Fundamental Laws of Financial Market Trend

金融市场走势的基本法则

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Abstract / 摘要

This article discloses the fundamental laws governing the price movements of financial markets. These laws are built upon quantum effects can manifest on a macroscopic scale, Chaos Theory, Elliott Wave Theory, Gann Theory, and Aigoo Theory. Through these laws, the trends of financial markets can be accurately predicted under specific circumstances. Prior to my discovery of these laws (2017 - November,14,2021), it was possible to achieve returns of hundreds of times within a short period while maintaining extremely low drawdowns. More importantly, it reveals the fundamental principles of complex systems

本文公布金融市场运行的基本法则。这一法则基于宏观量子效应，混沌理论，艾略特波浪理论，江恩理论和艾古理论。通过这些法则，可以在特定情况下准确预测金融市场的走势，在本人发现这一法则前（2017年到2021年11月14日）可以在极低的回撤下实现短期内数百倍的收益。更重要的是，这揭示了复杂系统的基本原理。

Background / 背景

Since the inception of financial markets, speculators have been finding for a method that can accurately predict market trends. The early master speculator, Honma Munehisa, invented the fundamental principles of Candlestick analysis [10]. These principles were later popularized and advanced by Jesse Lauriston Livermore, whose work, Reminiscences of a Stock Operator, expounded the early methods of technical analysis [12, 13]. The individuals who truly scientificized these early, rudimentary explorations were Ralph Nelson Elliott and William Delbert Gann. Elliott geniusly categorized stock movements into waves, establishing a set of analytical rules for market trends in terms of space. Meanwhile, Gann made extensive use of time windows to forecast market movements, establishing a set of analytical rules in terms of time [4, 8]. Aigoo Theory integrated these two approaches, establishing a set of spatio-temporal analytical rules and hinting that, in some extremely rare circumstances, market trends can be accurately predicted [1]. By extending the aforementioned theories and combining with quantum effects can manifest on a macroscopic scale and Chaos Theory, I have discovered the fundamental laws of market trend. Through the proficient application of these laws, one can make directional judgments with extremely high accuracy in most cases, and in many instances, the accuracy can reach a staggering 100%. The fundamental laws consist of five basic components: I, Initial Patterns; II, Formation of the New Wave; III, Initial Direction; IV, Reversal Patterns; V, Termination Patterns.

在金融市场诞生初期，投机者就在追寻是否存在一种能准确预测金融市场走势的方法。早期的投机大师本间宗久（Honma Munehisa）发明了K线分析的基本原理[10]。将其原则发扬光大的是杰西·利弗莫尔（Jesse Lauriston Livermore）。其著作，《股票大作手回忆录》，阐述了早期市场技术分析的方法[12, 13]。真正将这些早期朴素的探索科学化的，是拉尔夫·纳尔逊·艾略特（Ralph Nelson Elliott）和威廉·德尔贝·江恩（William Delbert Gann）[4, 8]。艾略特天才地以波浪划分股票走势，在空间上对股票走势建立了一套分析规则。而江恩大量使用时间窗去预测股票走势，在时间上对股票走势建立了一套分析规则。艾古理论将这两者结合，建立了一套时空分析规则，并提示在极为罕见的情况下，可以做到准确预测市场走势[1]。本人将上述理论进行推展，并结合宏观量子效应和混沌理论，最终发现了市场运行的基本法则。通过熟练运用这些法则，可以在大多数情况下对市场做出准确率极高的方向性判断，并在许多时候，准确率可以达到惊人的100%。本规则由五个基本部分组成：I，初始模式，II，新浪形成，III, 初始方向，IV，转势模式，V，终结模式。

