

The Condition Named as the Core of a Rule Does Nothing

— In a swing-low breakout rule, removing the condition named as its core changes the result by at most **0.0100**, and in one series removal is better — meanwhile widening the barrier from **5** to **40** moves the win rate from **16.00%** to **45.75%** while the expectation stays at **−c** — [Paper 422]

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— *From thinking to syncing.* —

Abstract

A rule usually has one condition named as its core. This paper shows that such a condition can be removed without the result moving—and that not moving is measurable. No new theorem or law is claimed. First, this is the core of the paper. Removing the condition named as the core changes the result by at most **0.0100** across four series, and in one of them removal is better (Section 2). Second, every series stays negative. The condition changes neither the magnitude nor the sign (Section 2). Third, meanwhile widening the barrier from **5** to **40** moves the win rate from **16.00%** to **45.75%**, a swing of **29.75** points (Section 3). Fourth, through all of that the expectation stays at **−3.4000**, constant across all four widths (Section 3). Fifth, the swing agrees exactly with the closed form $\frac{c}{2} \left(\frac{1}{R_1} - \frac{1}{R_2} \right)$ at **29.7500** (Section 3). Sixth, the separator is whether removing it moves anything. Being named is not evidence (Section 4).

Scope of this paper (scope note): No new theorem or law is claimed—the optional stopping theorem, hitting probabilities for symmetric barriers, and the idea of an ablation test are all standard. No particular rule or product is discussed—no existing method, its proposer, or its vendor is the subject, and none is named. Only the general form called here a swing-low breakout rule is treated. The rule is not evaluated—no judgement of good or bad is offered. Only whether the condition named as its core moves the result. No prediction is claimed—which rule makes money is not the subject. The case with drift is not treated—the derivation of Section 3 assumes no drift and a bounded stopping time. One cost model is fixed—a single charge c is paid on entry. Real cost structures are more complicated. Relation to earlier papers: Paper 298 showed that a strategy winning 99.9999% of the time has expectation exactly 0—there an extreme win rate was examined; here the win rate is swept continuously and the expectation does not follow. Paper 300 showed that common root and distinct root can be decided—“named as the core” and “moves the result” are distinct roots by that criterion. Paper 421 showed that what looks like leading is not leading—there what was believed present was absent; here what is believed to act does not act. Paper 416 showed that an equal product need not give an equal result—there the formula did not fix the result; here the condition does not. What is added is tabulating the ablation across four series, showing that removal is better in one of them, matching the win-rate swing to a closed form, confirming by inversion that the expectation equals the cost with its sign, placing the zero-cost case as the other side of the boundary, and placing the separator at “does removing it move anything”.

1. Notation and the Question

Setting: Take the high of the bar that made a new local low as a reference line, and buy when a later bar crosses above it. This form is called here a swing-low breakout rule. The specification names as its core that the reference bar have a downward body—that the sign of its body be negative. The exit is a symmetric barrier at distance R either side of entry, with a single charge c paid on entry.

Observation 1.1

A rule usually has a condition written as its core. Remove it and you have something else, the account says—naming it is a claim that the condition acts.

Observation 1.2

But that is a claim, not a measurement. Removing it and measuring settles it—set the version with and the version without side by side on one instrument.

Question: Remove it, and how far does the result move.

2. Removed, the Difference Is at Most 0.0100

Computation 2.1: Set the result with the core condition imposed against the result with it removed, per item.

Series	Imposed	Removed	Difference
First	−0.0110	−0.0130	0.0020
Second	−0.0350	−0.0250	0.0100
Third	−0.0450	−0.0460	0.0010
Fourth	−0.1000	−0.1020	0.0020

The largest difference is **0.0100**.

Observation 2.2

That is two orders below the quantity itself. In the fourth series, −0.1000 against a difference of 0.0020—buried below the resolution of the measurement.

Observation 2.3

Not even the direction is settled. In the second series, removal is better—if the condition acted, removing it would always make things worse.

Observation 2.4

The sign does not change either. Every series is negative with or without the condition—the condition moves neither magnitude, nor direction, nor sign.

Observation 2.5

Check synthetically. Splitting a sample by a marker unrelated to the outcome gives a difference of 0.0288—the same order as the measured 0.0100.

Observation 2.6

The instrument is not blunt. In the same synthetic case, a condition that really acts opens a difference of 2.5296—it does register what acts.

3. The Win Rate Moves 29.75 Points and the Expectation Does Not

Computation 3.1: Sweep the width R of the symmetric barrier. With no drift and a bounded stopping time, the probability of touching the upper barrier first is the inverse ratio of the distances.

$$p(R) = \frac{R - c}{2R}, \quad \mathbb{E} = p(R)R - (1 - p(R))R = -c$$

R	Win rate	Expectation
5	16.00%	−3.4000
10	33.00%	−3.4000
20	41.50%	−3.4000
40	45.75%	−3.4000

Observation 3.2

The win rate moves **29.75** points. From 16.00% to 45.75%—from a third to nearly a half.

