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Research-Thesis: The 2008 Financial Crisis and the Rule-versus-Discretion Debate

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The 2008 Financial Crisis and the Rule-versus-Discretion Debate

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Tom Gillet
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List of Abbreviations

B&G	Barro and Gordon (1983)
B&M	Bernanke and Mishkin
ECB	European Central Bank
FAIT	Flexible Average Inflation Targeting
Fed	Federal Reserve
FG	Forward Guidance
FOMC	Federal Open Market Committee
GAO	Government Accountability Office
GDP	Gross Domestic Product
K&P	Kydland and Prescott (1977)
NBER	National Bureau of Economic Research
QE	Quantitative Easing
ZLB	Zero Lower Bound

General Introduction

In September 2008, the collapse of one of the largest American investment banks plunged the global economy into the most severe recession since the Great Depression. Faced with the collapse of economic activity, the central banks of the major advanced economies reacted with unprecedented speed and creativity: policy rates lowered to zero, massive asset purchases, and promises regarding the future path of interest rates. These decisions were taken under extreme urgency, without operational precedent, and without anyone knowing with certainty whether they would work. Monetary policy was entering uncharted territory.

This improvisation revealed a fundamental, unresolved tension that has run through macroeconomics since its earliest decades: the opposition between rules and discretion in the conduct of monetary policy. Should the central bank be entrusted with a formal rule that mechanically constrains its decisions, or should it be granted the freedom of judgment necessary to respond to unpredictable shocks? This debate, first articulated in 1936 by Henry Simons, mathematically formalized by Kydland and Prescott (1977) through their demonstration that discretion structurally generates an inflationary bias, and progressively enriched by decades of theoretical contributions, had not yielded a definitive answer by the time the crisis erupted.

The Research Question

The central question this thesis proposes to examine is the following: what was the impact of the 2008 financial crisis on the rules-versus-discretion debate in monetary policy? This analysis will lead us, in the final part, to formulate a normative position regarding the most desirable configuration in light of the lessons drawn from this debate.

The relevance of this question stems from the fact that the crisis generated two simultaneous pressures that the preexisting theoretical framework could not absorb. On one hand, post-crisis discretion became visible and contested on an unprecedented scale: the unconventional policies deployed massively without a pre-established framework exposed the risks of discretion lacking formal constraints over instruments. On the other hand, existing rules revealed their limitations at the effective lower bound: the Taylor rule prescribed negative policy rates that were physically impossible to implement (Bernanke, 2020). These two pressures forced a fundamental rereading of the debate itself, whose trajectory the following chapters trace.

The Central Argument

The central argument of this thesis is as follows. The 2008 crisis accelerated a shift in the debate that was already underway: from a binary opposition between rigid rules and pure discretion toward increasingly constrained forms of discretion. This shift was made visible by the emergence of unconventional policies, which opened a dimension in the debate that no one had mapped before the crisis: the degree of constraint imposed on unconventional instruments. In addressing this question, we were moreover led to observe that the very terms of the debate changed meaning across contributions. What authors call a rule in 1936, in 1993, or in 2017

refers to analytically distinct objects. Tracing this semantic mutation proved indispensable for understanding what the debate truly put at stake.

The Method

This thesis rests on an analytical review of the theoretical literature in monetary economics. We produce neither new empirical data nor an original formal model, and this work will not confine itself to a chronology of macroeconomic models. To understand the trajectory leading to the 2008 crisis and beyond, we conduct a threefold analysis: mapping the positions of the authors, analyzing their analytical divergences, and tracing the semantic mutation of the concepts of rule and discretion across the decades. This contribution is analytical and normative in nature: it seeks to reconstruct the internal logic of the debate, identify the unresolved tensions between existing positions, and formulate a proposal that addresses them coherently. The literature on the rules-versus-discretion debate is vast, and this thesis does not claim to offer an exhaustive survey. The authors examined were selected for their foundational role or their contribution directly linked to the shift in the debate after 2008. Each chapter introduces the retained authors, sets out their central argument, and identifies what it contributes and what it leaves open with respect to the central question.

Structure of the Thesis

The thesis is organized into four parts. The first, devoted to the foundations of the debate, traces the evolution of monetary thought from Simons to Woodford (2003). It shows how the debate progressively shifts from a binary opposition toward increasingly sophisticated hybrid positions, and how the notions of rule and discretion are transformed at each stage. The second part analyzes the 2008 crisis as a catalyst: it shows how the effective lower bound reveals a structural gap in the pre-crisis framework, and how the improvised responses reproduce the problem of time inconsistency on terrain that theory had not prepared. The third part examines the contemporary theoretical responses of Mishkin and Svensson and their limitations as illustrated by the Flexible Average Inflation Targeting (FAIT) framework adopted by the Federal Reserve in 2020. The fourth part sets out my normative position, which draws on the lessons of the entire debate to propose an institutional reform trajectory consistent with the limitations the analysis will have identified.