Five Fundamental Laws / 五大基本法则

I. Initial Patterns / 初始模式

There are three types of Initial Patterns:
1, Three-Wave Pattern: The most fundamental 3-wave "flat-cut" pattern.
2, Five-Wave Pattern: Building upon the Three-Wave Pattern, a 5-wave pattern is formed according to the rules of "New Wave Formation."
3, Eight-Wave Pattern: Similarly, building upon the Three-Wave Pattern, an 8-wave pattern is formed according to the rules of 'New Wave Formation'; all other conditions remain the same.
All benchmarks are based on waves 2 and 3. The rules for Initial Patterns are largely consistent with Elliott Wave Theory, with the key difference being that the initial three waves are completely flat—meaning waves 1, 2, and 3 are completely the same in space. In contrast, the "New Wave Formation" follows a V-shaped structure, a point that will be addressed in Rule 3.My most significant discovery is the massive impact of clutter (noise) on the Initial Pattern. When defining an Initial Pattern, one must ensure that the overall trend does not contain noise clutter exceed a threshold of 1/2.5029.... This value, 2.5029..., is the Second Feigenbaum Constant (α), a constant that possesses extreme universality within Chaos Theory[6].
初始模式为有三种:
1，三浪模式。最基础的3浪切割平模式。
2，五浪模式。在三浪模式的基础上，按照新浪形成的规则，形成的5浪模式。
3，八浪模式。同样在三浪的基础上，按照新浪形成规则，形成8浪模式，其他都是一样的。
所有的基准都是2,3浪。初始模式的规则和波浪理论基本一致，区别在于初始三浪是完全平的，也就是1，2，3浪在空间上是一样的，而新浪的形成是v形结构，这一点在规则三会提。本人最重要的发现是，杂波对初始模式的影响巨大。在定义一个初始模式的时候，必须确保走势整体没有超过1/2.5029...杂波。这个2.5029...是第二费根鲍姆常数（second Feigenbaum constant），这一常数(α)在混沌理论中具有极高的普适性[6]。

II. Formation of the New Wave / 新浪形成

After the most basic Initial Three-Wave Pattern, there are 4+4 ways to form a New Wave, categorized into two modes: Expansion and V-Retracement.
1. Expansion: Starting from the final position and using the Initial Pattern as the benchmark, space expands by factors of 1, 2, 2.5029..., 4.669..., and so on.
2. V-Retracement:
a) A Forward V-Retracement based on Wave 2; any retracement is valid as long as it breaks the highest or lowest point of any wave within its Initial Pattern.
b) During the 1st and 3rd formations of a New Wave, a Reverse V-Retracement based on Wave 2.
c) During the 2nd, 4th, and 5th formations of a New Wave, a Reverse V-Retracement based on the "New Wave 3."
d) During the 3rd formation of a New Wave, a Forward V-Retracement based on the "New Wave 3."
Calculation Rules: All retracements in the same direction that align with the current benchmark can be included in the calculation of overlaps and sizes. If they do not align, they are excluded from the calculation, even if they were historically recognized.
在最初始的三浪模式后，有4+4种方式形成新浪，分为扩张和v回调两种模式。
扩张。顺着最后的位置，以初始模式为基准，在空间上扩张1,2,2.5029...,4.669...倍。
v回调。
a，以2浪为基础的正向v回调，任何的回调只要突破了其初始模式中任意一浪的最高或最低点，就是有效的。
b，第1,3次形成新浪时，以2浪为基准的反向v回调。
c，第2,4,5次形成新浪时，以新3浪为基准的反向v回调。
d，第3次形成新浪时，以新3浪为基准的正向v回调。
所有符合当前基准的同方向的回调，都可以计入重合和大小的计算中。如果不符合，就不计算，即使历史承认过。这个4.669...是第一费根鲍姆常数(δ，first Feigenbaum constant）。

III. Initial Direction / 初始方向

The Initial Direction is always aligned with the trend of the final wave; however, there are three ways to change this Initial Direction:
1, Sequence: The benchmark time sequences follow the set of natural numbers $\{1, 2, 3\}$, $\{1, 2, 3, 4, 5\}$, and $\{1, 2, 3, 4, 5, 6, 7, 8\}$. By comparing against the benchmark sequence: if there is an odd number of identical elements, the direction reverses; if there is an even number of identical elements, it does not reverse.
2, Overlap: This is identical to the 'Overlap' rule within the Reversal Patterns.
3, Time Expansion: In a 5-wave pattern, the 3rd wave serves as the benchmark; in an 8-wave pattern, the 5th wave serves as the benchmark. If Time Expansion occurs, the

direction reverses.
初始方向都是顺势最后一浪的，有三种方式可以改变初始方向。
1，序列，基准时间次序都是自然数序列，123，12345,12345678。对比基准序列，有奇数个相同的，反转，偶数个相同的，不反转。
2，重合，和转势模式中的重合完全相同。
3，时间扩张，5浪模式以3浪为基准，8浪模式以5浪为基准，如果时间扩张，则反转。

