IFTA 講演・寄稿論文

一目均衡表による世界の主要株価指数の予測分析

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要　旨

　一目均衡表は細田悟一氏（1898 〜 1982）が長年の金融市場の研究を通じて開発した相場分析手法である。細田氏の没後 40 年近く経た現在でも、市場分析や取引を行うための有効なツールとして、トレーダーや投資家、分析者に広く親しまれている。

　最近では、アジアを中心に世界中でも「Ichimoku」が普及し始めているが、効果的には活用されていないようである。なぜかというと、一目均衡表は、「価格予測」「時間予測」「波動分析」など、多面的な市場分析の原理・手法が統合されたものであるため、完全にマスターするのが非常に困難だからである。当然ながら一目均衡表には原著が存在するが、海外で扱うには言語の大きな壁に遭遇する。欧米人にとっては、日本語はさまざまな意味で厄介な言語である。日本語の語彙は英語とはまったく異なり、文法構造もまったく異なるため、日本語から英語への翻訳は非常に難しく、原著で使われている日本語の適切な英訳を見つけるのも困難だ。

　そこで、筆者が 2019 年に開催された IFTA カイロ大会で発表した内容をベースにしたものを以下で紹介する。原著に書かれている日本語を平易な英語に翻訳したものを利用し、さらに関連する理論を加え、2020 年発行の IFTA ジャーナルに寄稿したものからの抜粋となる。すべてを掲載すると相当な分量になるため、一目均衡表の基本的な一部の見方と当時の NY ダウ、上海総合指数、エジプトの主要指数である EGX30 を予測分析したもので構成している。

Basic concept of the Ichimoku Chart (Introduction)

- Ichimoku is focused on the underlying "powers" in the market. To know the next market direction, it suffices to know which side, buyers or sellers, is winning or losing. The market moves in the direction in which the equilibrium between the buyers and sellers has been broken. The chart developed by Hosoda allows one to instantly grasp the equilibrium state of the market. This is why it was named "Ichimoku Kinko Hyo", which literally means "One Glance Equilibrium Chart" in Japanese.

- The middle-point of the price range is regarded as important.

- The three basic components of the Ichimoku theory are the "time" principle, "wave structure" principle, and the "price level" principle.

- One of the important traits of Ichimoku is its "time" study. Most market players focus on price moves, and tend to make light of the time factor. In Ichimoku, it is considered that while price moves are important, the time factor is more important than the price factor; without a solid "time" study, one cannot have a true understanding of the markets.

The three basic principles of Ichimoku

After confirming San'yaku Koten, you should consider the three basic principles of the "wave structure", "price level", and the "time". Figure 1 shows all the points. Notice that the bull market consists of three waves, and an equilibrium is established between price and time. The same applies to the bear market. It is highly probable that the market direction will reverse at the equilibrium point of the horizontal and vertical axes.
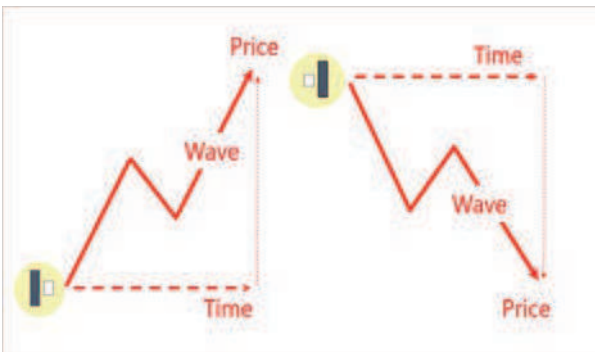

Figure 1. The three basic principles of Ichimoku

Wave Structure Principle

First of all, the wave structure principle is very simple. Hosoda classified the wave patterns that appear in financial markets into a number of groups according to their wave structure, and gave unique names. I wave is a single rectilinear or straightish (normally sharp) thrust up or down without notable corrective moves. V wave consisting of two successive I waves, a sharp thrust up followed by a sharp thrust down, or a sharp thrust down followed by a sharp thrust up. N wave an up–down–up or down–up–down wave. This is the wave pattern most commonly seen in the market.

