

# *Research on Financial Attributes and Risks of Virtual Goods*

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**Abstract:** Virtual items are very popular nowadays, this article will study the skin of Counter Strike-Global Offensive (CS:GO) with an unbiased perspective and official data. A lot of the data comes from the numbers Valve cooperation (VALVE) publishes. In addition, the soaring price of the CS:GO skin market in recent years has already diffraction some of the conclusions, and this article will prove the conjecture about the infinite financial value of virtual goods is correct. Furthermore, CS:GO skin is not subject to the constraints and regulations of the market rules, and the attributes of other virtual items are consistent, and in many ways can be found similarities. Through the official data, the research results are obtained: CS:GO skin profit space is large, but there are unpredictable risks. The article will reflect the financial properties of the entire virtual goods market through the CS:GO skin. This article does not give any advice on financial transactions and accepts no responsibility for any losses.

**Keywords:** risk, virtual goods, financial

## 1. Introduction

The trading of virtual goods is becoming more and more popular today, and people have gradually begun to pay attention to the financial attributes of these virtual goods. In such an open market, the intervention of capital will change the price of the whole market and make the whole market change. This article will take CS: GO skins as an example and discuss whether such items can really be profitable in the long run from the fluctuations in price. Whether there is a greater risk in this transaction.

Valve Corporation is a prominent video game developer and publisher based in Bellevue, Washington. Established in 1996 by former Microsoft employees, Valve quickly gained recognition for its groundbreaking releases and innovative approach to game development. The company's most notable achievements include the creation of iconic franchises such as Half-Life, Portal, and Team Fortress, as well as the development of the digital distribution platform Steam, which revolutionized the way games are bought and played.

Valve's commitment to quality and player-centric design has earned them a dedicated fan base and critical acclaim. The company is renowned for its emphasis on creativity, allowing developers to experiment and push boundaries in their projects. This philosophy has led to the creation of immersive and groundbreaking gaming experiences that have left a lasting impact on the industry.

Valve's influence extends beyond game development and distribution. The company has played a crucial role in the growth of esports, particularly through their support of Counter-Strike: Global

Offensive and Dota 2, both of which have become major titles in competitive gaming. Valve's dedication to fostering a thriving community and its willingness to collaborate with players and madders have solidified its position as a leading force in the gaming industry.

Counter-Strike: Global Offensive, commonly known as CS:GO, is a highly popular multiplayer first-person shooter game developed by Valve Corporation. It is the fourth installment in the renowned Counter-Strike series and has become a staple in the esports community. CS:GO emphasizes team-based gameplay, where two teams, terrorists and counter-terrorists, compete in various objective-based game modes. With its strategic depth, skillful gunplay, and competitive scene, CS:GO has captivated millions of players worldwide and continues to be a prominent title in the realm of competitive gaming.

In a study of virtual goods, it was shown that trading used virtual goods can benefit both developers and consumers. And more directly: "Our analysis also reveals that developers are more willing to embrace the secondary market when they can take a cut during the transaction. "This is a very important point in our research, because developers' policies and attitudes affect their own interests, as well as the risks of the entire market. This article will take CS:GO skins as the research object to study its price fluctuations and related information.

## **2. Research on the Price and Risk of CS:GO Skin**

### **2.1. Key Factor of Price**

CS:GO is a game released by Valve Corporation (VAIVE) in 2012, which has a history of more than ten years, and with the increasing number of players and the rich diversity of items, skin trading has really been taken seriously in late 2017. While it's possible to play on steam, the 15% commission on items over \$1 makes it hard to find any financial value in this area. With the launch of China's trading platform and the popularity of electronic money, 2% commission and creditworthy merchants charging cheap commission gradually appeared in the market, which officially opened the curtain of the emergence of financial value of CS:GO skin. A \$1,100 knife skin in today's market would have cost only \$15 [1].

Of course, there is no denying that the number of people playing the game has been hitting new highs, and demand is growing faster than supply, so prices will rise. However, when the author observe a curve, the author find that this curve is not a simple function, but in recent years, there are abnormal fluctuations and sudden growth rates, which are all because of the entry or selling of capital. Intuitively speaking, the key factor affecting price when selling quantity [2].

### **2.2. The Source of Financial Attributes**

With all the benefits, there are risks. VAIVE has maintained a neutral stance on these trading platforms, and VAIVE's revenue comes from the \$2.50 cost of skin boxes and the high fees. Different rarity corresponds to different price. [2] These low-fee platforms are in direct competition with VAIVE's own marketplace community, and VAIVE's sales have shrunk considerably, but they are the only way to make these items financially valuable. VAIVE is not going to crack down on these platforms to remove the financial attributes of items and thus reduce the number of people who open weapon chests.