IV. Reversal Patterns / 转势模式

There are five subsequent ways to trigger a Trend Reversal:
a) Identity: Based on the temporal comparison of the initial Waves 2 and 3; each subsequent formation of a New Wave (including expansion and reversal) involves a comparison of the final two waves. If they become more identical, a reversal is triggered.
b) Overlap: Using the last second wave as the benchmark, a global and historical trace is conducted on all waves in the same direction. If there is an overlap where a larger wave encompasses a smaller one, or if they gap against each other, a reversal is triggered.
c) Expansion: Divided into Time Expansion and Space Expansion, both based on the factors 1, 2, α, and δ. These use the global framework as the benchmark. In cases of continuous spatial expansion, the spatio-temporal benchmarks remain unchanged. A reversal occurs when Time Expansion reaches the intervals of 1–2 or α-δ.
d) Small-to-Large: Using the penultimate wave as the benchmark, compare it against all previous waves in the same direction. If it is larger and falls within the range of 2–3 or α+1-$\delta+1$, a reversal is triggered.
e) Transcendence: If the global framework exceeds δ times the base framework, a reversal is triggered. The 'base framework' refers to the benchmark at the time of the New Wave formation, specifically Wave 2 or Wave 3.
后续有5种方式可以转势:
a,相同，以初始23浪的时间对比为基础，后续每次新浪形成，包括扩张，反向，都对比最后的两个浪，更相同，转势
b,重合，以倒数第二浪为基准，所有同方向的浪，进行全局及历史追溯，有大包括小的重合，或者互相跳空，转势。
c,扩张，分为时间扩张和空间扩张，都是以1,2,α,δ为基础的，都是整体框架为基准，空间连续扩张的话，时空基准都不变。时间扩张在1-2，α-δ处转势。
d,小大，以倒数第二浪为基准，对比此前所有同方向的浪，如果是更大而且范围在2-3,$\alpha+1$-$\delta+1$之间，转势。
e,超越，整体框架超过基础框架的δ倍，转势。这个基础框架，应该是当时新浪形成的基准，也就是2或者3浪。这里的时间相同，在江恩理论中有提及。而重合是在波浪理论中有提及，时间扩张在江恩理论中有提及，空间扩张在艾古理论中有提及。小大则是我个人的发现，超越也是我个人的发现。

V. Termination Patterns / 终结模式

The Termination Pattern is the most critical rule. It determines that after an Initial Pattern is formed, the trend reversals carried out according to the aforementioned rules are not infinite. This means that even if previous reversal patterns failed to predict correctly, once the market trend reaches a Termination Pattern, its direction must be correct (i.e., a 100% success rate).
Three-Wave Pattern: Terminates after 5 cycles; requires at least 2 New Wave formations. Stop-loss/take-profit space is set at δ times the benchmark. The initial time limit is $\delta \times \alpha$ times, using the second New Wave formation as the benchmark. If the take-profit target is not reached after the time limit is exceeded, an immediate reversal occurs, moving by α times, followed by another reversal at that position.
Five-Wave Pattern: Terminates after 3 cycles; requires at least 1 New Wave formation. Stop-loss/take-profit space is set at α times the benchmark. The time limit is δ times, using the first New Wave formation as the benchmark. If the take-profit target is not reached after the time limit is exceeded, an immediate reversal occurs, moving by 2 times, followed by another reversal.
Eight-Wave Pattern: No subsequent New Wave formations. Stop-loss/take-profit space is set at 2 times the benchmark. The time limit is α times, using the Eight-Wave structure itself as the benchmark. If the take-profit target is not reached after the time limit is exceeded, an immediate reversal occurs, moving by 1 time, followed by another reversal.
终结模式是最重要的一个规则。它判断在初始模式形成后，按照上述规则进行的转势不是无限次数的。这意味着，即使前面的转势模式预测失败，一旦市场走势运行到终结模式时，其方向必定是正确的（也就是成功率100%）
3浪模式，5次终结，至少2次新浪形成，空间δ倍止损止盈，时间初始限制为$\delta \times \alpha$倍，基准是第二次形成新浪，如果在时间超越限制之后，仍未止盈，当即反转，走α倍，在此位置再次反转。
5浪模式，3次终结，为至少1次新浪形成，空间α倍止损止盈，时间限制为δ倍，基准是第一次新浪形成，时间超越限制后，仍未止盈的，当即反转，走2倍，再次反转。