When N wave extend to nine waves, it is judged that the uptrend is close to the limit. And when the price falls below the previous low, the uptrend terminates with the top forming pattern.
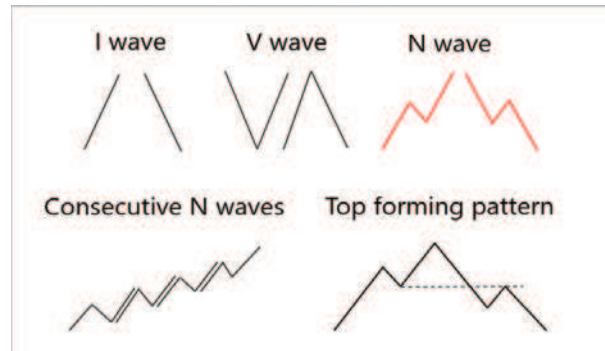

Figure 2. Wave Structure Principle

Price level principle

– In ichimoku, there are the four basic projection methods as shown below.

N projection –– Up: N = C + (B – A) Down: N = C – (A – B)

* These two equations are effectively the same. But I am showing both as I believe this makes it intuitively easier to understand for readers. The same applies to the following.

– Up: N projection adds the distance of the last upleg to the last low.

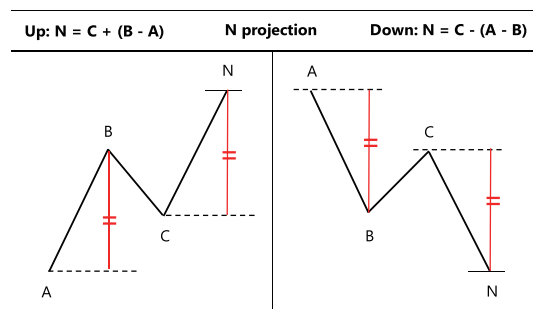– Down: N projection Subtracts the distance of the last downleg from the last high.

Figure 3. N Projection

V projection –– Up: V = B + (B– C) Down: V = B – (C – B)

– Up: V projection adds the distance of the last downleg to the last high.

– Down: V projection subtracts the distance of the last upleg from the last low.

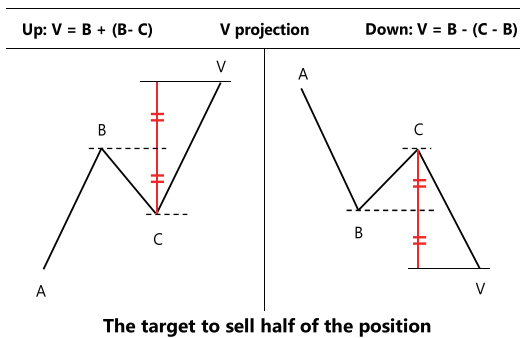This is the target to sell half of the position.

The target to sell half of the position

Figure 4. V Projection

E projection −− Up: E = B + (B − A) Down: E = B − (A − B)
− Up: E projection adds the distance of the last upleg to the last high.
− Down: E projection subtracts the distance of the last downleg from the last low.
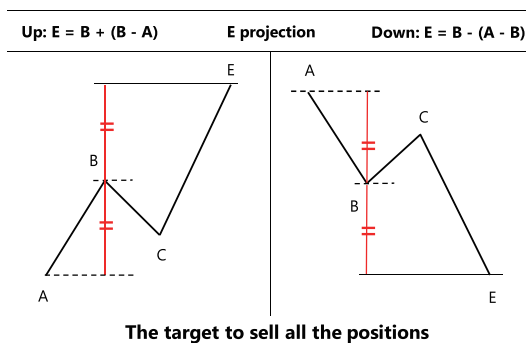This is the target to sell all the positions.

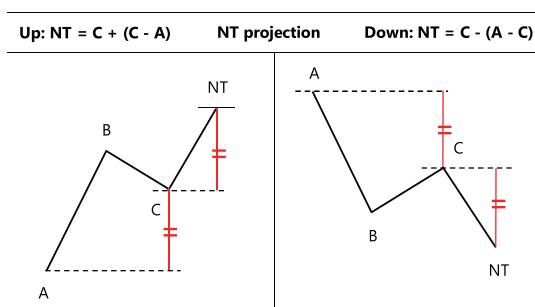**The target to sell all the positions**

Figure 5. E Projection

Figure 6. NT Projection

NT projection −− Up: NT = C + (C − A) Down: NT = C − (A − C)
− Up: NT projection adds the distance between the last two low to the last low.

− Down: NT projection subtracts the distance between the last two highs from the last high.

