IMPACT OF ECONOMIC CRISES OF THE XXI CENTURY ON INVESTMENT MARKETS: STOCK MARKET, VENTURE, REAL ESTATE MARKET, GOLD AND DIAMOND MARKET

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Abstract

Investment market is a set of economic relations between the provider and the recipient of investment services. In modern realities, investments play an important role for both small and large investors. Market participants invest money to generate income or preserve capital. This article examines the impact of economic crises on the investment attractiveness of various financial markets: diamonds, venture capital, gold, real estate, and securities. The objective of the article is to look into possible reasons for changes in the value of assets depending on the stage of the economic cycle. The main conclusion that can be drawn is that amid maximum uncertainty, investors opt for more stable and safer assets. Therefore, the value of these assets surges during periods of crisis and then gradually slides or remains flat. Moreover, it should be noted that each of the financial markets has its own unique features. Portfolio diversification allows investors to preserve and slightly increase financial capital regardless of the volatility typical of all the financial markets.

Keywords

Economic crisis, investments, stock market, real estate market, gold, USA, UK, stock exchanges, share, bond, diamonds, financial markets.

INTRODUCTION

Every 5-10 years, society has faced economic crises caused by various factors: external (which do not depend on the decisions of the authorities, such as natural phenomena) and internal (risky decisions regarding the development of banks and financial institutions, inept financial and economic policy, etc.). The globalization of economic relations in the 21st century has created the conditions for national and regional crises to often spill over the borders of one country, thereby provoking a general deterioration in the economic situation throughout the world. The digitalization of data has influenced the structure and principles of the investment business operation: back in the 20th century, the world's first electronic stock exchange, NASDAQ, was established, auction houses began to offer online auctions, price quoting for diamonds and gold is available in real-time, and the information on most real estates is publicly available. In this regard, the economic crises of the 21st century are radically different from those that occurred before.

To correctly manage financial capital, it is necessary to see a broader picture, to understand the patterns and trends characteristic of various financial markets at all stages of the economic cycle (expansion, peak, recession, depression). Indicators, ratios, data in the reports of states and organizations, information noise, as well as the behavior of investors themselves serve as signs indicating an emerging crisis. This happens because the internal and external causes of a global or local economic crisis do not develop immediately, but accumulate, dragging the country into depression, recession, and destabilization.

The investment market has a complex, multi-layered structure. It includes six main financial markets: venture business, real estate, diamonds and gold, stock market, and art business (investing in art, antiques).

This article examines the impact of economic crises on the stock market, the commercial real estate and housing market, as well as the diamond, venture, and gold markets, which was done for several reasons:

1. These financial markets are considered one of the most developed in the world; they have high liquidity and a well-established ecosystem (organized exchanges and online trading, a functioning secondary market for the sale of assets).
2. Information on them is reliable and publicly available.
3. Government agencies and bodies effectively regulate the activities of professional participants on these financial markets, ensuring transparency and legality of operation.

This article is based on various sources of information: textbooks, Internet resources, financial statements of investment companies and banks. The topic of the article is relevant and in demand for all the participants in the financial world.

TRENDS ON INVESTMENT MARKETS DURING THE CRISIS

The investment market is a certain set of economic relations between the seller and the recipient of investment services. They are built on the principles of free competition and partnerships between entities engaged in investment activities. The market monitors legal relations between entities to ensure their compliance with internal rules and law, thereby ensuring the security of transactions. The investment market creates liquidity for assets, which allows holders to quickly receive money for them by completing purchase and sale transactions at the current value.

Since the economy is cyclical, investor interest in various financial markets also varies depending on what phase it is at.

If we talk about the choice of investors amid maximum uncertainty, then in this case, the preference is given to more stable and safer assets. Investors try to minimize or completely eliminate credit and inflation risks.

When compiling a portfolio on the stock market, the emphasis shifts towards stock of the most stable companies. As an example, we can take the securities included in the S&P 500 and Dow Jones Index. The data released by the largest stock exchanges in the United States (NYSE and NASDAQ) and the London Stock Exchange (LSE) reflect the most accurate picture of the stock market at various stages of the crisis. If we talk about debt securities, they enable an investor to diversify portfolio. A bond (state, corporate, or municipal) is a security that certifies the right of its holder to receive the bond nominal value back from the issuing company of this bond after a certain period of time, as well as interest (coupon) payments. In this case, the holder of the security is a creditor of the issuing company. Bonds are traditionally treated as financial instruments with fixed income, since the yield is known in advance and does not change in the vast majority of cases. It should also be noted that there are debt securities linked to some macro indicator or other financial asset. An example would be Treasury securities TIPS. These are inflation protected bonds. Debt securities that have 1-2 months left to maturity are considered the safest (compared to longer maturity from the same issuer). In some cases, they can even trade with negative yields and at a premium to par. An important indicator for analysis is the yield on government securities issued by the US Treasury Department. This happens because an investor, when choosing an asset to purchase, pays attention to it. Moreover, other securities on the stock market depend on this indicator. In Figure 1, we can see a graph of the yield curve for debt securities issued by the US Treasury [1].

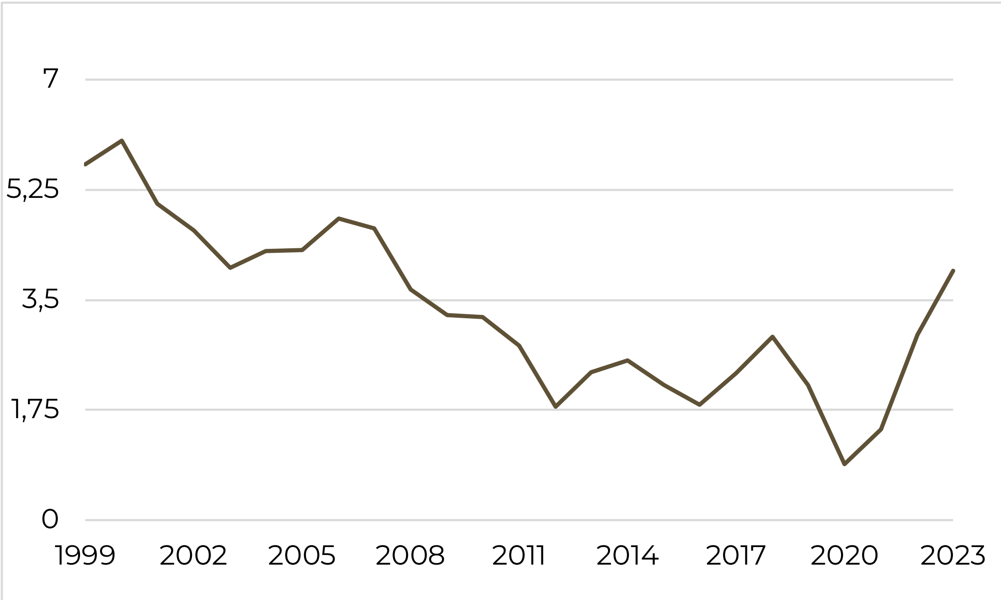


Fig. 1. Yield curve for debt securities issued by the US Treasury, %.
Source: Macrotrends. 10 Year Treasury Rate – 54 Year Historical Chart. Available at: https://www.macrotrends.net/2016/10-year-treasury-bond-rate-yield-chart (accessed 28 December 2023).

The investment climate in the United States greatly impacts the global economy as a whole. This happens for many reasons, one of which is the development of the stock market in this country. In 2023, US stock markets accounted for nearly 60% of global trading. The next country by stock market share was Japan, followed by the UK [2]. If we look at the stock market capitalization as a percentage of GDP in Table 1, we can see that in the USA, this figure is quite high (193.35% - 2020; 137.64% - 2007; 147.38% - 2000). The UK is not in last place, but is inferior to the USA (102.187% - 2020; 124.36% - 2007; 154.68% - 2000). However, it is necessary to bear in mind that the UK economy accounts for a much smaller share of total GDP. That is why the economic crises that occur in the United States, to a greater or lesser extent, affect the situation in the entire global financial sector [3].