8浪模式，后续没有新浪形成，空间2倍止损止盈，时间限制为α倍，基准就是八浪，时间超越限制后，仍未止盈的，当即反转，走1倍，再次反转。

Discussions / 讨论

Throughout the long history of financial markets, speculators have naturally sought methods to accurately predict market trends. Most modern financial theories assume that market movements are random. In his 1959 study, Harry Roberts used a random number table to generate a set of stimulated market price charts, which exhibited head-and-shoulders tops, trend lines, and support levels highly similar to those in financial markets [19]. However, beyond this, there is no stronger evidence to prove that financial market movements are random. Yet, the assumption that market price movements are random remains the foundational hypothesis of modern finance, upon which the vast majority of financial theories are built.

I questioned this hypothesis while studying finance. In my view, predicting financial market trends is no different from predicting the future in the physical world; it is a problem of ultra-complex systems. While this problem is extremely difficult, results from Chaos Theory over the past half-century have confirmed that ultra-complex systems exhibit regularity in certain circumstances rather than complete randomness [6, 14, 15, 17, 18]. Furthermore, physics has discovered that quantum effects can manifest on a macroscopic scale [2, 3, 5, 7, 9, 11, 16].

Consequently, in early 2018, I hypothesized that a fundamental Initial Pattern (essentially a macroscopic "quantum" composed of spatio-temporal structures) might exist in financial markets. Once this Initial Pattern forms, subsequent market movements exhibit a regularity consistent with Chaos Theory. I even suspect that random numbers generated through coin flips or quantum effects might not be truly random but still possess specific patterns, i.e., such laws are universal.

In financial markets, a group of speculators trades solely based on price movements, collectively known as Technical Analysts. Their most famous works include Elliott Wave Theory and Gann Theory, while Aigoo Theory also holds some renown in China [1, 4, 8]. By refining these technical analysis doctrines alongside empirical rules summarized from my own ten year experience in market, and after a long and complex verification process, I finally confirmed on November 14, 2021, that this hypothesis is entirely valid, with no exceptions found in practice.

Prior to this confirmation, I conducted a large number of small-scale trades in the foreign exchange market (continuing until October 2021, by which time these rules were nearly completed, resulting in very successful trades with several-fold profits). However, once the validity was confirmed and mock accounts demonstrated the potential for hundred-fold returns, I ceased all financial trading. It has been over four years since then. Primarily, as the first person to discover these rules, I feel a profound sense of responsibility and required significant time to contemplate how to handle this achievement.

One of my initial plans was to register biomathematics.org and establish an institute for biomathematics, anticipating the discovery of similar rules in biological phenomena. Subsequently, I dedicated my time to writing statistics papers, including biostatistics and theoretical statistics—achievements that could likely lead to a Nobel Prize or Fields Medal [20–25]. I have long considered the profound impact of this achievement on human civilization and social structures, including its potential applications in complex systems, physics, chemistry, and biology. Thus, I began exploring biomathematics in 2019.

Beyond applications in other disciplines, I have also contemplated the impact of this theory on the financial system itself. I believe the Free Market will persist for a long time as the optimal choice, though its specific operations will differ under the influence of these rules. Concerning how to deal with the potential social impact and public opinion has caused me painful, leading me to archive this achievement temporarily at that time. My greatest fear is that these results might be exploited by the ambitious; especially amidst the Artificial Intelligence wave, the impact of this achievement on financial markets is evident. Ultimately, I decided to disclose it fully and completely to protect our Free Market and protect our liberty.

