The Analysis of the Superiority and Future Promise of The Transfer Token

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Introduction

The start of Cryptocurrency as we know it was in 2008, when the anonymous cryptographer Satoshi Nakamoto announced the thesis "Bitcoin: A Peer-to-Peer Electronic Cash System" and the next year issued the first Bitcoins onto the market. From then 10 years have passed, and currently the cryptocurrency market has been valued at around 350,000,000,000 dollars. The pace of growth is staggering, but so is the number of cryptocurrencies being introduced, and there are now over 5,000 brands of cryptocurrencies on the market.

It is inevitable that with this high of a degree of evolution, the public overhears about the world of cryptocurrency and tries to gain entry. However, due to the numerous options when introduced, it is highly difficult for newcomers to make a decision on which cryptocurrency to invest in.

In this thesis, by looking through the valid points in the below two points, this paper aims to recommend the coin issued by our company, The Transfer Token (hereinafter referred to as TTT).

In the first chapter, I would like to detail on how TTT as a method has superiority over other overseas remittance options. The issues overseas remittance face ranges from the costs involved with remittance, the time it takes to send amounts, and etc., but we would like to compare the traditional remittance options with using The Transfer Token as a remittance method.

In the second chapter, we would like to detail on how ＴＴＴ will act as an investment in the long term. Looking at how buying and holding ＴＴＴ will deliver returns, and how the value will adopt to the standards set, we aim to calculate and imagine the many outcomes and patterns that will affect the suitable price (theoretic price).

Chapter 1: Viewing ＴＴＴ as an Overseas Remittance Method

Section 1. The traditional methods of overseas remittance

Overseas remittance is the act of sending funds from one country to another, and in a research conducted by World Bank economists, in 2018 there were 6940 billion dollars' worth in overseas remittance, increasing 8% since the previous year (1). In recent years the issue of immigrants and refugees has been placed in the global spotlight, and with this state of affairs in the background, it can be said that the overseas remittance marketplace will experience even more growth.

As we speak, the most traditional form of overseas remittance is by going through the banking system. First, as we look through the fees and cost, for overseas remittance through banking we must look at remittance fees, lifting charges and recipient fees. In the case of the three most predominant banks in Japan, also called the three Mega-banks, the remittance fees cost from 3000 to 5000 yen, the lifting charges are 0.05% of the remittance amount (although, the minimum is set at 2500 yen) and the recipient fee is set at 1500 yen. Up until here, the total results in a cost of 7000 to 9000 yen.

Added to this, if the sending party's bank does not have a partnership with the recipient party's bank, there arises the need to transact through an intermediary bank, of which the correspondent charges will amount to several thousand yen. For example, the largest-scale bank within Japan, Mitsubishi UFJ Bank (the total assets amount to 5th place worldwide) only has 2 branches in the Touhoku region's biggest city, Sendai of Miyagi prefecture. Even more, both of these branches have the same address, so it can be said that there is only one branch. Moreover, in the 47 prefectures that constitute Japan, there are 20 prefectures that do not have a branch of the said bank (May 2020, present). Not surprisingly, in these prefectures the use of local banks within the region will increase, but since the number of banks with an overseas partnership will be limited, in trying to make an overseas remittance, the occurrence of a correspondent charge will be unavoidable.

Also, a waiting period of several days will be necessary until the remittance is completed, as will the potential of human error (SWIFT (Society for Worldwide Interbank Financial Telecommunication) has recorded the errors made at 6% (2)).

On the other hand, in the case of overseas remittance using cryptocurrency, the service is more accessible to the average person in terms of costs compared to banks. For example, with Bitcoin, there are instances where with the transaction fees made to exchanges, there may be additional fees when trading a minor or less well-used cryptocurrency. However, even with this the fees only range from a few to a few-hundred

yen. Also, regarding the time needed, it will only take anywhere from a couple of seconds to several ten minutes, so it is less than when compared to traditional banking systems.

However, it should be warned that with Bitcoin and etc. there are scalability issues that may arise, and users should be cautioned. This is a problem that occurs with the increase in trading and data amounts, and results in slower executions in sending funds. In these cases, requesting a faster execution under these circumstances will incur larger fees.