Table 1

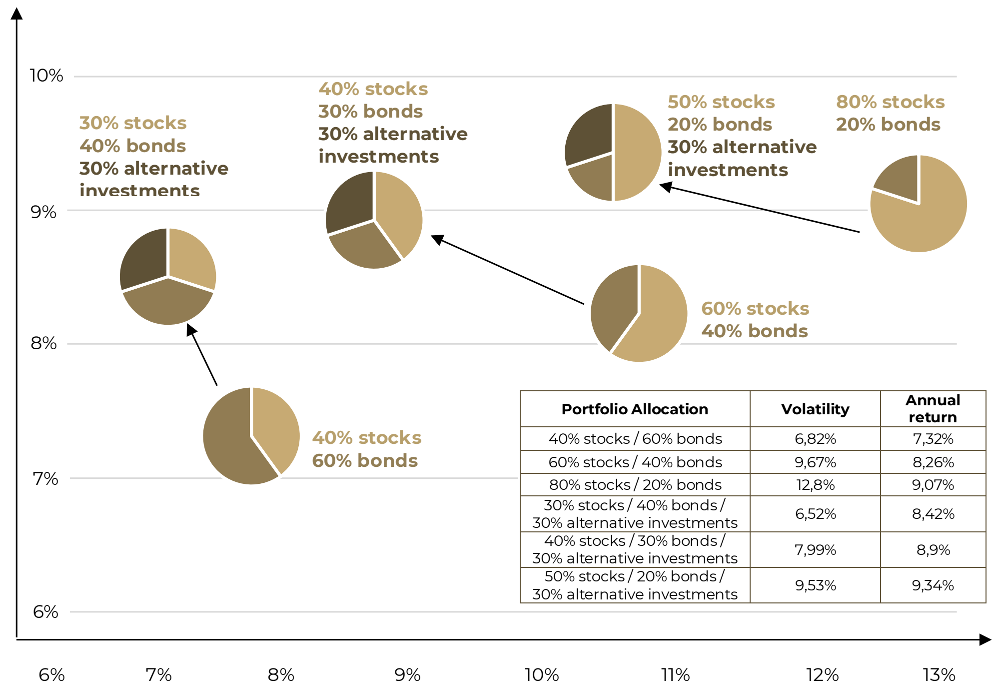
Stock market capitalization, % of GDP

2000		2007		2020	
Hong Kong	363,14	Hong Kong	1254,47	Hong Kong	1777,23
Switzerland	283,77	Luxembourg	321,94	Iran	508,22
Luxembourg	160,23	Singapore	160,23	Saudi Arabia	330,82
Singapore	159,07	Switzerland	259,73	South Africa	311,45
Great Britain	154,68	South Africa	248,65	Switzerland	270,52
Netherlands	153,41	Jordan	238,68	USA	193,35
USA	147,38	Malaysia	168,07	Singapore	187,32
South Africa	134,63	India	161,24	Canada	160,32
Sweden	124,92	Australia	151,95	Japan	133,07
Malaysia	120,65	Canada	148,86	The Republic of Korea	132,35
France	105,93	USA	137,64	Australia	129,66
Canada	103,5	Papua New Guinea	135,79	Malaysia	129,41
Australia	89,65	Israel	127,71	Qatar	114,53
Spain	84,27	China	126,15	Thailand	108,53
Ireland	81,71	Bahrain	124,66	Great Britain	102,19

Source: The Global Economy. Stock Market Capitalization. Available at: https://www.theglobaleconomy.com/rankings/stock_market_capitalization/#:~:text=Stock%20market%20capitalization%20as%20percent,available%20from%201975%20to%202020 (accessed 28 December 2023).

It is necessary to mention that the derivatives market even amid moderate volatility is unpredictable and investments in it incur enormous risks. In this regard, during the crisis the structure of the investment portfolio is radically revised. Investor preference shifts towards more predictable and less volatile stock market instruments.

Alternative investments are an integral part of diversifying financial capital. Looking at Figure 2, we can trace the relationship between volatility and return on investment depending on whether alternative investments is a part of the investment portfolio or not. If funds were invested only in securities in the ratio of 40% stocks and 60% bonds, then with a volatility of 6.82%, the return made up 7.32%. When alternative investments were added, volatility dropped to 6.52%, and returns reached 8.42%. By analogy, we can see a similar situation with other ratios. This chart shows that investing in real estate, private equity, or hedge funds along with traditional stocks and bonds can significantly reduce risk and increase returns [4].



Portfolio Allocation	Volatility	Annual return
40% stocks / 60% bonds	6,82%	7,32%
60% stocks / 40% bonds	9,67%	8,26%
80% stocks / 20% bonds	12,8%	9,07%
30% stocks / 40% bonds / 30% alternative investments	6,52%	8,42%
40% stocks / 30% bonds / 30% alternative investments	7,99%	8,9%
50% stocks / 20% bonds / 30% alternative investments	9,53%	9,34%

Fig. 2. Alternative investments and portfolio risk/return.
Source: J.P. Morgan Asset Management. Available at: https://am.jpmorgan.com/us/en/asset-management/adv/insights/market-insights/guide-to-the-markets/ (accessed 28 December 2023).

Alternative investments include those that do not fall into the mainstream categories of stocks, bonds, mutual funds, and ETFs (exchange-traded funds). These may include precious metals, modern and antique art, vintage cars, diamonds, unique vintage wines, rare coins, and much more. It should be mentioned that the value of these assets does not directly correlate with the value of stocks and bonds. This makes it possible to diversify an investment portfolio. Looking at Figure 3, we can see the dynamics of indices for various types of assets [5].

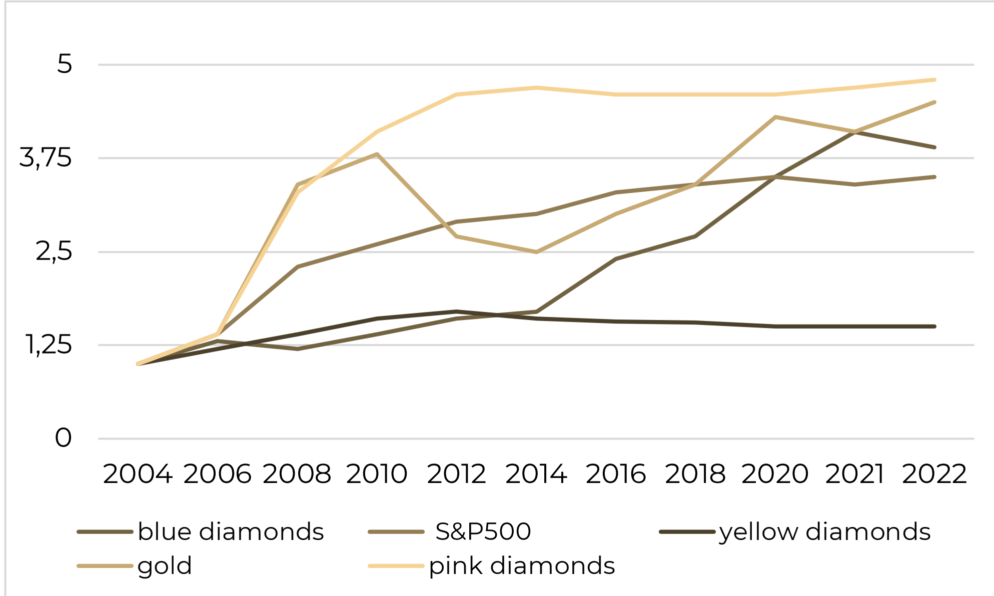


Fig. 3. Comparative dynamics of price indices for diamonds and other major investment assets, points.
Source: compiled by the author based on data from the ALROSA report "Investments in diamonds, November 2022". Available at: https://russianjeweller.ru/2/10/13693 (accessed 28 December 2023).

Investment diamonds are rare stones with the highest characteristics of color (D-E-F) and clarity (IF-VVS1-VVS2) [6]. The average weight starts with 1 carat and ends at 5 carats. Prices for gems of this size range from $50,000 to $150,000. Moreover, it is possible to purchase diamonds from 5 to 10 carats. They have less liquidity, but are still considered investment attractive and in demand among investors. Large diamonds are most often classified as collectible. The price for such diamonds can reach 600-700 thousand dollars [7]. It is also necessary to mention that the most marketable shape for colorless diamonds is round. It is considered the most expensive and attractive for investment. This is primarily due to the production process. To cut a diamond and make it round, almost half of the mass must be removed. It is believed that a classical round cut diamond with 57 facets best reflects light and fully reveals its beauty. For fancy cut stones, a larger proportion of the total weight of the diamond is reserved. This is why heart, oval, cushion, baguette, pear, marquise, princess, and emerald shaped diamonds are less commonly purchased as investments. Therefore, during the analysis, it is necessary to pay special attention to the economic indicators that are associated with the purchase of diamonds of the highest category. In case of colored diamonds, the most important criterion is the saturation of the shade and not the size. High-quality stones of fancy colors are much less common in nature than colorless ones. It is precisely because of their uniqueness that investors pay special attention to them. To summarize, there are only 8 main criteria that affect the price of a diamond: size, shape, color, clarity, cut quality, symmetry, polish, and the presence/absence of fluorescence.

Gold is considered a savings asset, which amid great uncertainty increases its attractiveness to the investment world. Moreover, compared to other assets, gold has shown a good return over the past 30 years, as can be seen in Figure 4 [8]. It should be noted that investment gold can be purchased in different forms: in the form of bars, antique coins, investment coins (sold by banks), and also in the form of a security on the stock market.

