

Auspicious Days in the Japanese Stock Market

Predictions Examined by a Cultural Historian

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More than ninety years ago K. Steiner, a German merchant living in the western part of Japan, wrote an academic article on the preoccupation with fortune-telling he detected among his Japanese neighbours (STEINER 1910). Most surprising was the fact that even the stock market – the most uncertain field in his eyes – was subject to predictions by astrologers. In those days the auspicious and inauspicious days of the year were published in specially devised almanacs. Since “almost all Japanese involved in trade and the stock market buy these booklets and depend in their transactions on the predictions made there,” he did not find it difficult “to know beforehand when the Japanese are going to buy or sell equities” (ibid.: 62). Armed with this information, he could anticipate when stock prices were going to rise and fall. Hence, foreign residents of Japan able to understand these almanacs were clearly in the ideal situation for investors: they knew the ups and downs of the market a year in advance.

Intrigued by this article, I resolved to address the issue as to whether qualifications of time still exert any influence on the Japanese equity market. In investment banking time-related anomalies in stock return are usually called calendar effects. Studies show that some days or months promise significantly higher or lower returns on investments, a phenomenon usually explained by the weekend or the end of the accounting year (REINGANUM 1990).¹ The systems of time divination explored here certainly belong to the category of calendar effects. In contrast to the forms mentioned above however,

1 For Japan day of the week fluctuations were studied by Jaffe and Westerfield (1985) who showed that the day with the lowest mean return is Tuesday. According to Kato and Schallheim (1985), January has the highest returns at the Tokyo Stock Exchange.

“chronomancy” (Needham) – in other words the mantic art making predictions about good or bad timing – eludes scientific explanation as do all the many other forms of mantic endeavours.

Starting point for our investigation will be the chronomantic systems described by Steiner back in 1910. Two of his methods to define good and bad days are chosen in order to test their validity in the present day context. The reference point for evaluating the cycles will be the Nikkei 225 stock average for the year 1997, whose daily prices were available to me. On the basis of the results from this elementary test I will go on to discuss the procedures for further investigations into the subject.

Steiner used two almanacs² compiled for the year 1910: a general one and one devised specially for businessmen. Subtitled “Statements on the cheap and expensive prices for rice,” it was clearly pitched at rice contract trading at the futures market in Osaka. These two booklets I could not obtain. However, older versions of almanacs from the beginning of the Meiji-period do exist; and comparison with more recently compiled booklets show that all almanacs display the same basic structure and the columns for each day contain the same chronomantic notations.³

Steiner (1910: 74–78) selected four systems or cycles he found most important and explained the way they worked and their significance for predicting trends on the equity market. Although elements of all four cycles are still noted in the day columns of today’s almanacs, two of them are unsuitable for our purposes. The cycle called “Nine Stars” (*kyūsei* 九星) is usually linked to the birth star of individuals, consequently an inauspicious day for one person could be promising for someone else.⁴ A second cycle, the “Twenty-Eight Mansions” (*nijū hasshuku* 二十八宿), is replaced in some almanacs by a

2 The distinction between a calendar and an almanac as made by Smith (1992, 1) in the Chinese context is applied here: “The term ‘calendar’ refers exclusively to an annual publication authorized and usually issued directly by the Chinese central government, while the word ‘almanac’ denotes an unofficial calendrical work which may be informally sanctioned, merely tolerated, or in fact expressly forbidden, by the State.”

3 The earliest example of such an illegal calendar I found was from 1884. In its title, “Essential Diary for the 17th year of the Meiji Era” (*Meiji jūshichinen chūyō nikki* 明治十七年中要日記), the word calendar was obviously avoided. A later example from 1904 was titled: “Everybody’s Treasure for the 38th year of the Meiji-Era” (*Meiji sanjūhachin nen banmin hō* 明治三十八年万民宝).