Time principle

The third subject is the time projection. One striking characteristic of the Ichimoku theory is the degree of importance it places on the time factor. Hosoda taught, "It is not that time merely passes as prices fluctuate in the market. Time influences the market. The market is dictated by time."

Ichimoku calculates "Reversal dates" in the following "Basic number"−based projection and "Time parity"−based projection. These two methods can be used separately or simultaneously.

a) "Basic number"−based projection

First, I explain "Basic number"−based projection. Following (Table 1) are the "Basic numbers" to be used with period data as default parameters. In addition to that, there are 83,97,101, etc. Some Ichimoku researchers claim that they have found that 5,13,21 should be added as Basic numbers when dealing with weekly data.

Table 1. "Basic numbers" to be used with period date

Basic number	Comments
9	−Useful for calling intermediate tops/bottoms
17	−Useful for calling intermediate tops/bottoms (9+9−1)
26	−First term, Useful in up markets (9+17)
33	−Particularly useful in down markets (17+17−1)
42	−Very important in both up and down markets (17+26−1)
51	−Second term (26+26−1)
65	−More useful in up markets than in down markets (33+33−1)
76	−Third term, More useful in up markets than in down markets (26+26+26−2)
129	−More useful in up markets than in down markets (65+65−1)
172	−More useful in up markets than in down markets (33+65+76−2)

Reversal dates are projected by adding "Basic numbers" to the high or low on which the trend reversed. Figure 7 illustrates that.

Reversal dates are the dates on which the market is projected to "reverse" directions at relatively high probabilities. However, the market does not always "reverse" on a Reversal date. In a strongly trending market, the existing move sometimes simply "accelerates", instead of "reverses", on a Reversal date. This happens more often in a down-trending market, than in an up-trending market. Suppose there is a market that has been moderately declining into a Reversal date. If it cannot reverse direction during that time window, oftentimes it starts falling sharply.
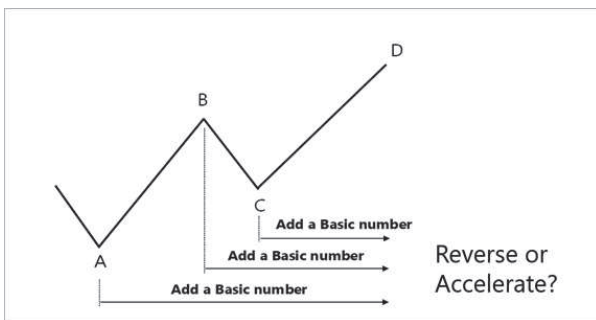

Figure 7. "Basic number"–based projection

b) "Time parity"–based projection

Second is "Time parity"–based projection. In this method, Reversal dates are projected by adding the same time distance between two key dates in the past to the high or low on which the trend reversed, from which to project into the future. Figure 8 illustrates this.

(1) Add the time distance (the number of the days) between the high C and the low D to the date of the low D into the future

(2) Add the time distance (the number of the days) between the low B and the low D to the date of the low D into the future

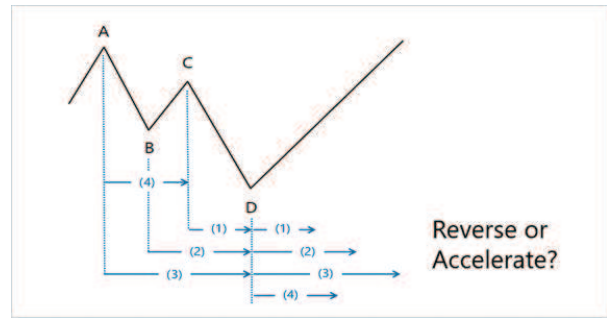(3) Add the time distance (the number of the days) between the high A and the low D to the date of

Figure 8. "Time parity"–based projection

the low D into the future

(4) Add the time distance (the number of the days) between the high A and the high C to the date of the low D into the future

Dow Jones Industrial Average, Monthly

Figure 9 is a monthly chart of the Dow Jones Industrial Average. In July 2019, a high was reached at N projection of 27251 dollars in N wave from March 2009. After that, the stock price dropped sharply, however San'yaku Koten continued. And the conversion line has accelerated in October 2019, therefore the market became more bullish. As a result of responding to changes in the conversion line, November 2019 was a significant acceleration point as it was the month which coming with the time parity 12 and the basic number 129.