Part I : The foundations of the debate and the emergence of constrained discretion

Chapter 1: Time Inconsistency and the Original Argument for Rules

1.1 An Old Debate, a Decisive Formalization

Ever since the early decades of modern macroeconomics, a fundamental tension has run through the discipline: the opposition between rules and discretion, two radically different ways of conceiving the conduct of monetary policy, and whose contours, as we shall see, have never ceased to evolve. As early as 1936, in the aftermath of the Great Depression, whose devastation had revealed the dangers of a monetary policy left to the judgment of men and institutions, Henry Simons, a central figure of the Chicago School, framed this opposition in terms that would remain surprisingly stable. He contrasted *rules* with *authorities*, meaning government by pre-established principles versus government by the discretionary judgment of men (Simons, 1936). For him, discretion subjects monetary policy to short-term cyclical pressures that are inherently incompatible with long-term stability. Milton Friedman, who had himself studied at Chicago under Simons's intellectual influence, extended this tradition in 1960 by proposing his constant money growth rule. Building on his quantity theory of money, he prescribed increasing the money stock at a constant rate, between 3% and 5% per year (Friedman, 1960). The rule is deliberately rigid, and this rigidity is precisely what constitutes its value: it shields monetary policy from human judgment and from the "long and variable lags" that make any discretionary intervention structurally unpredictable (Friedman, 1960).

However, while Simons, Friedman, and their Chicago School colleagues had already sensed that under discretion, the public has no reason to believe the announcements of an authority unbound by a rule, thereby undermining the central bank's ability to anchor expectations (Clerc, 2024), their arguments remained primarily practical: discretion is poorly exercised, central bankers make mistakes, and governments yield to political pressures. As long as the problem was not mathematically modeled, the analytical framework left theoretically open the possibility that an ideal, rational, and benevolent policymaker could exercise discretion optimally. It is precisely this door that Kydland and Prescott (1977) would definitively close, bringing to the debate a mathematical formalization whose implications would prove decisive.

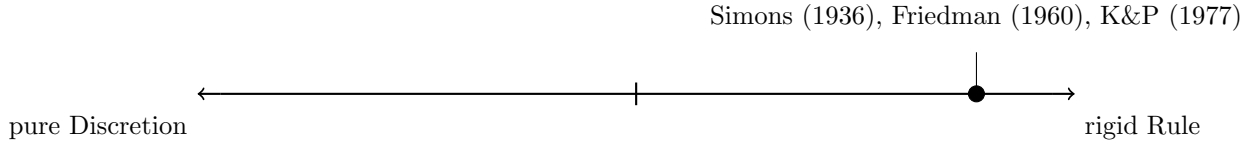
1.2 Kydland and Prescott: A Structural Problem

The contribution of Kydland and Prescott (1977) does not lie in describing the poor behavior of central banks. It lies in demonstrating that even a perfectly benevolent, perfectly competent policymaker, entirely independent of any political pressure, will generate a suboptimal outcome under discretion. The problem does not lie with the individuals, it is inherent to the logic

of the situation. Their argument relies on the notion of *time inconsistency*: a policy is time-inconsistent when what is optimal to announce today for tomorrow will no longer be optimal to execute tomorrow when tomorrow comes. Applied to monetary policy, the mechanism is as follows. The central bank announces zero inflation. Agents believe this announcement and set their nominal wages accordingly. However, once wages are set, the bank is tempted to engineer an inflationary surprise to reduce real wages and stimulate employment in the short run. Agents, endowed with rational expectations, anticipate this logic from the outset and set their wages expecting a positive inflation rate. The equilibrium under discretion is therefore an equilibrium with a structural inflation bias: inflation is higher than it should be, yet no one desired this outcome. No internal reform of discretion can solve this problem: changing the governor, improving models, or strengthening formal independence alters nothing about the logical structure of the situation. The conclusion is straightforward: an external constraint is required, a commitment that mechanically binds the policymaker and makes deviation impossible or prohibitively costly.