4 Some almanacs like the ones issued by the “Japanese Association for Mantic Arts” (Nihon Senjutsu Kyōkai 日本占術協会, 1992) take this into account by supplying nine different calendars for each of the nine groups a person can belong to.

version with only twenty-seven Elements. This leads to a different mode of attribution and consequently to contradictory interpretations for a given date.⁵ Because of this ambiguity only two of Steiner's methods will be explained in the following and tested. They seem to be valid for all potential stock-traders in Japanese markets.

The first system used here to predict trends in the Japanese stock market is the well-known sixty-day cycle which is generally referred to as "Stems and Branches" (干支 Chin. *ganzhi*, Jap. *kanshi* or *eto*).⁶

The second method used is of Japanese origin. It consists of six elements that are called the "Six Luminaries" (*rokuyô* 六曜 or *rokki* 六輝). As they were "particularly important for equity traders" (STEINER 1910: 80) it will be appropriate to explain their historical development, general meaning and mode of attribution to the days of the calendar in some detail.

A one-page calendar for the year 1748 contains the oldest reference to the six signs in their present form.⁷ An early example of their actual use in timing decisions may be found in a navigation manual compiled in the second half of the eighteenth century. A captain from the island Izu Hachijôjima supplies a list of the six emblems and advises sailors that the day for departing

5 See for example the almanacs edited by the "Headquarter of Takashima I[-ching] Interpretations" (Takashima Ekidan Honbu 高島易断本部, 1993) announcing on its cover that it follows the "old method" of "Twenty-seven Mansions".

6 Its sixty elements are formed by combining two characters taken from two shorter cycles called the ten "Stems" (干 Chin. *gan*, Jap. *kan*) and the twelve "Branches" (支 Chin. *zhi*, Jap. *shi*). The first of its sixty pairs is created by joining the first element of the denary with the first element of the duodenary cycle. The cycle starts anew with the first pair after the sixtieth pair – a combination of the tenth "Stem" and the twelfth "Branch". As sixty is the lowest common multiplier of ten and twelve every "Stem" appears six times and every "Branch" five times within these sixty pairs of the cycle. Early in the seventh century a system of calculating time was imported from the mainland to Japan via Korea. The Chinese calendars imported at the time included the sexagenary cyclical signs which were not merely attributed to each day of the year but also to months and the year itself. Furthermore, the interpretation of the signs of this cycle had been developed into an elaborate system using the theories of Yin and Yang and the Five Elements. They ascribed qualities to the cyclical characters and thus to the units of time they were assigned to. When this system was introduced into Japan these sixty cyclical signs were not merely utilised to count units of time. They also represented phases of circulating energy that correlate the microcosm with the macrocosm, human beings and their environment. Their application to the stock market can thus be seen as a modern usage of a cycle already in constant use for more than three millennia.

7 It was discovered at the National Diet Library in Tokyo by Kanda Shigeru. As the printing of the signs on the original woodblock print is very faint I could only verify the designations for the six elements and was unable to decipher their interpretations.

on their then quite dangerous sea voyages should be fixed according to these signs. Their designations and basic chronomantic meanings are as follows:

- [1] “Early [Action Brings] Victory” (*senshō* 先勝): “auspicious” (*kichi* 吉); [2] “Similar [Things are] Attracted” (*tomobiki* or *yûin* 友引): “medium auspicious” (*hankichi* 半吉); [3] “Early [Action Leads to] Losses” (*senmake, senpu?* 先負): “auspicious in the morning” (*asa kichi* 朝吉); [4] “Buddha’s Entering [Nirvana]” (*butsumetsu* 仏滅): “inauspicious” (*kyô* 凶) [5] “Great Peace” (*taian* 大安): “very auspicious” (*daikichi* 大吉); [6] “Red Mouth” (*shakkô* 赤口): “auspicious at noon” (*hiru kichi* 昼吉).⁸

Apart from the rather simple nature of the temporal qualifications represented by these emblems nothing is said about how they are to be attributed to the days of the year. However, a widely used encyclopedia from 1839 offers additional explanations.⁹