And the 2V projection of 29654 dollars from a low in 2009 has reached at February 2020. The February high was close to time parity number 25 from the January 2016 low to the January 2018 high. It is a basic number 26 in the first place. This means that the time and the price did coincide. After that, the stock price dropped sharply. If the market can stay San'yaku Koten after the correction, one should judge that the uptrend will continue until the coincidence point of time and price is reached again.

Basically, the points where the trend is likely to change are the timing when the lagging span touches the stock price. If the lagging span falls

below the stock price, a bearish sign is confirmed. However, as with the 2016 correction, if the lagging span jumps to support the stock price at that time(January 2014), the trend will be further strengthened.

If it exceeds the high in February 2020, it will be the ninth wave. The upside target is E projection of 30232 dollars from the low in 2009. Also, there is V projection of 32190 dollars in the period after 2018. This is an important target that consistent with 3E projection of 32097 dollars from the low in 2009. And the most important timing on the time projection is from July to October in 2021, from January to April in 2022, December in 2022 and June in 2023.

Shanghai composite index, Monthly

Figure 10 is a monthly chart of the Shanghai composite index. Look at the long term N wave from a low in 2008. The coincidence point of 81 months close to the Basic number 83 and the middle-point(VE:5199) of E and V in the N wave was the reversal month for the upward wave.

Currently, it is moving in the downward wave from a high in 2015. In the short term, the conversion line may go above the base line, however it is not just San'yaku Koten. That is, the downward wave can be predicted to continue. In that case, the coincidence point of the time parity 81,93,97 and V projection of 1689 in the N wave from a high in 2015 is likely to be an important reversal month
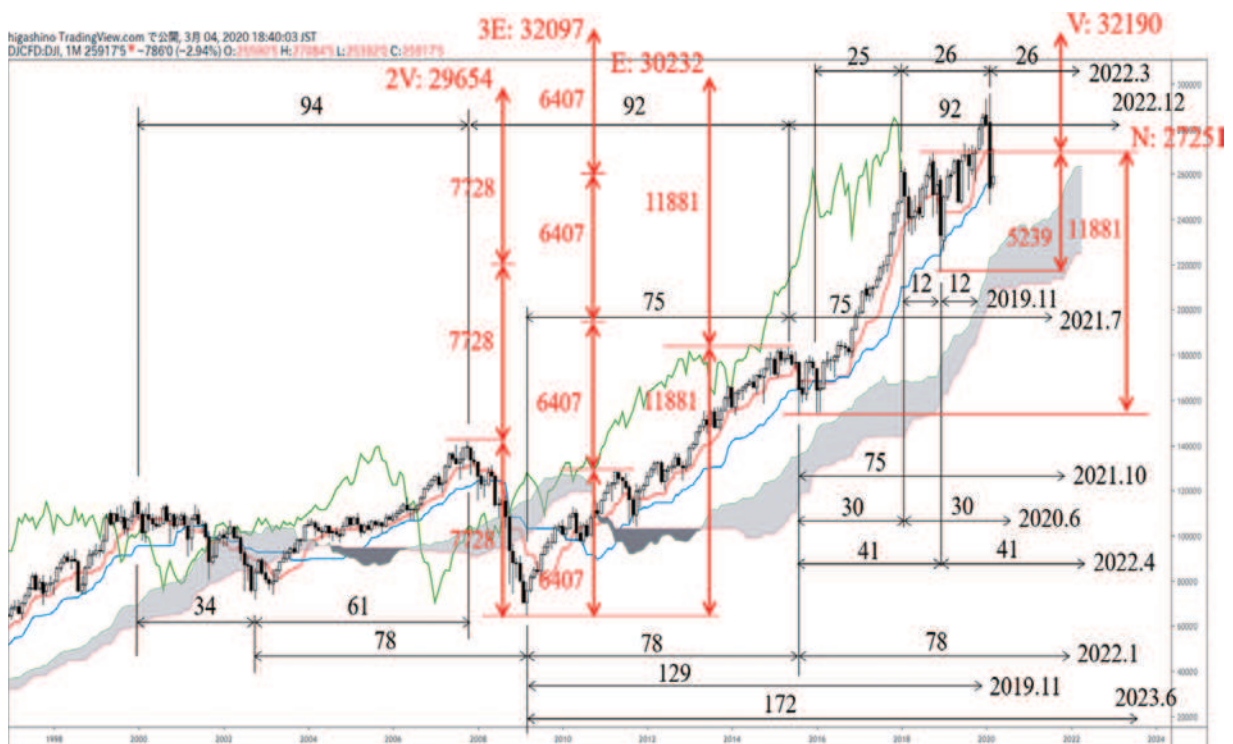