### **2.3. The Impact of Valve Company Policy on Skin Prices**

VAIVE's changes have a huge impact on the price. In 2018, VAIVE adds a seven-day cooldown to traded CS:GO items on Steam, making it seven days before players can trade purchased items again. In 2020, there were a large number of "red locks", and depriving users of trading rights to conduct a

large number of transactions, so that many "warehouses" were seized, and the loss of goods worth \$4 million at the time [3]. People lost confidence in the market, causing prices to fall. Later, the trading platform no longer acted as a warehouse, but directly as an intermediate guarantee responsible for direct transactions between players, and the situation of the trading platform "red lock" was avoided. In April 2023, as the Counter Strike 2 (equipped source 2 engine) entered the Beta testing phase, the price went up, resulting in the crash of Steam and the trading platform. By June 2023, Steam had imposed a curfew on trading, leaving players with less information about the market again. From a micro point of view, there are also examples that can prove the direct impact of in-game changes on accessories. In June and November 2022, the Counter terrorist main weapon M4A1 was nerf twice, which caused the price of M4A1 to fall sharply [4]. The second time directly caused the price to fall by 36% in the following two months. Two M4A1 replacement weapon, M4A4 skin price directly increased by 4.5 times [5]. This shows that VALVE's policies have a direct impact on price movements, both on a spectator and macro level.

#### **2.4. Fluctuations and Ceilings in Item Prices**

After an interview with 100 gamers, the current trading trend of gamers reached a very surprising 50% believe that the market will grow and 50% believe that it will fall, and in fact, only 27% of players think that CSGO skin has not reached their psychological expectations of the highest price.

From another perspective, even though the total value of the market is rising, the price of low-priced and low-rarity skins does not match the price growth ratio of high-rarity skins. Ten skins of the same rarity in the game can be combined into a higher rarity skin [6]. The increase in the price of high-rarity skins should force the increase in the price of low-rarity skins. However, the price of low-rarity skin is already relatively high because of the one-in-ten reason, so when the price of high-priced skins increases, the price of low-rarity skins does not increase significantly.

According to the box drop mechanism of the 6.10 update in 2023, a box will only be dropped when upgrading, which means that an extremely active online player can only drop 2 boxes per week, and based on the average number of online players after the update is 1.2 million people, even if we estimate that each person can drop 1.5 boxes per week, only 1.8 million boxes are added a week [7-10]. However, based on data from April 19, 2023, players open 714 thousand boxes per day, which means that players open close to 5 million boxes per week. In other words, if VALVE doesn't make any changes to the box drop mechanism, the box will eventually be opened. In the short term, the price of boxes will rise, and in the long term, the skin market will increase because of the decrease in supply.

However, because the price exceeds the player's psychological expectations too much, resulting in game players will not buy. The emergence of the rental market has solved this problem. The price of many popular skins with strong liquidity has reached an amazing annual interest rate of more than 20%, and even the highest financial property butterfly to the original long-term rental has reached an annual interest rate of 4.4%. This interest rate is far higher than the bank, and even in the financial products market is a very good existence. Considering the increase in skin prices in recent years, the annualized interest rate of the skin itself is much higher than the annualized interest rate of the lease, which only accounts for a part of it.

#### **2.5. The Prosperity of Goods and Their Effect on Prices**

Taking into account the risk issues mentioned above. Whether to enter the market is an important issue for many capital and players, but one of the most guaranteed is the trading platform. Taking the second trading platform, Youyou. Youpin, for example, its registered capital is only 10 million yuan, while the total market value of the market has reached 800 million yuan [2]. Obviously, trading

platforms do not need to worry too much about taking care of those small markets, and the emergence of more and more new trading platforms also confirms the fact that existing trading platforms are guaranteed to make money. Unfortunately, however, the market has become saturated, and many emerging trading platforms have invested a lot of capital, and do not even need fees at the beginning of their creation, and issue subsidies, but they still cannot attract many buyers and sellers, mainly because Steam is very secure, and binding a heart platform is very cumbersome. Moreover, the most important thing is that the quantity of goods of a new platform is very small, resulting in the bottom price of skins cannot reach the bottom price of the mainstream platform, even if the welfare is issued to make up for it, it cannot be maintained for a long time, will only increase the return on investment, and will be occupied by opponents and traders.

### 3. Conclusion

After the study, the price of CS:GO skins will continue to grow in the long run under the current environment, but there are many micro and macro risks. On a micro level, Valve's in-game changes can have a big impact on small traders by fluctuating item prices. At a macro level, changes in the market and Valve's future trends and direction, and even attitudes towards various related issues, have an impact on the market as a whole, and the impact, good or bad, has a large impact on all those trying to profit from it.

However, from the perspective of benefits, although the development space is no longer huge from the current situation, it still exists. Financial attributes will be too high in price and external factors will greatly interfere with the price from other aspects, which will result in high financial added value of goods. Although the trading platform is very profitable, the saturated market leads to the trust that the not solid capital can no longer continue to win and enter the market. CS: GO items are one of the most successful examples of virtual goods today, and their trends and values reflect the broader virtual goods landscape and can serve as a model for anyone creating virtual goods. It also provides many cases for traders, but the unpredictable risk as a very important common denominator is that we cannot ignore in any virtual goods.

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