Here the six emblems are referred to as “Luminary Stars” and in the chapter, “Thoughts on choosing days [according] to the ‘Six Luminary Stars’ (*rokuyôsei* or *rikuyôsei* 六曜星)” rules are set out on how to allot them to the days of the calendar. The lunar months are starting point for the calculation. On the first day of each month the sequence begins anew with one of the six signs. The first day of the first and seventh lunar months always starts with the first sign in the row. The first day of the second and eighth months starts with the second sign. The third and ninth months start with the third sign and so on until the sixth and twelfth months start with the sixth sign. So how do we find out what day the twelfth day of the first month is? One has to set out from the first day of this month – according to the list it is an “Early [Action Brings] Victory” day – i.e. the first sign in the row, and then one continues to count the days forward, awarding a sign to each of the following days until one reaches the sixth sign, the “Red Mouth” day, that falls on the twelfth day.

Glancing over the explanations given in today’s almanacs you will find that neither the general interpretation of the signs, nor the mode of allotting them to the days, have changed.¹⁰ The method of attributing the “Six

⁸ *Kaisen anjōroku* 1810: 358.

⁹ *Tenpō shinsen Eitai daizassho banreki taisei* 1839: 139a–b.

¹⁰ The interpretation of the day “Early [Action Leads to] Losses” in the navigation manual as being “auspicious in the morning” is obviously a misprint. It contradicts the very name of the day and the standard interpretation which would be, “Bad from the morning until the hour of the horse [at noon]” (*Tenpō shinsen Eitai daizassho banreki taisei* 1839:

Luminaries” also reveals that the six signs do not form a real cycle because this six-day week is interrupted at the end of every month and begins anew on a predetermined weekday.¹¹ Since in the luni-solar calendar a month always starts on the day of the new moon, it is evident that the notation of the six in the almanacs depends on the moon’s phases. This makes the whole system rather ambiguous because the date of the new moon varies according to geographical location.

Once we have looked into how Steiner applied the two cycles to make predictions, we will test the validity of chronomantic interpretations using the Nikkei 225 stock average as compiled by the *Nihon Keizai Shinbun*.¹²

According to Steiner’s explanations in his article, two days of the sixty-day cycle predict the market trend directly. On the day “[7] Old Metal-Horse”¹³ prices will rise and they will fall on the day “[15] Old Earth-Tiger.” On two out of the three trading days in 1997 that were governed by “[7] Old Metal-Horse” the index rose. On the third day the market closed slightly lower than on the previous day. The study of the cyclical sign “[15] Old Earth-Tiger”

139b1–2).

- 11 If we transfer this method to the Gregorian Calendar, every January would start with a Monday, despite the fact that December 31st might have been a Thursday.
- 12 The Nikkei 225 index for 1997 can be described as follows: The long-term trend reached an all time high at the end of 1989 of 38,915 points. The index nosed downward for almost three years until a relative low was reached at the end of August 1992 (14,309 pts.); then the index moved in a trading range between around 14,500 and 22,750 points. In 1997 the index started at 19,500 points before reaching a relative low mid-January (17,019 points) and a relative high at the end of July (20,698 points). Thereafter the index fell continuously to 14,488 by the end of the year. In that year the Tokyo Stock Exchange was open on 245 days; days with a declining index slightly outnumbered days with a rising index at 129:115.
- 13 In the interpretative Japanese rendering of the cyclical characters, the ten “Stems” are called by the “Element” they are linked with (“Wood,” “Fire,” “Earth,” “Metal,” “Water”) and a specification is added as to whether it contains the Yin or the Yang aspect of that “Element”. “Wood” is attributed to the first and second “Stem” with “Yang-Wood” being the specification for the first “Stem” and “Yin-Wood” for the second. Now, of the many pairs that Yin and Yang can represent (male-female, husband-wife, ruler-subject, the preceding-following etc.) the relation between elder and younger brother is chosen to represent the complicated notions of Yin and Yang: “Elder Brother of Wood” (*ki-no-e*) is therefore the literal rendering of the Japanese pronunciation of the first “Stem”. When used in the sexagenary signs the twelve “Branches” are designated by their zodiacal names (“Rat,” “Ox,” “Tiger,” “Hare,” “Dragon,” “Snake,” “Horse,” “Sheep,” “Monkey,” “Cockerel,” “Dog,” and “Boar”). “Elder brother of Wood-Rat” (*ki-no-e ne*, the Sino-Japanese rendering is *kōshi*) is therefore the interpretative designation for the first of the sixty pairs. Here this is abridged to “Old Wood-Rat”.

showed that on four out of five days under that sign prices fell as predicted by Steiner.

