Ph.D.
University of Pardubice, Faculty of Economics and Administration
Studentská 95
532 10 Pardubice
Czech Republic
Ing. Lukáš Kruml
University of Pardubice, Faculty of Economics and Administration
Studentská 95
532 10 Pardubice
Czech Republic