Figure 9. Monthly chart of Dow Jones Industrial Average

for the downward wave. In addition to, focusing on the move from a high in 2015, the time parity 13, 32, 37, 44 may also be important as the time on the horizontal axis. The downside target is V projection of 1689 in the N wave from a high in 2015 as well as N projection of 2141 and V projection of 1592 in the N wave from a high in 2018.

If it exceeds a high in 2018 with San'yaku Koten, it is likely to lead to a larger N wave starting from a low in 2013. In this case, the month coming with the time parity 32, 37, 44, 68, 81, 93, 97 will be the important reversal month for the upward wave. And it is considered that the upward wave will continue until the N projection of 5698 or the level of 4909 obtained using the habitual price range.

EGX30 Index, Weekly

Figure 11 is a weekly chart of the EGX30 Index. Currently, it is a small-scale rebound from the low in December 2018. If it exceeds the high in February 2019, N wave from the low in December 2018 can be confirmed. And you can predict N(16457) and E(18566) upward projections. In addition, it is important to predict the middle-point(17511) of N and E projections. After the short correction, if it exceeds the high in April 2018, a larger N waves starting from the low in January 2016 can be confirmed. In that case, the price range of 12701 from the low in January 2016 to the high in April 2018 and the price range of 6338 from the high in April 2018 to the low in December 2018 will be an important factor for the price projection.
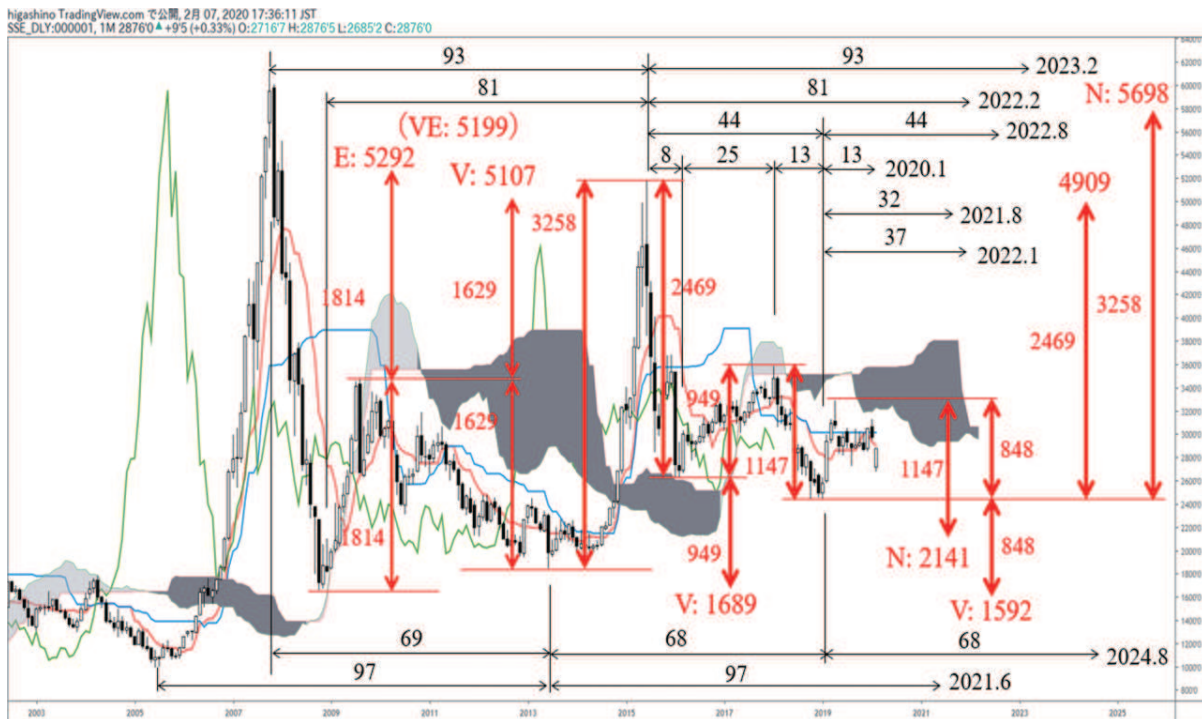

Figure 10. Monthly chart of the Shanghai composite index

However, if it falls below the low in December 2018, the medium-term N wave starting from the high in April 2018 can be confirmed. And you can predict N, V and E downward projections.