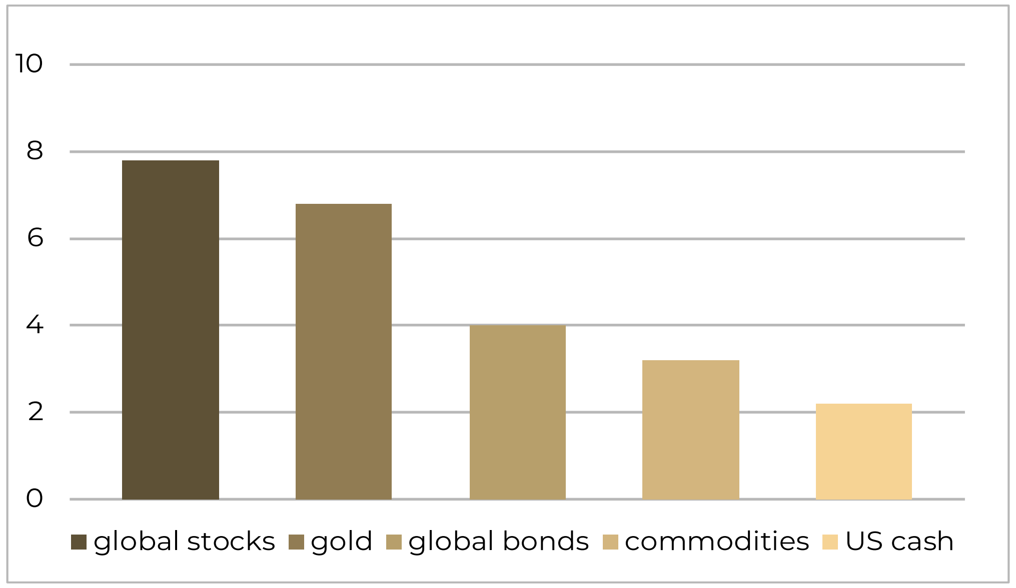


Fig. 4. Return on assets for the period from 31 December 1992 to 31 December 2022, % return.
Source: World Gold Council report "30 years of Gold Demand Trends". P. 6. Available at: https://www.gold.org/goldhub/research/30-years-gold-demand-trends (accessed 01 December 2023).

The official international price of gold, the fixing of LBMA gold price, is set by the London Bullion Market Association twice a day at auction with the participation of 13 accredited banks and organizations. The official price is calculated for bars with a rate of at least 995. The weight of the gold bar should be no less than 350 and no more than 430 ounces (10-13 kg). The bar should have the marking and serial number of one of the refineries that have proven themselves to be reliable suppliers. The LBMA gold price fixing is used all over the world. Therefore, the impact of economic crises on the gold market can be appropriately assessed using this indicator as a basis. It is worth mentioning that gold has high liquidity. The market value for private investment and government reserves exceeds $3.7 trillion. Moreover, gold is also used in industrial manufacturing. Figure 5 illustrates the distribution of gold across various economic sectors [9].

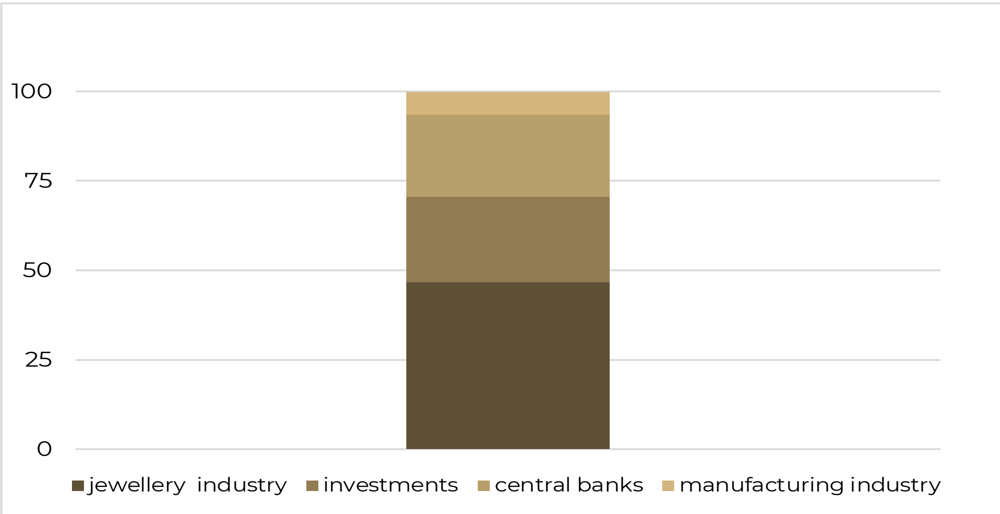


Fig. 5. Structure of global demand for gold by industry, %.
Source: Compiled by the author based on Bloomberg data. World Gold Council. Available at: https://www.gold.org/goldhub/research/30-years-gold-demand-trends (accessed 20 December 2023).

Investment in real estate is considered one of the most popular in the modern world. This is because the investor receives a fixed income at regular intervals by renting out the residential / commercial real estate. Moreover, the facility rises in intrinsic value over time. Looking at the chart below, we can see the negative impact of crises on the average return of real estate, as well as its market value [10].

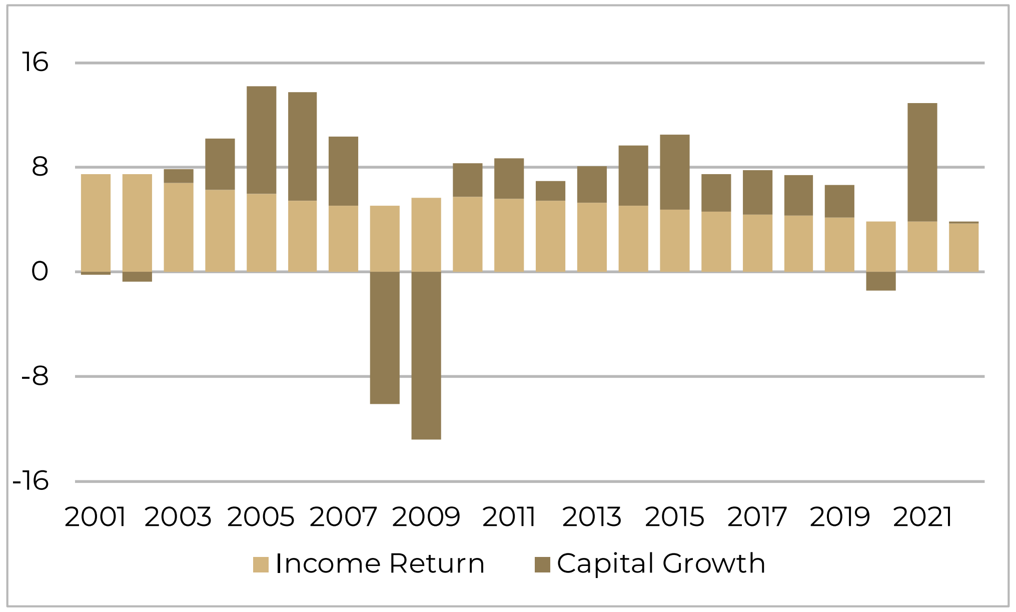


Fig. 6. World real estate index, %.
Source: Abrdn. Global Real Estate Outlook Q4 2023. Available at: https://www.abrdn.com/en-ie/institutional/insights-and-research/global-real-estate-outlook-q4-2023 (accessed 28 December 2023).

The real estate market largely depends on the reasons behind the economic crisis as well as on the government policy (cutting the key rate, providing financial aid to a certain cohort of the population, etc.). To understand how the financial market reacts to crisis situations, it is necessary to consider data from official sources. Every year, countries around the world publish statistics on the purchase of various types of real estate. All economic indicators related to this financial market are publicly available. When making decisions, investors consider market trends, global indicators, as well as real estate prices.

Based on the above, we can conclude that the situation on various financial markets changes depending on the stage of the economic cycle the world economy is at. The share of investment capital on the real estate, diamond, and gold markets is high. Therefore, investment attractiveness has a tangible impact on price quoting, growth, or decline trends on a particular financial market.

КРИЗИС ДОТКОМОВ

The very first of the economic crises of the 21st century was triggered by the rapid development of technology and the exorbitant desire of a large number of Internet startups and established companies to raise "easy" investment money, joining the trend of "new economy" business based on operation in the Internet.

The bubble began to inflate in 1995. By 1999, 39% of venture capital was invested in these types of companies [11]. Most of the analysts' forecasts regarding Internet startups turned out to be irrational optimism. Ultimately, the companies with hundreds of millions of dollars pumped in did not live up to investors' expectations. Many loss-making companies with an incomprehensible business model effected IPO and were unable to operate effectively and manage the raised capital. As a result, investor confidence not only in the securities of high-tech firms but also in the stock market as a whole was shaken. In 2000, the NASDAQ technology index collapsed. On March 10, it reached 5132.52 points (the daily peak) during trading and fell by more than 1.5 times at closing, which can be seen in Figure 7 [12].