Another inevitable problem with overseas remittance using banks and traditional cryptocurrencies is the burden of the underlying costs involved, such as the gap in the buy/sell rate, which will basically be inflicted upon the users. For example, using a Japanese bank, if the TTM is 1USD=100JPY, the TTB will be 1USD=99JPY, and the TTS will be 101JPY. Due to this spread, even if the exchange system has not differentiated in value, the sender will have to pay the cost of 2% of the sent fee. Furthermore, this price discrepancy exists even in traditional cryptocurrency, so the sender needs to be wary of the actual costs incurred being larger than expected in overseas remittance.

Section 2. The Overseas Remittance System of ＴＴＴ

At our company, it is possible to send currencies from the sending party to the recipient within the same wallet through using ＴＴＴ, and users can send to the recipient wallet with the touch of a button.

With a typical cryptocurrency, there is the hassle of the sender having to purchase the cryptocurrency using the sender's native currency, placing it his or her wallet and sending it to the recipient, who will then need to exchange it into their native currency.

Compared to this, it can be said that the ＴＴＴ ecosystem is simple and clear to use. Furthermore, for the exchange inside the sender's wallet of "sender's native currency → ＴＴＴ → recipient's native currency", the TTM rate will be adopted for both the buying and selling times. This means that there will be no discrepancies between the buying and selling rate, and the underlying costs of exchange relying on solely the movement of the exchange rate during execution. The transaction times for this type of execution will be 0.5 seconds, minimizing the market risks involved.

Section 3. The Advantage of ＴＴＴ

When using ＴＴＴ during overseas remittance, compared to the couple of days it would take for a typical banking system, it only takes 0.5 seconds which is revolutionary. It is also

comparable to traditional cryptocurrencies.

Also, looking from a cost perspective, the costs that arise from overseas remittance using ＴＴＴ are the below two charges. One is the currency exchange fee. When exchanging the currency from the sender's wallet to the recipient's wallet via ＴＴＴ, there is a currency exchange fee of 0.5% of the total sent amount. The other is the buying/selling・sending fees, which is 5 yen. As stated previously, there are no discrepancies in the buy/sell rate, which means that it is possible to view the underlying costs as zero. The above two costs are the only two costs involved in sending funds.

Compared to the cost of a few thousand yen, along with the buy/sell rate adding up to costs in excess of as seen in traditional overseas remittance methods, it can be seen that ＴＴＴ excels in terms of the overall cost.

Fig (1)	Costs	Time needed
Banks	7,000 to 9,000 yen ＋corresponding charge ＋costs due to the discrepancies in buy/sell rate	Several days *Mistakes possible due to human error
Traditional Cryptocurrencies	A few yen to several hundred yen ＋costs due to the discrepancies in buy/sell rate *Increases possible due to scalability	A few seconds to several-ten minutes *Time losses possible to scalability
ＴＴＴ	0.5% of the total amount＋ 5 yen *Adopt the same rate in buy/sell	0.5 seconds

The above table is comprised of and compares each aspect of overseas remittance by bank, traditional cryptocurrencies and ＴＴＴ. It is clear to see that by both cost and time needed, ＴＴＴ is the superior out of the three.

Chapter 2: ＴＴＴ as an Object of Investment

Section 1. Beneficiary Rights of Holders of ＴＴＴ

In the case of stock trading, the holders are entitled to receive dividends, which the amount of effects the yields and quality of the stock. This in turn can enable the public to make a prediction on the fair price (theoretical stock price).

Now, in the case of ＴＴＴ, will holders be able to receive the equivalent of dividends?

As stated in Chapter 1. Section 3. when conducting overseas remittance while using ＴＴＴ, there are two fees incurred: currency exchange fees and buying/selling・sending fees. 50% of these fees will appropriately being divided and distributed to ＴＴＴ holders based on their holding rate (for the former, the holders who actually loaned out their ＴＴＴ will be served on a first-come first-serve basis). This, exactly, is the equivalent of the dividends that holders of ＴＴＴ will be entitled to receive.

In this chapter, as how by the fair price of stocks can be predicted by the dividend amount, we will explain how the fair price of ＴＴＴ will be predicted by the dividends from holding it.