Their solutions are institutional rather than technical in nature. They envision constitutional or legal rules that make deviation structurally impossible, and explicitly mention a "constant growth in the money supply and constant tax rates" as examples of policies preferable to discretion (Kydland and Prescott, 1977). This second example reveals the general scope of their argument: the problem of time inconsistency plagues any public policy where the policymaker is tempted to deviate ex post from their ex ante commitments. A government that promises low taxes to encourage investment will be tempted, once the factories are built, to heavily tax capital that is now immobile, exactly as the central bank is tempted to produce an inflationary surprise once wages are fixed. Their contribution is primarily a diagnosis: discretion inevitably generates credibility problems as soon as agents possess rational expectations, and only an external constraint can remedy this.

Conceptual Benchmark: The Debate as a Straight Line



At this stage of the debate, the concepts of rules and discretion are organized according to a strictly binary logic: on one side, the strict rule; on the other, pure discretion. Simons (1936), Friedman (1960), and Kydland and Prescott (1977) jointly occupy the rule pole, which the graph represents as a single point: all three reject discretion and prescribe a formal constraint that ties the monetary policymaker's hands. K&P's demonstration is decisive because it definitively closes the door on pure discretion: not only is it poorly practiced, but it is structurally suboptimal. Thus, for the time being, the debate is organized along a single axis: the degree of constraint imposed on the policymaker.

1.3 Barro and Gordon: Reputation as an Imperfect Substitute

K&P establish that binding commitments can improve outcomes compared to discretion, but they leave open the question of the precise form of these commitments. Barro & Gordon (1983) start precisely from this silence to ask a question K&P had not raised: given that interactions between the policymaker and private agents are repeated over time, is it possible for reputational forces to substitute for binding commitments and produce the same effects? To answer this, they formalize the interaction between the central bank and the public as a repeated game and establish a hierarchy among three regimes. First, *cheating*, which consists of producing an inflationary surprise by deviating from an announced rule, is locally preferable because it allows

for short-term employment stimulus or reduces the real value of public debt. Second, the *ideal rule*, a commitment to zero inflation that would be socially optimal if it were credible, but which is not because the temptation to cheat always outweighs the reputational cost. Finally, *discretion*, the continuous re-optimization without commitment, is the worst possible equilibrium; it produces high inflation without any employment gain, precisely because agents anticipate the temptation to deviate and set their expectations accordingly. This ranking (*cheating* > *ideal rule* > *discretion*) establishes from the outset that pure discretion is not a viable option. However, the ideal rule is itself untenable, and B&G demonstrate this formally. Their model relies on a per-period cost function:

$$z_t = \frac{a}{2}\pi_t^2 - b_t(\pi_t - \pi_t^e) \tag{1}$$

where π_t is the realized inflation, π_t^e is the inflation expected by agents, $a > 0$ is the marginal cost of inflation, and $b_t > 0$ is the marginal benefit of an inflationary surprise. Under the ideal rule, the central bank commits to $\pi^* = 0$, resulting in a cost of $z^* = 0$. But if agents expect $\pi^e = 0$, the central bank is tempted to deviate to $\tilde{\pi} = \bar{b}/a$. This cheating reduces the cost to $\tilde{z} = -(1/2)(\bar{b})^2/a$, producing an immediate gain (a cost reduction) of $z^* - \tilde{z} = (1/2)(\bar{b})^2/a > 0$.

$$\underbrace{z^r - \tilde{z}}_{\text{temptation}} \leq \underbrace{q(\hat{z} - z^r)}_{\text{enforcement}} \tag{2}$$

where $q = 1/(1+r)$ is the discount factor, with the punishment modeled over a single period in B&G's baseline case. The ideal zero-inflation rule is untenable not because the reputational cost is theoretically insufficient, but because its credibility depends entirely on a sufficiently high discount factor (i.e., a sufficiently patient policymaker), which nothing can institutionally guarantee. The more patient the policymaker is, the more they can commit to low inflation, but reputation alone can never make a commitment to zero inflation credible. The reputational equilibrium is therefore established at an inflation level $\pi^r > 0$: it is the level that maximizes social welfare under the constraint that credibility is ensured for a realistic discount factor. This equilibrium is a weighted average of the outcomes under discretion and those under the ideal rule: it is superior to pure discretion but inferior to the ideal rule, and it leans toward discretion when the policymaker places little weight on the future consequences of their actions. This result is appealing, but B&G themselves show that it is structurally incomplete in three respects.

- First, reputation implies a permanent residual inflation cost: for the threat of punishment to be credible, the central bank cannot commit to zero inflation. The reputational equilibrium is thus established at a strictly positive inflation level, a cost that society bears simply to maintain the coherence of the reputational system, whereas a formal rule would eliminate it by design.

