

Introduction of Option Concept to Money

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Possession of currency is possession of option

Do you know option transaction? It is written in study guide that

[Buying and selling of rights to buy or sell a certain amount of commodities or securities, on a predetermined day or within a period of time, at predetermined price (exercise price)].

As it is buying and selling of rights, both to make a deal or not to make a deal are permitted to buyer. If the price is advantageous, right is exercised. If the price is disadvantageous, right is not exercised.

Buyer of option pays option fee. Cost as payback of right is paid to seller of option. Seller of option must make a deal (be a partner of buyer) on the condition of option when option is exercised by buyer. As payback of it, seller of option can get option fee.

To hold money is to hold right to be able to buy services freely. Therefore, to hold money is to hold a kind of option.

Owner of option pays option fee as payback of the right.

If to hold money is assumed to hold option, money holder must pay option fee depending on the amount and the period.

Suppose, for instance, option fee to hold ¥100 for a day is ¥1.

Today ¥100 → Tomorrow ¥99 (Pay option fee ¥1)
Day after next ¥98.01 (In addition, pay option fee ¥0.99)

If to hold money is assumed to hold option, as just described, amount decreases as time passed.

In this case, because amount decreases, change ratio of amount of money is minus.

For these reasons, if change ratio of amount of money is assumed to be interest rate, application of minus interest rate is needed for possession of money. (In order to pay option fee.)

In my book [Introduction of minus interest rate], it is explained that introduction of minus interest rate is necessary for economic theory. Main points of the book are described below.

1. Value of currency occurs only at the moment of economic transaction. In this case, amount of economic transaction corresponds to amount of currency. (Same

amount, reverse direction flow.)

2. Change ratio of scale of economic transaction corresponds to that of amount of currency perfectly. (This is conclusion of the premise of 1). This means that (nominal) economic growth rate corresponds to interest rate perfectly.
3. If change ratio of scale of economic transaction doesn't correspond to that of amount of money, economic transaction can't be realized.
4. If (nominal) economic growth rate is minus, interest rate needs to be minus.

As described above, needs for minus interest rate have been explained sufficiently, but it is not clear to introduce these points to economic theory / system. Prime reason may be that experts can't sufficiently understand the reason for interest rate to be minus.

(Prevalence of electronic money is needed for introduction of minus interest rate. (Privately owned paper money and coin etc. can't be decreased))

Contents of this text is much more comprehensible explanation of necessity for introduction of minus interest rate. If possession of currency is assumed to buy option, it is quite natural that interest rate becomes minus to pay option fee.

If excess debt is burdened, level of interest rate should be nominal economic growth rate or less.

The opinion [(nominal) economic growth rate corresponds to interest rate.] is on the premise that [value of currency occurs only at the moment of making a deal.]. If value of currency occurs at the moment of not making a deal, this opinion is not applied.

In present Japan, debts of central and local governments are over 1000 trillion yen. This means that huge currency (credit / debt) that has value at the moment of not making a deal occurs.

How should the level of interest rate be decided under this condition.

As the premise is [value of currency occurs only at the moment of making a deal.], (nominal) economic growth rate should be applied to change rate (level of interest rate) of amount of money used in economic transaction.

In addition, option fee occurs in currency not used in economic transaction. Therefore, level of interest rate that should be applied to the currency is minus interest rate.

Amount of currency of the former is defined as A, Amount of currency of the latter is defined as B. If each level of interest rate of both A and B is defined as $r(A)$ and $r(B)$, level of interest rate that should be applied to whole currency is defined as follows.

$$R = \{ A \times r(A) + B \times r(B) \} \div (A + B)$$

As $r(B)$ is minus, R is smaller than $R(A)$ (nominal economic growth rate).

As described above, it is concluded that level of interest rate needs to be far lower than nominal economic growth rate in present Japan that has huge debts.

The opinion [(nominal) economic growth rate should correspond to interest rate.] is not applied to present Japan. It is necessary for interest rate to be lowered further in order to revive Japanese economy.