After 2020, what is important in the time projection is the time parity 34 for short-term wave and the time parity 66,120 for medium-term waves. In addition, the week which coming with the basic number 76,83,97,101 from the low in December 2018 and the basic number 129,172 from the high in April 2018, will be the important reversal weeks.

I have just written about the future assumptions so far, however what I want to say is regardless of the size of N wave, whether it be an uptrend or a downtrend, it will continue until the coincidence point of time and price is reached.
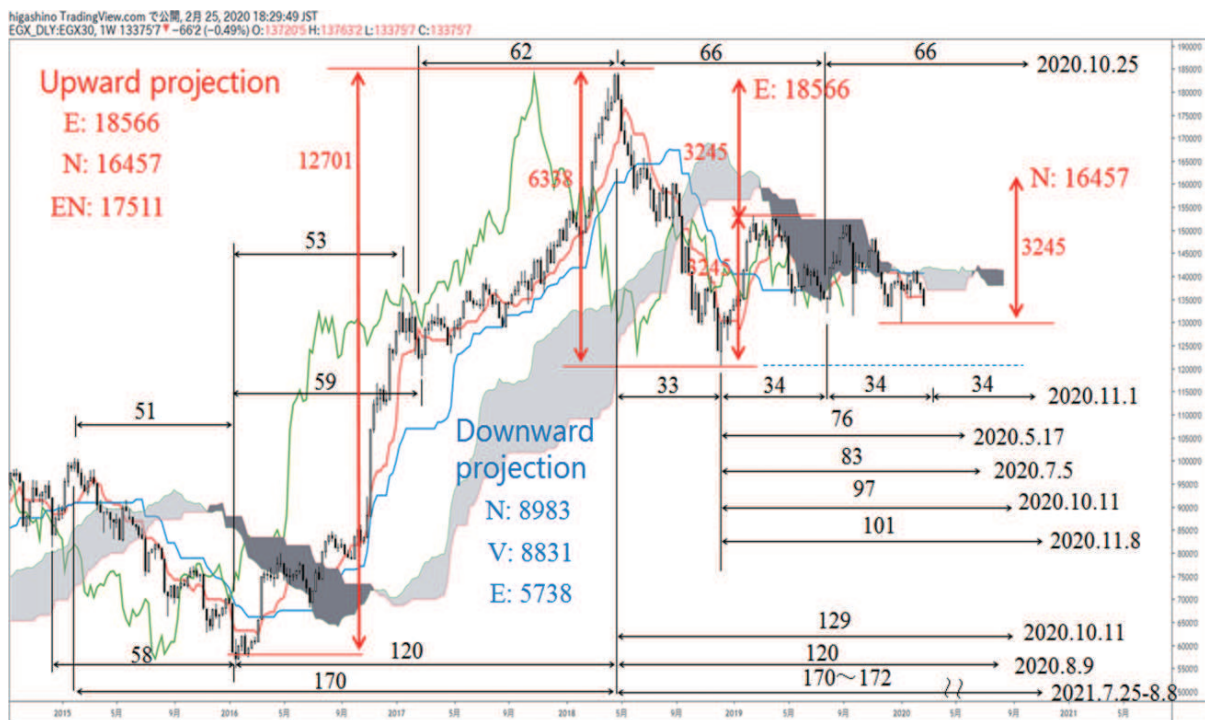

Figure 11.　Weekly chart of the EGX30 Index

●プロフィール

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1968年大阪生まれ。証券会社、大手銀行などを経て2006年にDZHフィナンシャルリサーチ入社。日本テクニカルアナリスト協会副理事長、教育部門を担当。IFTA（国際テクニカルアナリスト連盟）国際検定テクニカルアナリスト。欧州やエジプトなど国際カンファレンスでテクニカル分析の論文発表のほか、明治大学の非常勤講師、同志社大学経済学部で講師経験。テレビ東京、日経CNBCなどに出演。