Steiner also made isolated interpretations for the day “[57] Old Metal-Monkey.” Both of its cyclical characters are related to the element “Fire” so the sign represents a dual fiery energetic constellation which results in feverish ups and downs in the markets. In 1997, however, nothing out of the ordinary happened on the three days with this cyclical sign. The markets witnessed little more than slight advances and declines within a small trading range.

Besides these three days with their own distinct interpretation, the sixty-day system more often defines crucial days that predict the market trend for a predetermined number of days. These periods within the sixty-day cycle are of differing length – they vary from ten to sixteen days – and receive special names. In all cases speculators should watch the first day.

A ten-day period extending from the day “[21] Old Wood-Monkey” to the day “[30] Young Water-Snake” is called “Darkenings in the Ten Directions” (*jippôgure* 十方暮). As the name implies it is a dangerous period of time marked by volatile markets. If the trend of the first day is downward this will continue for the whole period. On the three trading days in 1997 governed by “[21] Old Wood-Monkey” the index fell. But contrary to Steiner’s interpretation, in two of three cases (June 11 and October 9) the index stood higher on the day “[30] Young Water-Snake” than at the beginning of that ten-day period.

“Ascending to the Heaven of the Heavenly One” (*tenichi tenjô* 天一天上) is the specific designation given to a sixteen-day period lasting from the day “[30] Young Water-Snake” to the day “[45] Old Earth-Monkey.” It can be interpreted as follows: if prices are low on the first day, they will remain low for the rest of the period, and vice versa. Stock market results from three out of five such periods in 1997 confirmed this interpretation: after a day with a rising index (April 21) it continued to rise. On two days (June 20 and August 19) with the cyclical characters “[30] Young Water-Snake”, the index closed lower than the previous day and continued to fall for the rest of the term.

A third period within the group of multi-day periods is known as “Eight Exclusively [One-Element Days]” (*hassen* 八專). This marks a 12-day period starting with the day with the cyclical sign “[49] Old Water-Rat” and ending with the day “[60] Young Water-Boar.” Given that the prices are high on the first day of this period, they will be predictably low on the remaining eleven days. However, if they are low on the first day, on the following eleven days they will be higher. My findings based on the Nikkei Index accord with the predictions on two occasions: once after a day with a falling index (July 9)

when an advance was registered in the rest of the period and then a rising index on one day (November 6) was followed by a sharp drop. In two other cases recorded for 1997 (January 10 and March 11) the index moved in the expected opposite direction but only for a few days and not for the whole 12-day period.

Finally, the day “[1] Old Wood-Rat” is significant since it inaugurates the whole cycle, meaning that the direction the market has on that day will continue until the cycle ends 59 days later. Due to weekends and public holidays there was trading on only four days with this cyclical character in 1997. After a substantial rise on January 22 there was a rally until the period’s half-way mark, after which the index reverted to its starting level. The sixty-day cycle starting on May 22 shows the same pattern: slightly rising prices on the initial day were followed by a rise during the first half of the cycle, with the cycle closing at almost the same level as at the start. During the two sixty-day cycles in the latter half of the year when altogether the index only fell, the prices rose contrary to the trend on the two days “[1] Old Wood-Rat” (September 19 and November 18). In both cases, however, the Nikkei 225 moved downward after that. So it is probably best to consider this first day of the cycle a day of rising index, as this was the case on all four occasions.