Section 2. Calculation Method of the Fair Price

In this thesis, we will utilize the DDM (Dividends Discount Model), the most popular method of analyzing the value of a stock. With a DDM, the stock value can be calculated as below:

$$\text{Stock Value} = \frac{D_1}{(1 + k)} + \frac{D_2}{(1 + k)^2} + \frac{D_3}{(1 + k)^3} + \cdots$$

D_t represents the t year of dividends, k represents the capital cost

The above formula's right calculates the first year dividend's current value, second year dividend's current value, third year dividend's current value and so on. This means it represents sum of the future dividend's current value.

By inserting the eternal growth rate g% into the formula and adjusting it with the formula of a geometric sequence, it can be modified to the formula below:

$$\text{Stock Value} = \frac{D_1}{(1 + k)} \quad : ①$$

$$(\text{ Only in the case of } k - g > 0)$$

Using the stock value calculated from this formula, we can then divide it by the company's total number of issued stocks, in which the result will be the value (theoretical stock price) of one stock. Thus, we can draw out what we set out to do, which is to calculate the fair price. Of course, applying the dividend amount for one stock will have the same results.

Now, to calculate the fair price of ＴＴＴ, first we analyze the numerator of formula ① (D) by looking at the currency exchange fee and buying/selling・sending fee for 1 unit of ＴＴＴ (1TTT). To calculate this, we use:

・The worldwide users of overseas remittance
・The average times an overseas remittance is completed annually
・The average sending amount per each overseas remittance
・The upper limit of ＴＴＴs issued
・The rate of ＴＴＴ

Each measure will be used to calculate in the following ways (in the formulas there may be multiplications and divisions of the same nature, but these of course are possible to offset each other).

Annually received currency exchange fees of 1TTT
  = Overseas remittance users × Average overseas remittances completed annually ÷
    ＴＴＴ's rate ÷ Upper limit of ＴＴＴs issued × ＴＴＴ's rate × Fee percentage
    (0.5) ÷ 2

Annually received buying/selling・sending fee of 1TTT
  = Overseas remittance users × Average overseas remittances completed annually ÷
    Upper limit of ＴＴＴs issued × Unit price of fee (5 yen) ÷ 2

For each item, we will use the numbers below.

・The worldwide users of overseas remittance … With the predictions of the IFAD
  (International Fund for Agricultural Development) at 1 out of 7 persons sending or

receiving overseas remittance (3), by setting the worldwide population at 7.7 billion, and assuming that half of the people using overseas remittance are senders, we divide 7.7 billion by 7, and then half the number, resulting in 550 million users
・The average times an overseas remittance is completed by a user ⋯ 7 times (4)
・The average sending amount per each overseas remittance ⋯ 263,000 yen (5)
・The upper limit of ＴＴＴs issued ⋯ 2 billion TTT

Also, the "capital cost (k)" in the denominator of formula ①represents the size of the opportunity cost when making an investment, meaning it is representative of the size of the return on investment to be expected in a similar case where the risks of investments are involved. Thus, it can be said it points to the level in which a fair return is requested in equivalence to the risks an investor takes on, meaning it can be described as "an investor's requested return on investment". Here we apply 6%, which is the general expectation.

Similarly, for the "eternal growth percentage (g)" in the denominator, this represents the g% of the constant growth the ＴＴＴ will experience in the future. Of course, in the case of both stocks and cryptocurrencies, the actual growth percentage will differ each year, so this number can be seen as an estimation of the current average growth percentage. With the current state, we will apply the IMF's (International Monetary Fund) announced World's Economic Growth percentage of 2.9% (2019) (6).

Thus, deducing from formula ①, the below three points are clear.
・As the dividend amount becomes larger, the fair price will also increase. In this case, as the "overseas remittance users", "average times overseas remittance is completed" and "average amount of each overseas remittance" increases, the fair price will also grow.
・As the capital cost decreases, the fair price will increase
・As the "eternal growth percentage" increases, so will the fair price

Section 3. The Fair Price of ＴＴＴ

Inserting the items mentioned in the previous section into the formula ①, and by predicting the various cases of adoption rates of ＴＴＴ (the percentage of users out of the overall overseas remittance users, that use ＴＴＴ), the calculation of the fair price is as below.