Attention: Because nominal economic growth rate in this book includes all economic transactions, it doesn't correspond to change ratio of GDP perfectly. (This has been written in [Introduction of Minus Interest Rate.]

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Career and Achievements of Akira Takizawa. (Writer)

Date (YYYY/MM/DD)	Career and Achievements
1985	He has started religious activity.
1989	He has graduated from the University of Tokyo, and started career in Mitsui Bank. (Now it is called Sumitomo Mitsui Banking Corporation.)
1994	He suggested to the bank. "Revolution in information will happen from now on. PC will be bank. System should be strategic division." After the suggestion, The Sakura Bank (Now it is called Sumitomo Mitsui Banking Corporation.) was far ahead of banking circles through IT strategy to establish Japan's first internet bank (Japan Net Bank) and so on. It led to IT introduction in every industrial circle and IT strategy in Japan. Suggestion described above made great contributions to IT strategy in Japan.
1995/06	He was assigned to General Planning and Policy Division. He was in charge of ALM.
1999/07	He surpassed both Buddha and Jesus in spiritual rank.
2000/06	He left the Bank to make a study on five dimension and so on.
2000/12/31	He accepted pyramid figure (Creation principle of all things, equipment for generation of magnetic field energy (Human activity energy)) from above. It was the advent.
2001/09	[The Day to Surpass Buddha] was published.
2003/02	[Five Dimension Theory] was published. It was theoretically explained in the book that world was fractal structure. (Space was involved in dot). Necessity to revise physics wholly by introduction of five dimension was advised in the book.
2003/06	[Introduction of Minus Interest rate] was released. Economic theory was restructured to revive economy in Japan. It was theoretically explained that interest rate and rate of nominal economic growth should agree. It was proved at the same time that the cause of depressed economy in Japan after the 1990s was much higher interest rate than rate of nominal economic growth. It was claimed that both business and financial recovery should be made by higher rate of nominal economic growth than level of interest rate. After delivery of this discourse to government and the Bank of Japan etc., it was spread in Japan that it was necessary for interest rate to be lowered, and it made great contributions to business recovery. It has been theoretical ground of low interest rate policy around the world after the Lehman crisis.
2004/01	Property to store electromagnetic wave was confirmed in fractal structure. (On the front page of The Asahi Shimbun.). A part of contents of [Five Dimension Theory] was confirmed academically.
2005	He began to write sequel of [Five Dimension Theory]. Fundamental structure was delivered to the Physical society of Japan etc..
2005	He has entered into heavenly world. (It is world of tutelary gods.).
2006/11	[Five Dimension Theory Vol. 2] was released. It was delivered to the Physical society of Japan etc..
2007/02	[Introduction of Option Concept to Money], [Restructuring of Foreign Exchange Theory] were released. It was delivered to various quarters.

2008/06 Kagayaki-No-Kai has been established to relieve humankind. [Fundamental Principle to Relieve Humankind] was released.

2008/10 [Wholly Revised Financial and Economic System] was released.

2009/08 [Fractal Economic Theory (this book)] was released. It succeeded in theoretical analysis of the cause of bubble economy.

2009/10 [Five Dimension Theory Vol. 3 principle of recognition] was released. Outline of five dimension was explained.

2011/10 [Five Dimension Theory Vol. 4 principle of space creation] was released.

2011/11 He has entered into creator world.

2011/12 Life-prolonging / Longevity Service has been started. Lifespan extension of humankind has been started.

2011/12 Equipment for generation of magnetic field energy (aura) was released.
He succeeded in generation of magnetic field energy (aura) mechanically.

2012/7 He presented recommendation titled "Nuclear power must be abolished" to Prime Minister Noda. As a result, new energy policy named "Innovative energy / environmental strategy" aimed for "All nuclear power will be nonoperating in the 2030s" was announced from government on September 14, 2012.

Present President of Kagayaki-No-Kai.

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