To test the second system for time divination we selected the most positive and the most negative day of the “Six Luminaries”. In Steiner’s words “the most auspicious day for speculations at the exchanges” (STEINER 1910: 76–77) is the “Great Peace” day. This day is characterized by constant low prices. 1997 saw forty-two “Great Peace” days and the index fell on twenty-five by an average of 1.67% and rose on seventeen days by an average of 0.86%, demonstrating that prices were actually low especially towards the close of the day. If we apply the most basic concept of equity trading, namely to buy low and sell high, this particular day could be seen as an opportunity to buy because prices are low.

The most inauspicious day “Buddha’s Entering [Nirvana]” enjoys the prediction that prices tend to go only in one direction: up or down. Thus we can expect a wide trading range on these days with opening and closing prices far apart and no prior knowledge about the direction of price-changes. However, the average daily rate of change to the index on “Buddha’s Entering [Nirvana]” days was only 196 points and therefore smaller than on “Great Peace” days, when the average change was 239 index points.

Another observation relating to these two days but not mentioned by Steiner was particularly surprising. Although there were more declines in the index

during 1997, my investigations showed that it was likely to rise on the thirty-nine “Buddha’s Entering [Nirvana]” days. In fact results showed that with eighteen declines by an average of 0.92%, there were twenty-one days on which the index rose by an average of 1.26%. We could combine these findings with the phenomenon of a declining index on “Great Peace” days and formulate a possible strategy: Buy the index at the beginning of a “Buddha’s Entering [Nirvana]” day; close the position at the end of the trading day in Japan and simultaneously open a short position, whereby the latter should be liquidated at the close of the “Great Peace” day. According to the rules of attribution, a “Great Peace” day necessarily follows a “Buddha’s Entering [Nirvana]” day.

The results yielded by this primary testing are hard to evaluate. A twelve-month period is certainly too short to amass a statistically significant amount of data; furthermore a calculator is definitely not the best instrument for sophisticated mathematical analysis. Despite the lack of computation devices, the outcome of this mini-survey was not completely discouraging. Clearly a handful of problems arise from this investigation.

Firstly the amount of data would need to be extended substantially. If available market data from the early decades of the twentieth century should be included in order to discover how Steiner’s systems actually worked. Further improvements could include the extension of data to small cap indices or shares of companies with a low percentage of foreign shareholders (presumably less susceptible to local chronomantic considerations).

One further problem lies in the variety of signs found in current yearbooks. As mentioned above, an element from the six-day week and a sexagenary sign impart a twofold meaning to each day of the year. However, we can attribute a third meaning when special days or periods within the sixty-day cycle lend an additional quality to a given date. Yet in the almanacs of today it is common to find as many as eight different notations in the column reserved for a single day. This increases the likelihood of contradictory instructions derived from signs of different cycles. It also highlights the need to develop a hierarchy of validity for the miscellaneous signs containing chronomantic information.¹⁴

14 The elements of the six-day week first appeared in the weekly schedules of Japan’s largest financial newspaper, the *Nihon Keizai Shinbun* in 1987. This implies that the signs Steiner considered the most important for stock-trading, should be put at the top of the list.

Most urgently for an effective survey we would require a precise definition of an auspicious and inauspicious day. Contemporary almanacs contain general mention of the impact of calendrical signs on buying and selling. However I have not been able to find up-to-date literature with specific advice to traders yet. This means, the interpretations of the signs and cycles given by Steiner are the only ones to rely on for the time being.

Ideally we should concentrate on developing separate testing procedures for each of the mantic systems or signs noted in today's almanacs. It would be a good idea to make different indices the target of these evaluations. The systems found reliable could then be elaborated into a more complex strategy that I presume would be best suited for swing traders. Compared to testing calendar effects like the day of the week or the month of the year, developing a testing routine to correlate the stock market with non-empirical influences would certainly prove to be more complicated. Nevertheless an investigation into correlations between stock trading and chronomantics promises to be rewarding and – regardless of outcome – would supply new material for the debate on the efficiency of the financial markets.

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