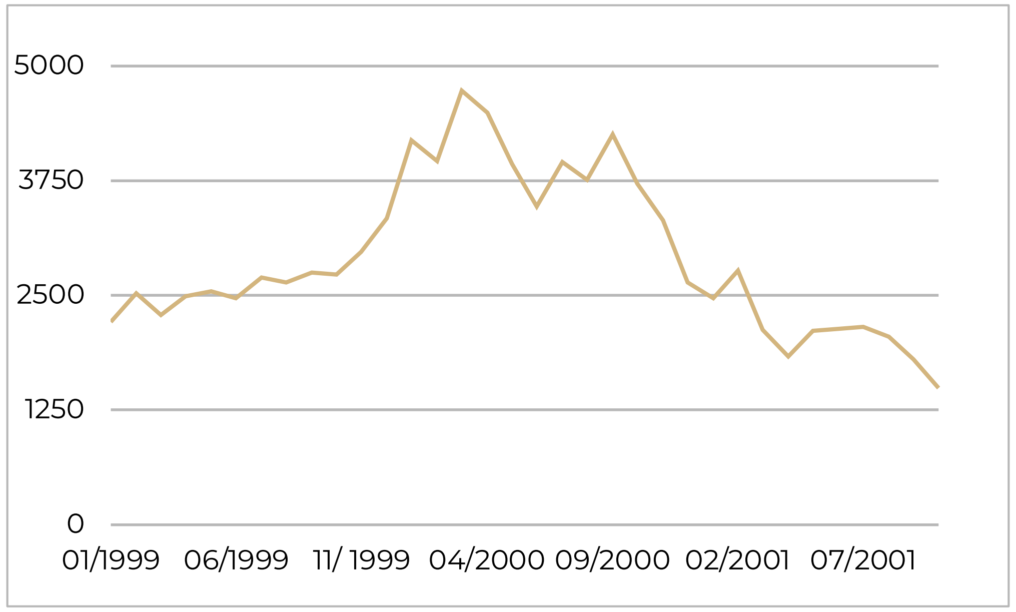


Fig. 7. NASDAQ index data, points.
Source: Yahoo website. Available at: https://yhoo.it/3ygw5v4 (accessed 26 December 2023).

Along with the fall of the index, the dot-com bubble burst. Due to the sharp deterioration of the situation on the stock market, a huge number of Internet startups went bust. Even the companies with established business suffered huge losses and found themselves on the verge of bankruptcy.

Global uncertainty raised financial markets volatility and made real tangible assets more attractive. Figure 8 shows that gold gradually began to rise in price after 2000 [13].

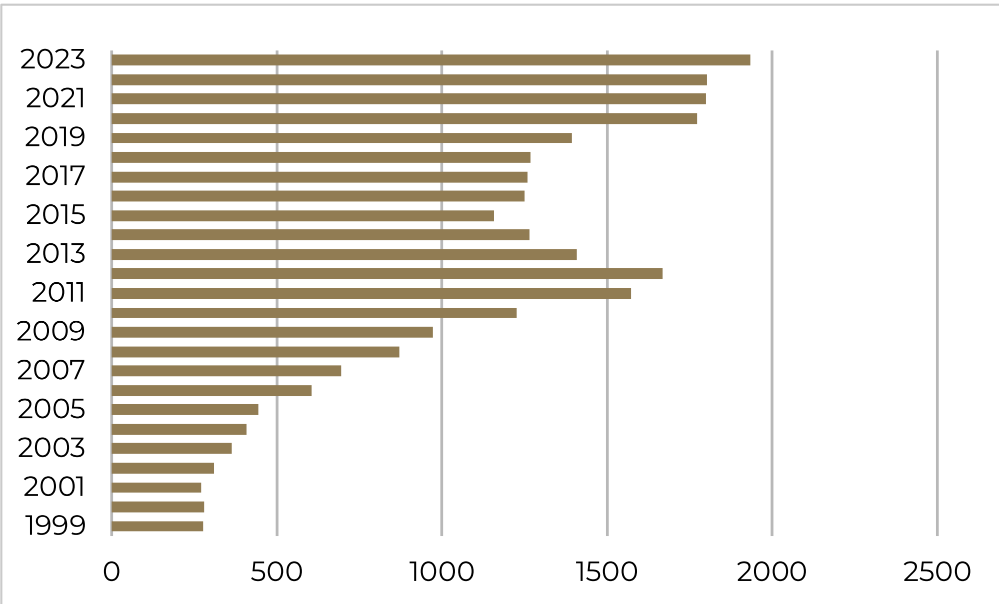


Fig. 8. Gold price from 1999 to 2023, US dollars.
Source: Macrotrends. Gold Prices - 100 Year Historical Chart. Available at: https://www.macrotrends.net/1333/historical-gold-prices-100-year-chart (accessed 28 December 2023).

The diamond market during the period when the dot-com crisis happened did not have the same investment attractiveness as in subsequent years. This was due to the strong (almost monopoly) power of the diamond mining company DeBeers. It controlled the process of selling diamonds, including the prices of stones. The supply of diamonds was artificially limited. The market liquidity was low, so it was less profitable for investors to invest in this type of asset than in subsequent years of the 21st century. However, diamond prices still gradually increased. Looking at Figure 9, we can see the dynamics over the ten-year period from 2000 to 2010 [14]. The price was taken for a 1-carat diamond with the following characteristics: EX EX EX, H&A, Super Ideal Cut, Flawless, Girdle thickness medium, Fluorescence none.

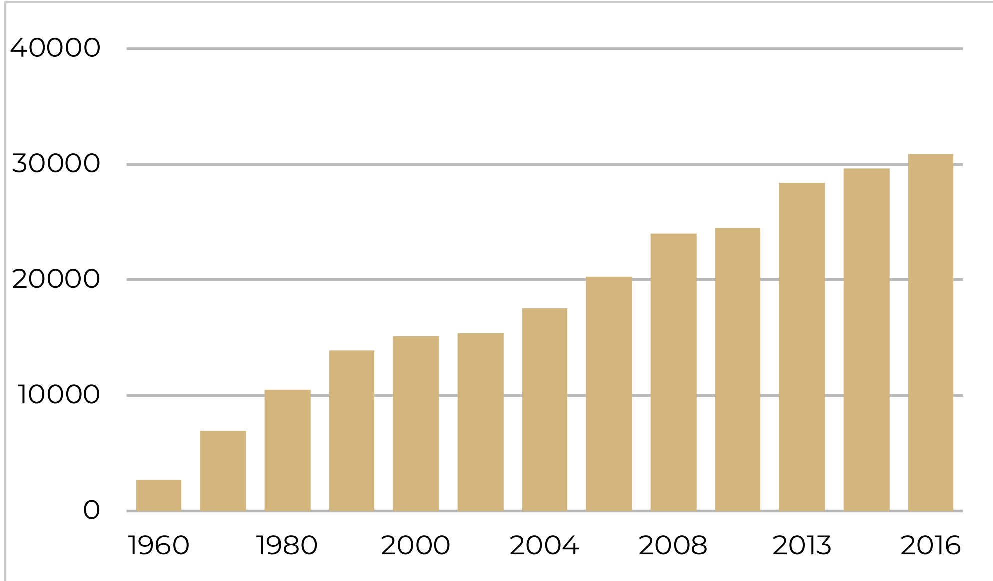


Fig. 9. Prices for 1 carat diamonds, US dollars.
Source: Statista. Diamond prices per carat from 1960 to 2016. Available at: https://www.statista.com/statistics/279053/worldwide-sales-of-polished-diamonds/ (accessed 21 December 2023).

This wave of investor "disappointment" has led to the real estate market becoming more attractive as an investment. Using the example of the USA and Great Britain, one can trace the main trends in the economies of developed countries, as can be seen in Figure 10 [15; 16]. Housing prices gradually rose until the 2007 crisis.

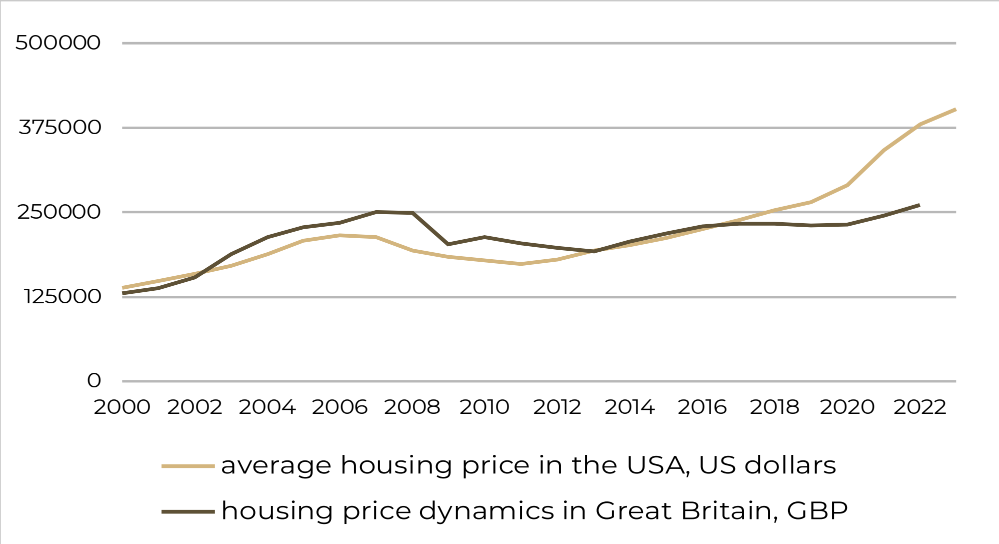


Fig. 10. Average housing price in the USA and UK.
Sources: compiled by the author based on data from DQYDJ. Available at: https///dqydj.com/historical-home-prices/ (accessed 28 December 2023);
Savills. Available at: https://www.savills.co.uk/landing-pages/a-brief-history-of-the-uk-housing-market-1952-2022.aspx (accessed 28 December 2023).