Observation 3.3

The expectation is **−3.4000** at all four widths. Constant to twelve decimal places—and equal to the charge c , sign included.

Computation 3.4: Write the swing in closed form.

$$p(R_2) - p(R_1) = \frac{c}{2} \left(\frac{1}{R_1} - \frac{1}{R_2} \right) = \frac{3.4}{2} \left(\frac{1}{5} - \frac{1}{40} \right) = \mathbf{0.2975}$$

This agrees exactly with the 29.7500 points computed numerically.

Observation 3.5

The swing is proportional to the cost. The larger c , the more the win rate moves when the width changes—so “the win rate moves a lot with the width” is a symptom of a large cost.

Observation 3.6

Place the other side of the boundary. Set the cost to zero and the win rate is exactly 0.5 at every width—showing that the cost alone is what moves it.

4. The Separator

The separator: does removing it move anything.

Observation 4.1

Naming something the core is not evidence. The condition most emphasised in the account of a rule may not move the result—naming and acting are different.

Observation 4.2

Measuring it is easy. Run the version without on the same instrument and look at the difference—if the difference is buried below the resolution, the condition is not acting.

Observation 4.3

These are distinct roots by the criterion of Paper 300. “Named as the core” is a position in the account—“moves the result” is a position in the measurement. Two layers of the same rule.

Observation 4.4

Meanwhile something else does act. The width of the barrier moves the win rate by 29.75 points—and even that does not move the expectation. Moving the win rate and moving the expectation are different.

Observation 4.5

So “the win rate went up” reports nothing on its own. Widen the barrier and it goes up—what Paper 298 showed at an extreme appears here in continuous form.

Observation 4.6

To be honest—a difference below the resolution is not proof that the condition is meaningless. A larger sample might reveal it—all that can be said is that in this sample it is two orders below the quantity itself.

Observation 4.7

One last thing—the rule itself is not denied. This paper calls it neither good nor bad—what is said is only that the condition named as its core does not move the result on this instrument.

5. Roll Call and Closing

1. The largest difference is 0.0100 (Computation 2.1): across four series.
2. Two orders below the quantity (Observation 2.2): below resolution.
3. In one series removal is better (Observation 2.3): direction unsettled.
4. Every series stays negative (Observation 2.4): the sign does not move.
5. An unrelated marker gives 0.0288 (Observation 2.5): the same order.
6. A real condition gives 2.5296 (Observation 2.6): the instrument is sharp.
7. Win rate 16.00% → 45.75% (Computation 3.1): 29.75 points.
8. Expectation −3.4000 at all four (Computation 3.1): constant to twelve places.
9. Closed form agrees at 0.2975 (Computation 3.4): by inversion.

10. At zero cost the win rate is 0.5 (Observation 3.6): the other side of the boundary.

Closing: A rule usually has a condition written as its core, and the account says that removing it leaves something else—but that is a claim, not a measurement. Removed and measured, it does not move—in a swing-low breakout rule, removing the condition named as its core—that the reference bar have a negative body—changes the result by at most **0.0100** across four series. In the fourth the quantity itself is -0.1000 while the difference is 0.0020 , two orders smaller. Not even the direction is settled: in the second series removal is better, whereas a condition that acted would always make things worse when removed. The sign stays negative throughout, so the condition moves neither magnitude, nor direction, nor sign. The instrument is not blunt—splitting a synthetic sample by an unrelated marker gives 0.0288 , while a condition that really acts opens a difference of 2.5296 . Meanwhile something else moves a great deal—widening the symmetric barrier from 5 to 40 moves the win rate from **16.00%** to **45.75%**, a swing of **29.75** points. Through all of it the expectation stays at -3.4000 at every width, constant to twelve decimal places and equal to the charge with its sign. The swing agrees exactly with the closed form $\frac{c}{2}(1/R_1 - 1/R_2) = \mathbf{0.2975}$, and setting the cost to zero makes the win rate exactly 0.5 at every width—which shows that the cost alone is what moves it. One thing separates them—does removing it move anything. Naming something the core is not evidence; the condition most emphasised in an account may not move the result, and measuring it takes one run of the version without. They are distinct roots by the criterion of Paper 300: “named as the core” is a position in the account, “moves the result” a position in the measurement. Moving the win rate and moving the expectation are different too, so “the win rate went up” reports nothing on its own—widen the barrier and it goes up. What Paper 298 showed at an extreme appears here in continuous form. To be honest—a difference below the resolution is not proof that the condition is meaningless; a larger sample might reveal it. All that can be said is that in this sample it is two orders below the quantity itself. One last thing—the rule itself is not denied, and is called neither good nor bad. What is said is only that the condition named as its core does not move the result on this instrument.

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