The rules described above are essentially the original manuscript completed on November 14, 2021, with only minor modifications. I will provide further case-by-case explanations in

the future. However, given the limited time currently available, I can only explain up to this stage. Publishing these results normally without obstruction is an immense challenge in itself. I must complete this work in the shortest time possible.

在金融市场漫长的运行中，投机者天然地希望寻求一种能准确预测市场走势的方法。现代金融学理论大多假设市场走势是随机的。哈里·罗伯茨(Harry Roberts)在1959年的研究中利用随机数表生成了一组"股价走势图"，其中呈现和金融市场走势高度相似的头肩顶、趋势线和支撑位[19]。但除此之外并没有任何更强的证据能证明金融市场的走势是随机的。可市场价格走势是随机的是现代金融学的基础假设。绝大多数的金融学理论都是建立在这一假设之上的。我在学习金融学的时候就对这一假设产生过疑问。因为在我看来，预测金融市场的走势和预测现实世界中的未来并没有什么区别。这是一个超复杂系统的问题。这一问题虽然十分困难，但最近半个世纪的混沌理论已经有一些成果证实，超复杂系统在某些情况下呈现规律性，而非完全随机的[6, 14, 15, 17, 18]。此外，物理学已经发现，在宏观尺度上也可以展现量子效应[2, 3, 5, 7, 9, 11, 16]。我因此在2018年初假设在金融市场可能存在一种基本的初始模式（也就是宏观上由时空结构组成的量子）。这种初始模式形成后，其后的市场走势会呈现某种符合混沌理论的规律性。我甚至怀疑，通过抛硬币或量子效应等方式形成的随机数其实可能也不是真正随机的，仍然存在特定规律。在金融市场中，确实有一批投机者单纯根据市场价格走势而进行市场交易，这些投资者统称为技术分析派。他们最著名的就是艾略特波浪理论和江恩理论[4, 8]。而艾古理论在中国也小有名气[1]。将这些技术分析学说和我自身参与金融市场十年经验总结的法则加以提炼，在经过漫长而复杂的校验后，最后在2021年11月14日确定这一假设是完全成立的，在实践中发现不了任何例外。在这一假设确定成立前，我在外汇市场有大量的小额交易（直到2021年10月我仍然有一些交易，那时这些规则已经基本完成了，所以这些交易都非常成功，获取了数倍的利润）。但在确定成立，模拟盘可以达到数百倍的收益后，我即停止了所有的金融交易。至今已有四年多的时间。主要是作为首个发现这一规则的人，我深感责任重大，需要很多时间去思考这一成果的处理方案。我当时初步的处理方案之一是注册biomathematics.org，计划设立生物数学所。预期能在生物现象上发现类似的规则。其后我的时间都花在撰写统计学论文上，包括生物统计学和理论统计学，其成果很有可能让我获得诺贝尔奖和菲尔兹奖[20–25]。关于这一成果对人类文明和社会结构的深刻影响，我在此之前就有长时间的考虑，包括其在复杂系统，物理，化学，生物上的应用都有过设想。因此在2019年开始学习探究过生物数学。

除了其他学科的应用，对于这一理论对金融系统本身的影响我也有过长时间的考量。我认为市场经济还是会长期存在的，仍然是最优选择，当然在这种规则的影响下，它的具体运作会有一些不同。而如何处理其潜在的社会影响和可能的舆论也让我非常头疼，所以直接将这一成果封存起来了。我最担心的，还是这些成果被野心家利用，尤其在人工智能浪潮下，这一成果对金融市场的冲击是显而易见的。最终我还是决定将其通过多个渠道全部完整公开，让大家一起思考如何保护人类文明赖以维系的市场经济以及保护我们不应被公权力侵犯的自由。

上述的规则基本就是我在2021年11月14日完稿的原本，只做了轻微改动。后续我会做进一步案例解释。但目前时间有限，只能讲解到这一步。因为将这些成果正常发表，不受阻拦，本身就非常不容易。我需要在尽可能短的时间内完成这些工作。

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