If we talk about commercial real estate, the situation is similar. Figure 11 shows the growth in returns on real estate investment in the UK. Even though the average return remains the same throughout all years (5-8%), the rise in asset capitalization accelerated significantly in the period from 2001 to 2006 [17].

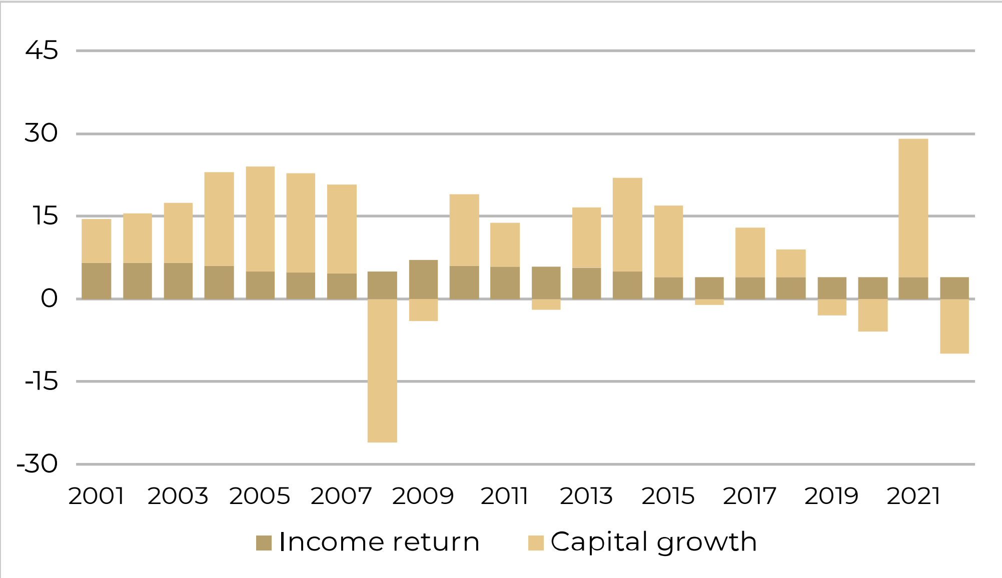


Fig. 11. Growth in return on investment in UK commercial real estate, %.
Source: MSCI. Industrial and Offices Led UK Property's Fall in 2022. Available at: https://www.msci.com/www/quick-take/industrial-and-offices-led-uk/03701428858 (accessed 26 December 2023).

The 2000 crisis had a less detrimental impact on the global economy as a whole than subsequent crises of the 21st century, but became one of the reasons behind a financial bubble on the real estate market.

MORTGAGE CRISIS 2007-2009

The global economic crisis, which was later dubbed the Great Recession, started with the mortgage crisis in the United States in 2007. The excess inflow of finance into the real estate sector after the dot-com crash led to a rise in housing prices (Figure 10). For more than 7 years, the real estate market demonstrated positive dynamics. Looking at the Consumer Price Index (CPPI) in Figure 12, we can see an upward trend. This index contains information on housing, industrial real estate, office real estate, and commercial real estate sectors in the United States. The period from 2000 to 2007 experienced rapid growth (from 53 to 99 points) [18].

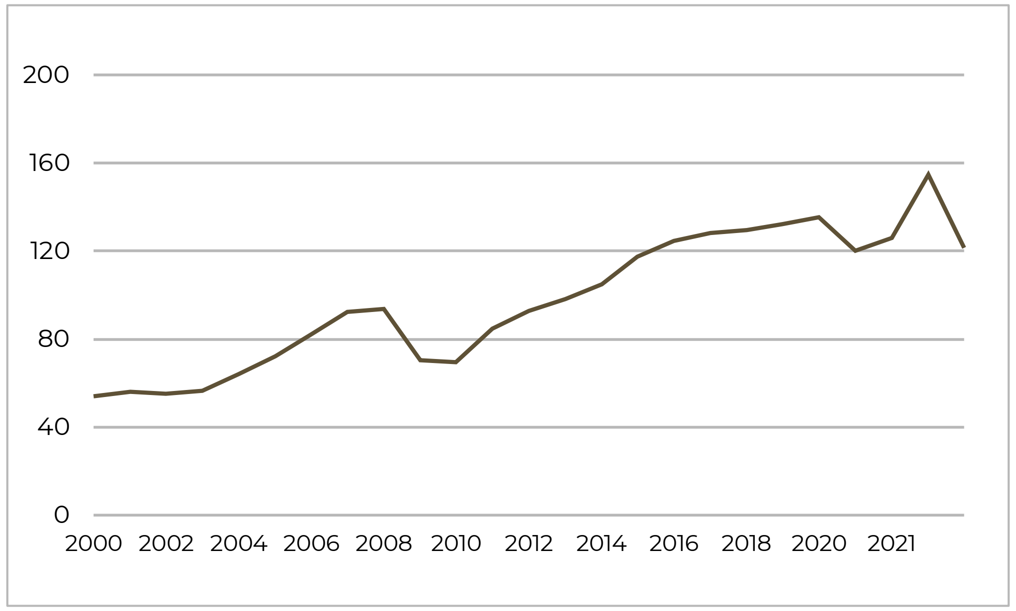


Fig. 12. US Commercial Real Estate Index - CPPI, points.
Source: Green Street. Property Prices Decline on Higher Rates. Available at: https://www.greenstreet.com/insights/CPPI (accessed 25 December 2023).

This trend led to the faulty assumption that real estate value would always grow. People willingly took out mortgages on several houses at once, without thinking about how they would pay them back if the rental property was idle or if the price of the "asset" fell. In view of the financial illiteracy of the population and the desire of banks to ensure the biggest income, loans with a floating interest rate, which were called substandard, began to be popularized in society. They were offered to those who were not eligible for loans that complied with the standards of government mortgage agencies such as the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Federal National Mortgage Association (Fannie Mae). These loans were high-risk due to the likelihood of default. Looking at Figure 13, we can see that people with the highest levels of wealth took out a mortgage to purchase a property, but the loan share to the total cost made up approximately 20%. The poorest population, on the contrary, could afford to buy a house or an apartment with a mortgage that covered 70-80% of the cost of the real estate [19].

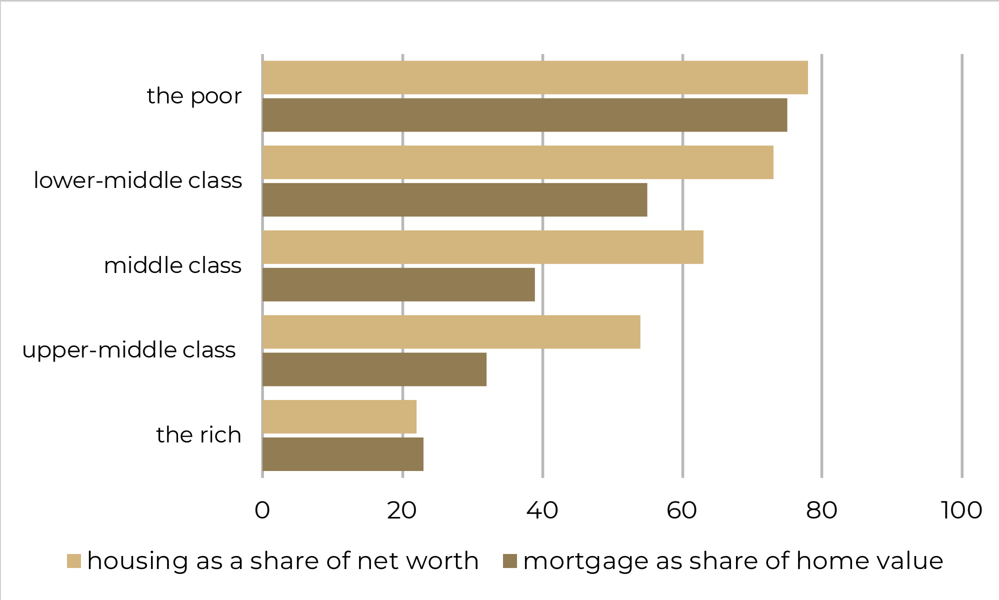


Fig. 13. The share of real estate from a person's total wealth and the share of the loan taken out to purchase this real estate. (Wealth Tied Up in Housing And Debt by net-worth quintile in 2007)
Source: Five Thirty Eight. Why the Housing Bubble Tanked the Economy And the Tech Bubble Didn't. Available at: https://fivethirtyeight.com/features/why-the-housing-bubble-tanked-the-economy-and-the-tech-bubble-didnt/ (accessed 28 December 2023).