・Adoption rate = 5% … 1TTT = 2,049 yen
・Adoption rate = 10% … 1TTT = 4,098 yen
・Adoption rate = 15% … 1TTT = 6,148 yen
・Adoption rate = 20% … 1TTT = 8,197 yen
・Adoption rate = 30% … 1TTT = 12,295 yen

If the adoption rate of TTT increases by just 5% among remittance users, it is clear to see that the value will jump up in price. And as the adoption rate increases by 10%, 15%, 20%… the value of ＴＴＴ will continue to surge in price.

Also, in this estimate, there are more positive factors as below.

First, in our estimate we have used the global economic growth percentage numbers for the "eternal growth percentage", but if ＴＴＴ's growth percentage outpaces the average growth percentage of the global economy, as mentioned in the previous section the fair price will increase further, it can be said.

Next, regarding the "capital cost" if the market's acknowledgement to the level of risk of ＴＴＴ decreases, this also will lead to the increase of the fair price.

Furthermore, there is the possibility that the worldwide number of overseas remittance users will increase in the future. As previously mentioned, the number of immigrants is seeing an increase on a global scale, and the globalization of the world's economy is accelerating year by year. As more people look to education and employment across borders, the increased usage of overseas remittance is unavoidable, and the need for such services is bound to increase.

Moreover, with the increased demand of overseas remittance that is the general trend, as mentioned in the previous chapter, using ＴＴＴ will bring a significant advantage to users. Regarding the cost applications, do traditional overseas remittance methods and the costs they carry, truly fulfill the needs of users? Particularly in the case of Japan, the level of remittance fees is the fourth-highest out of the G20 member countries, and the second-highest out of the G7 member countries, as statistics have shown (7). There have been many criticisms regarding the added costs that come with overseas remittance. To those voices, and the ever-increasing number of overseas remittance users, by providing an advantage in cost, we believe we can say that ＴＴＴ surely is good news for all.

Conclusion

　In this thesis, we have analyzed and looked at the superiority and promise that ＴＴＴ holds over other cryptocurrencies from two aspects.

　First, from a perspective as an overseas remittance method, compared to banking systems and other cryptocurrencies, there are significant advantages in the time required, and above all, the costs and fees involved in making a remittance.

　Next, from an investment perspective, even though the current rate of ＴＴＴ is clearly small in value, it shows great promise for future growth.

　Even more so, this superiority and future promise will hopefully lead to an increase in overseas remittance users, to the increase in value of ＴＴＴ, which will lead to greater awareness, which will then lead to even more users. It can be predicted that this will bring a great synergy to the entire ecosystem.

　In addition, this thesis only focuses on the analyzing of "ＴＴＴ as a method of overseas remittance". It is needless to say that the use will not be limited to only overseas remittance but will be extended to the buying and selling of ＴＴＴ itself, as well as being traded for goods and services in actual stores. The fees accumulated from these transactions will also be distributed to holders of ＴＴＴ.

　Clearly this will mean an increase in the dividend amount, and results in an even larger amount of the fair price as described in Chapter 2, Section 3.

　Notably, to comment on ＴＴＴ, the exchange rate of ＴＴＴ to ＴＴＴ is 1 to 1 respectively, so the fair price of TTT will be equal value to ＴＴＴ as calculated from the formula in this thesis.

　As mentioned in the introduction, the start of Bitcoin and its issuance was in 2009, but the first commercial transaction was completed in the next year, 2010. The fable of 10,000 BTC being traded for two pizzas is all too famous. Calculated in dollars, the maximum exchange rate of Bitcoin until now was the peak of 20,089 dollars in 2017, so 10,000 BTC would mean over 200 hundred million dollars when calculated. Even more, the value of the two pizzas was 25 dollars at the time of 2010, meaning that 1 BTC was equal to 0.0025 dollars. The transaction was made with the rate not even reaching 1 cent. It is an unbelievable tale in current times, but it stands strictly true, and the 2 people who completed the trade have had their names written into the history books of Bitcoin, cryptocurrency and the global economy.

Today, if one were to show up uninvited to a Bitcoin exchange carrying two pizzas, they would be immediately dismissed. However, keeping the incident in mind, it is not impossible to discover an accessible yet attractive cryptocurrency in this world.

It is with our greatest pleasure if this thesis and TTT will enrichen the lives and future global economy of all individuals.

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