In 2002, subprime loans accounted for only 6% of the total amount of loans and already in 2006, they reached 20%. This was caused by investment banks actively selling securities that transferred financial risks to investors. Junk bonds included both high-quality loans and high-risk ones that were hidden inside an investment product. In this regard, major rating agencies assigned fairly high ratings to mortgage bonds based on substandard mortgages. This helped to inflate the bubble.

The global food crisis of 2007 caused a rise in consumer food prices. Prices for oil, gas, power, gasoline, diesel fuel, and utilities surged sharply. This resulted in many low-income families being unable to make monthly fixed interest payments on their mortgages. By May 2008, it had affected almost 6% of American households. House prices fell by almost 15% in just a year (Figure 10), and their resale could not reimburse banks for the amount of primary mortgages. Moreover, buyers' credit checks became more rigorous at the resale stage, causing much lower demand for these houses.

The fall in real estate prices led to the situation when the real cost of a house or an apartment no longer covered existing debt obligations. The number of private defaults rose. For instance, in March 2007, overdue loans (for a period of more than 30 days) of the largest lender Countrywide amounted to 19%. It was the borrowers with mortgages taken out in 2004-2007 who, in most cases, were unable to clear their liabilities.

Therefore, large banks specializing in mortgage lending, as well as insurance companies, found themselves on the verge of bankruptcy. The US government could not allow the collapse of the entire financial system, so in September 2008, it allocated $700 billion of financial aid to save them. Unforeseen spending forced the US Federal Reserve to print dollars, causing high inflation (Figure 14) [20].

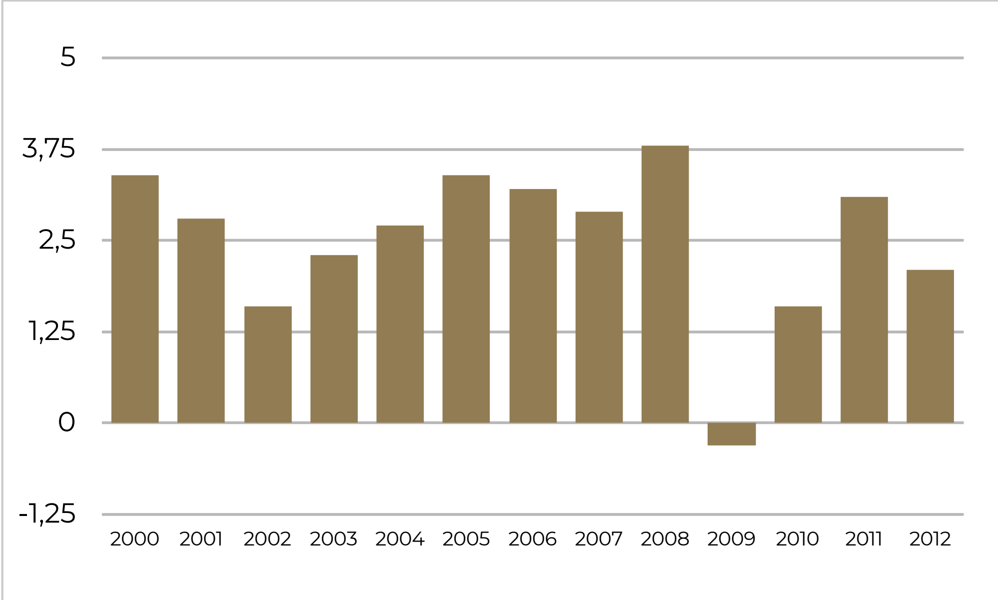


Fig. 14. Inflation in the USA, %.
Source: Macrotrends. Available at: https://www.macrotrends.net/countries/USA/united-states/inflation-rate-cpi (accessed 28 December 2023).

According to the World Bank, the decline in GDP at purchasing power parity in developed countries reached 3.4% in 2009, while GDP growth in emerging economies slowed sharply to 2.8% (from 5.8% in 2008) [21]. The full-scale crisis in the United States officially lasted from December 2007 to June 2009 (18 months). The mortgage crisis affected more than 20 economies around the world.

The value of the US stock market fell by almost a quarter from June 2007 to November 2008. It is important to note that by early November 2008, the S&P 500 stock index [22] had fallen by more than 40% compared to the record highs of 2007. In mid-2008, investment and savings (excluding pension savings) fell by $1.2 trillion.

It is necessary to consider the CBOE Volatility Index (VIX) in Figure 15. A period of low volatility is considered to be when the index is at a level of 12 or below, and a period of high volatility is considered to be above 20. If the VIX is at 30, then we can conclude that there is a crisis situation on the financial market, and investors are very worried [23].

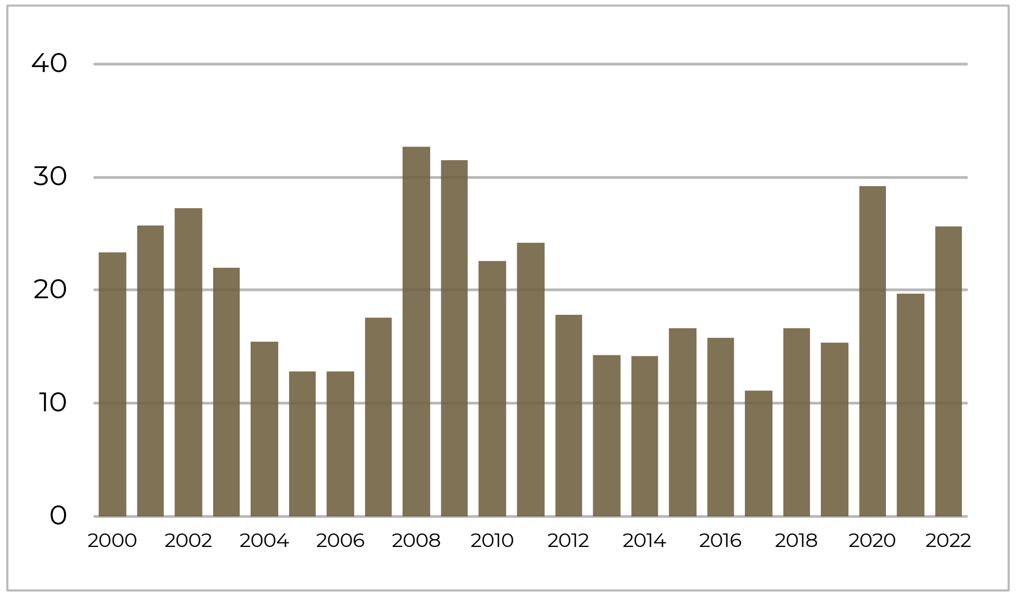


Fig. 15. Volatility Index (VIX), points.
Source: compiled by the author based on data from the Yahoo website. Available at: https://yhoo.it/3pSD1wO (accessed 28 December 2023).

Due to high uncertainty on both the stock market (Figure 15) and the real estate market, investors' attention shifted to more stable and reliable types of assets. There was a revaluation of values, the hunger for super-profits faded away as the primary objective at that time was the preservation of savings.

Gold price (Figure 8) showed a tangible rise. If in 2006 this asset price made up $604.34 per ounce, then in 2009, the price reached $973.66 per ounce. Almost 40% over several years is a considerable difference for this investment asset.

Though prices for investment diamonds are less volatile than for gold, between 2007 and 2009, precious stones rose significantly in their market value (Figure 16) [24]. The dynamics of the price index for diamonds of 1 carat, 3 carats, and 5 carats reflects the general situation on the market. This happens because it is colorless diamonds with these characteristics that are most in demand.

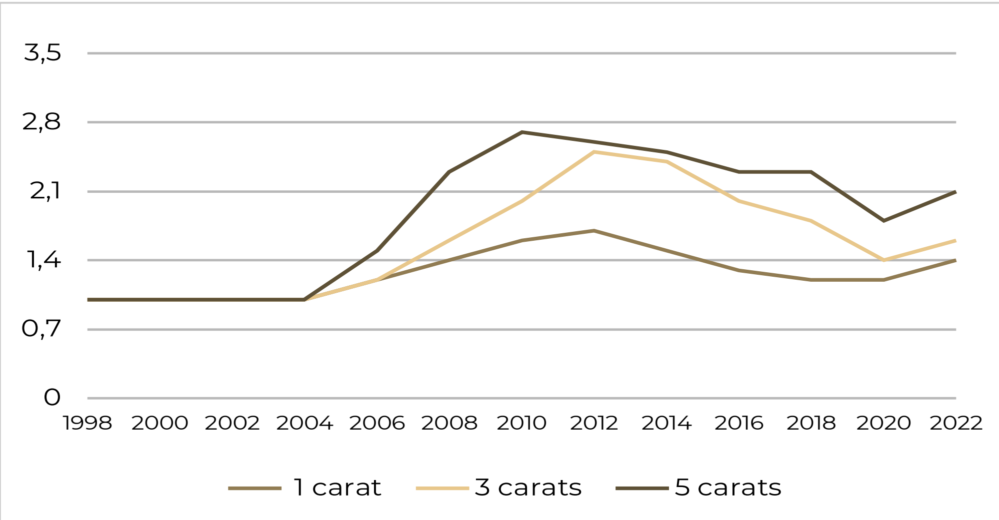


Fig. 16. Dynamics of the price index for colorless diamonds (D-IF) of various sizes (1 carat, 3 carats and 5 carats).
Source: compiled by the author based on data from the ALROSA report "Investing in Diamonds, November 2022". Available at: https://russianjeweller.ru/2/10/13693 (accessed 28 December 2023).

If we talk about fancy colored gemstones, then Figure 3 clearly shows the price dynamics for yellow, pink and blue diamonds. These gemstones are purchased by investors because of their rarity. Colored diamonds are much less common in nature than colorless diamonds. For this reason, their price is several times higher. Moreover, the depth of shade plays an important role when evaluating a stone. This factor is key when determining the price of fancy color diamonds.

The above allows us to conclude that the crisis on the mortgage market had a huge impact on both the US economy and the global economy as a whole.

PANDEMIC - COVID-19 CRISIS

One of the severest economic crises was caused by the Covid-19 pandemic in 2020. On January 30, the World Health Organization (WHO) declared the outbreak a public health emergency of international concern and began calling it a pandemic on 11 March 2020. The end date of the emergency can be considered May 2023.

Under these circumstances, small, medium, and large businesses radically changed their approach to the work process. Companies transferred employees to remote work and began to pay more attention to business development in the Internet. This had a positive impact on the stock prices of technology companies. For instance, Zoom became one of the most popular services for organizing video conferencing, although it had been previously little known and inferior to Skype in many respects. If we talk about offline business, the situation is radically different. Due to reduced supplies, high penalties for violating quarantine, and other measures taken to fight the virus, the activities of companies that require the physical presence of the customer and employees were almost brought to a standstill. Revenue and other performance indicators of firms declined sharply. This, in turn, had a negative impact on the stock prices of companies that do not provide Internet services and cannot transfer their business online.

The development of a particular sector of the economy was significantly influenced by state policies and the preferences created for business activities in certain areas. Since the 2020 crisis was caused by the disease outbreak, the healthcare sector enjoyed huge funding from both investors and the government. Stocks of companies developing a vaccine showed significant gains. Examples include Pfizer, Johnson & Johnson, and Moderna.

This dissonance impacted the stock market. Throughout 2020-2021, it showed high volatility. This can be seen by looking at the rates of the S&P 500 and DJIA [25]. It is worth noting that the S&P 500 Index includes the largest companies by capitalization on the US markets from various sectors. Dow Jones Industrial Average is a stock index and a special numerical indicator of the stock exchange, showing the situation in the industrial sector of the economy.

Figure 15 shows a strong jump in investor anxiety. The VIX index reached a value of almost 30 points. An indicator at this level indicates a crisis situation. If in 2019 this indicator was at 15.39, then in 2020 the gauge almost doubled. Based on the above, we can conclude that the stock market in the period from 2020 to 2021 not only quickly recovered from the initial crash but also reached new highs.

It should be noted that such a rebound in securities value and indices on the stock market was provoked by the policies of states that allocated trillions of dollars to provide financial aid. Regardless of the negative sentiment in the world economy, the influx of liquidity caused a rally in the stock market.

Yields and bond prices move in different directions. When the price falls, the yield rises. Since a decline in bond prices often occurs when investors dump them to invest in stocks, a rise in bond yields on the market often constitutes a signal for the beginning of a bullish sentiment (active purchases) on the stock market. It is necessary to look at the yield curve of government securities issued by the US Treasury in Figure 1. After the start of the pandemic, the yield rose sharply. If in 2020 this reading was 0.89%, then in 2021 the yield made up 1.45%. In 2022, we could see the figure at 2.95% and in 2023, already 3.96%.

Periods of low bond yields, as a rule, indicate investors' concern and their reluctance to invest money in the high-risk stock market. High demand for bonds pushes their prices up and yields decline. It is also necessary to mention that the investment attractiveness of bonds depends on the key rate and the dynamics of its changes. If we compare the information from Table 2, this will become obvious [26].

Table 2

Key rate in the USA by year, %

Year	Average yield, %
1999	4,97
2000	6,24
2001	3,88
2002	1,67
2003	1,13
2004	1,35
2005	3,22
2006	4,97
2007	5,02
2008	1,92
2009	0,16
2010	0,18
2011	0,1
2012	0,14
2013	0,11
2014	0,09
2015	0,13
2016	0,39
2017	1
2018	1,79
2019	2,16
2020	0,36
2021	0,08
2022	1,68
2023	4,92

Source: Macrotrends. Federal Funds Rate - 62 Year Historical Chart. Available at: https://www.macrotrends.net/2015/fed-funds-rate-historical-chart (accessed 28 December 2023).

The Federal Reserve and central banks around the world cut interest rates during the pandemic in an effort to boost economy during the recession. This led to a fall in bond yields and a rise in their prices.

Uncertainty in the world economy contributed to rising gold prices. This is clearly visible in Figure 8. The price per ounce in 2019 was $1,393 and in 2020, it rose to $1,773. In January 2020, the world faced the disease outbreak, and no one realized how much the crisis would change developed and emerging economies. In March, the situation with the virus worsened. On the 11th, the outbreak was declared a pandemic by the WHO, and the price of gold made up $1,987.96. If we talk about them in more detail, the price of gold in July 2020 reached its decade high ($2,336.44). For comparison, in 2011, at its peak (in August), gold cost $2,472.88. In 2021 and 2022, there was no such rapid growth for this asset.

Rising inflation expectations amid global turbulence forced investors around the world to look at various types of alternative assets to protect capital and diversify their portfolios. One of these assets was investment diamonds. Their prices are characterized by the greatest stability and maintain confident positive dynamics in the long term. The small size of the market, which amounted to $10 billion a year (for comparison, the financial asset market is $100 trillion), allows the industry to protect itself from sharp price fluctuations. Should need arise, manufacturers can hold diamonds in storage. Therefore, at the beginning of the year, during the lockdown, prices for diamonds dropped by approximately 7%, but the drop turned out to be much less than for other commodities. Figure 16 shows that the price index for stones of 1 carat, 3 carats and 5 carats showed positive dynamics.

If we talk about the real estate market, then in this case, the rise in the price of country houses was caused largely by consumer demand due to measures to combat Covid-19. However, it is worth mentioning that investment capital also poured into this sector of the economy. For instance, the average price of housing in the United States gradually increased. In the UK, the price has also risen since 2020 (Figure 10). Commercial real estate suffered most due to the crisis caused by the pandemic. Figures 11 and 12 clearly show the decline in this sector in 2020. This is due to quarantine measures that did not allow enterprises and companies to operate as normal. This economic downturn has had a significant impact on the value of commercial real estate around the world. At first, it dropped and then there was a fairly sharp rebound.

The above allows us to conclude that depending on the reasons for the crisis situation, the investment attractiveness of an asset on a particular financial market may be different.

VENTURE

The investment attractiveness of the venture market always depends on the economic situation not only in the country where money is invested but throughout the world. In times of crisis, raising financial capital becomes a non-lucrative and complicated process for both investors and startups. Under crisis circumstances, a business may raise less investment than during times of active global economic growth. It is explained by the fact that investing in startups carries high risks that are not commensurate with the potential return. Moreover, amid increased uncertainty, investors tend to opt for more conservative instruments that show low volatility [27].

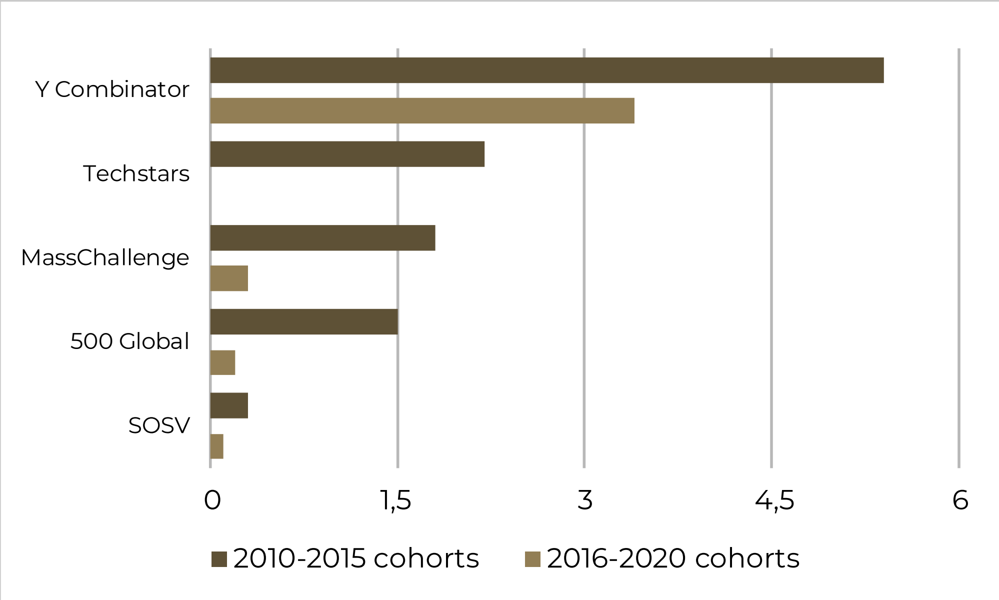


Fig. 17. Estimated percentage of startups that became unicorns, %.
Source: PitchBook's Quantifying the Success of YC and the Largest Accelerators. Available at: https://pitchbook.com/news/articles/y-combinator-accelerator-success-rate-unicorns (accessed 28 December 2023).

Investing in startups is considered high-risk. Experts estimate that 4.5% of startups that have gone through Y Combinator since 2010 have become billion-dollar companies; however, approximately 30% of venture-backed startups ultimately failed. In Figure 17, you can see the share of startups that became unicorn companies. The high return that the venture market can generate is only possible in rare cases. Thus, almost 9 out of 10 startups fail [28]. Almost 75% of venture businesses do not meet the expectations of investors (i.e. funds, business angels). In 30-40% of cases, the initially invested money not only bring no dividends but is completely lost. The startup spends it on its development (for instance, on the development of a medical drug or new IT technology), payroll, and other types of expenses.

Analyzing Crunchbase reports [29] from 2020 to mid-2022, we can see a gradual decline in this sector, which became one of the reasons for the bankruptcy of a large US bank, Silicon Valley Bank. The trend towards a reduction in investment in the venture business was triggered by investors' attempt, amid uncertainty, to minimize risks. Moreover, the cessation of state policies aimed at economic recovery had a negative impact on venture investments.

Reduced investment leads to a decline in gross domestic product (GDP). This argument is based on the idea that investment leads to an increase in the total output of goods and services. Looking at Figure 18, we can trace this trend during the crisis of 2000, 2007, and 2020 [30].

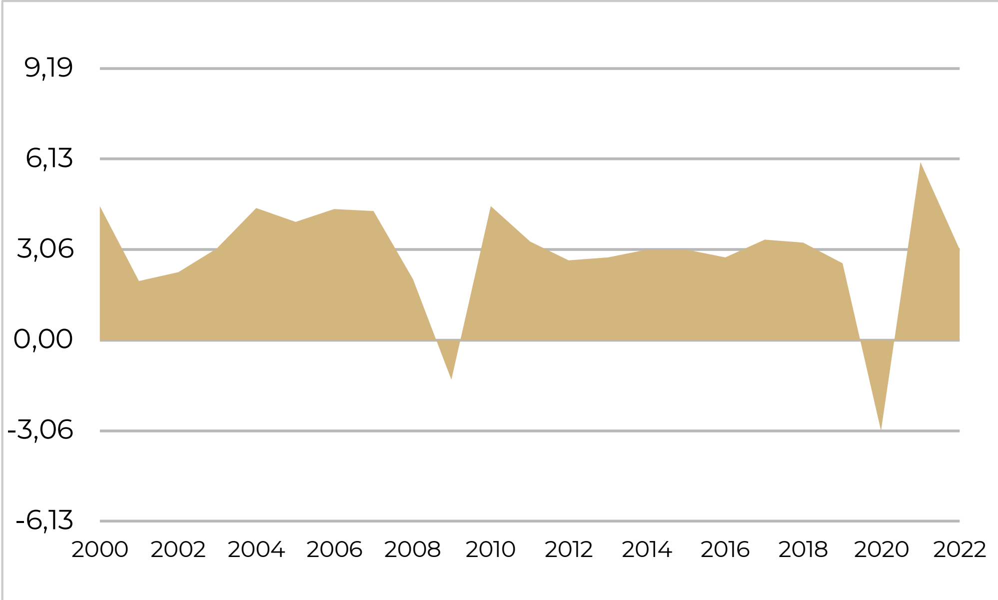


Fig. 18. World GDP growth rate, %.
Source: Macrotrends. World GDP Growth Rate 1961-2024. Available at: https://www.macrotrends.net/countries/WLD/world/gdp-growth-rate (accessed 28 December 2023).

It is worth mentioning that investment is the most volatile component of total spending, as it depends not only on interest rates but also on future economic consumption. Looking at Table 2, we can see the US key rate. It is believed that the venture market in this country is better developed than in the rest of the world. Table 3 can serve as proof of this assumption [31].

Table 3

Global national ecosystems ranked by VC investment, billion dollars

Country	2022	2021	2020	2019	2018
USA	245	364	175	156	149
China	61	84	61	65	108
Great Britain	31	41	17	18	12
India	25	43	15	17	13
France	16	14	6	6	5
South Korea	15	16	5	5	5
Germany	12	21	7	9	6
Canada	11	16	6	7	5
Israel	8	11	5	4	4
Singapore	8	8	4	5	6

Source: Dealroom. The State of Global VC by geography. Available at: https://dealroom.co/guides/global (accessed 28 December 2023).

That is why it is necessary to analyze the "investment attractiveness" of a venture business, relying primarily on the economic indicators of the USA and Great Britain.

It is necessary to consider the UK economy size with much smaller share of global GDP than the US. For instance, in 2000 the USA accounted for 30.66% of world GDP and the UK 4.98%, respectively. In 2007, the US share made up

25.03% and the UK - 5.35%, in 2020 - 25.06% and 3.22%, respectively. 2022 had a significant impact on all indicators. China took first place with almost 18%, and the United States - 13.5%. In 2022, the UK's share fell to 2%. However, the UK is actively attracting funds to the venture capital market. In Table 3, we can see that the USA ranks first among all countries for this indicator, and the UK is third. The amount of financial capital that flows into the sector varies from year to year.

Based on the above, we can conclude that crises have a negative impact on the venture business sector.

CONCLUSION

The stock market, under certain conditions, is volatile and high-risk. Under the influence of negative external circumstances, stocks can significantly change in their value by 70-400% if we talk about over-the-counter trading, the futures market, or IPO, and by 5-15% if we take into account the shares of large companies that are included in such indices as Dow Jones, S&P 500, Nasdaq 100, and others (blue chips). Bonds tend to be less volatile than stocks and often perform better than other financial assets during recessions. However, they also have their own risks, including default risk and interest rate risk. Thanks to digitalization, the stock market is open to investors from anywhere in the world. This contributes to chaos and uncertainty as thousands of external factors influence security prices. Moreover, both professional market participants (large international investment companies, hedge funds, funds of funds) and retail investors operate on this market, and each has their own strategy for managing financial capital.

As for gold bars or coins, this asset becomes attractive to investors amid high uncertainty. However, the purchase should not be made at the peak at the maximum price, but in advance, when stability sets in. Thus, when selling gold during times of highest demand, there is a high probability of making excess return.

The diamond market is less dependent on global crises at the initial stage, as it is more strongly controlled by large market players (diamond mining companies, jewelry brands). They keep prices at a certain level, preventing the fall in the price. Despite this, amid high volatility in the economy, there is a tendency for the value of diamonds to rise. This investment asset has high intrinsic value and is considered a savings asset.

The real estate market is more popular globally as investors better understand how it works. This financial market is less liquid and has higher commissions than the stock market. However, it is more accessible and open to people wishing to invest their money than the gems or antique market. Owning residential or commercial real estate minimizes the risk of asset theft, which is an advantage over when an investor buys diamonds, art, or antique coins. Real estate is classified as alternative investment.

It should be noted that each of the financial markets has its own unique features. Portfolio diversification allows preserving and slightly increasing financial capital amid uncertainty. Unfortunately, it is impossible to predict exactly how the situation will develop during each phase of the economic crisis. Many unrelated factors impact security prices and the price of real assets. Despite this, there is a trend of increasing demand for alternative investments amid instability. Investors are more likely to invest their own savings in low-risk instruments available on financial markets and that contain real value.

Economic crises have a tangible impact on the investment attractiveness of various financial markets and the dynamics of the world economic development.

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THE IMPACT OF DIVORCE ON WOMEN'S LABOR SUPPLY

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Abstract

Divorce brings changes to the parties' time use and economic conditions. In recent years, the divorce rates of urban and rural areas in China have continued to rise and caused many people to worry about the social stability and the welfare of women after divorce. This paper focuses on how divorce affects women's labor supply and wage income. Using data from the China Household Finance Survey 2013-2019, we find that divorce generally promotes the probability of women participating in market labor. This is also consistent with our understanding that divorce will cause most women's family income to decline significantly, thus they become more likely to participate in market labor to maintain their economic well-being. Our paper implies that women's economic welfare may not deteriorate at all after divorce, and thus their will about marriage should be protected by relevant law.

Keywords

Labor Supply, divorce, women, China, Labor Force Participation.