- Second, reputation is vulnerable to preference shocks: a severe economic crisis, intense political pressure, or a change in central bank leadership can make the policymaker more impatient. In such cases, the immediate gain from deviation exceeds the future cost of lost reputation, whereas a formal rule would hold regardless of momentary preferences.

- Third, reputation generates a multiplicity of equilibria: while B&G set the punishment duration to one period in their baseline model, they acknowledge that this choice is arbitrary. In reality, nothing determines how long agents will refuse to believe the central bank after a deviation; this duration depends on implicit conventions upon which agents must coordinate, producing several possible reputational equilibria. B&G explicitly admit they have no satisfactory way to resolve this multiple equilibria problem.

These three limitations reveal a structural vulnerability that all solutions based on reputational credibility will inherit. B&G then extend their analysis to a framework where the policymaker

observes the realizations of the benefit parameter b_t before choosing the inflation rate, while agents must form their expectations without this information. In this framework, optimal policy takes a contingent form: inflation varies according to the state of the economy based on a pre-announced logic. It is no longer discretion because the reaction function is predictable, and it is no longer the ideal rule because it abandons the unconditional commitment to zero inflation.

The most original analytical property of this contingent rule is what B&G call "biting the bullet" (Barro and Gordon, 1983). The optimal contingent rule sometimes entails producing inflation below expectations, meaning deliberately causing deflation in states where the benefit of an inflationary surprise is low. This decision is costly ex post: if one considers only the present situation, it would be preferable to avoid deflation. But B&G show that this cost is rational in a repeated game: by producing inflation below expectations in quiet states, the central bank invests in credibility. This allows it to produce inflation above expectations in crisis states where the benefit is highest, typically during wars or severe recessions. The policymaker chooses to "bite the bullet" during calm periods, thereby building up the credibility required to stretch policy limits during full-scale crises. This mechanism is analytically powerful: it demonstrates that credibility is not a static state but a dynamic investment, whose profitability depends on the policymaker's ability to accept short-term costs to preserve long-term gains. However, B&G acknowledge that even this contingent rule remains exposed to the logic of time inconsistency: once the rule authorizes a deviation during a crisis, nothing mechanically prevents the policymaker from deviating beyond what it authorizes. The contingent rule therefore does not solve the fundamental problem; it merely displaces it within its own parameters. They also recognize that the multiplicity of equilibria problem remains: if several reputational equilibria are possible depending on the chosen punishment duration, the contingent rule does not uniquely select one.

In short, Barro and Gordon demonstrate that reputation can partially discipline discretion in the absence of a formal rule, but at the price of a permanent residual cost and structural vulnerability. It is an imperfect substitute for a formal rule, not an equivalent: where a formal rule would eliminate the inflation bias by design and define a unique path to equilibrium, reputation can only mitigate its most harmful effects while inheriting its own frailties. But their contribution is not limited to this negative observation: with the contingent rule, they produce the debate's first explicitly theorized hybrid object, a flexible yet coherent commitment that preserves predictability without demanding mechanical rigidity. In doing so, they show that the binary line between rules and discretion can accommodate intermediate positions, and it is this intuition that the next section will expand upon.

1.4 Taylor: Disciplined Discretion as an Implicit Position

The 1993 publication of John B. Taylor's article marks an important milestone in the evolution of the debate, but not in the way it is often perceived. Taylor is frequently portrayed as the champion of monetary policy rules, the one who provided the pro-rule camp with its most concrete and influential instrument. This reading is accurate but incomplete, as it masks an internal tension in his position that is analytically decisive.

The Taylor rule primarily represents a conceptual innovation compared to Friedman's rule. Whereas Friedman proposed a fixed rule, a constant money growth rate independent of any observable variable, B&G had already established the principle of a rule whose response varies according to the state of the economy. Taylor takes an additional step by operationalizing this principle: he precisely specifies the variables (the deviation of inflation from its target and the deviation of output from its potential) and the reaction coefficients. His baseline formulation rests on two 2% anchors: a 2% inflation target and a 2% equilibrium real interest rate, with

equal weights of 0.5 for both deviations:

$$r = p + 0.5y + 0.5(p - 2) + 2 \tag{3}$$

where r is the nominal federal funds rate, p is the rate of inflation, and y is the output gap. This specification makes the reaction function publicly calculable for the first time, constituting a significant transformation of the very notion of a rule. A rule is no longer an immobile formula that ignores economic conditions; it is a contingent plan that specifies in advance the central bank's response to all possible economic configurations. What the rule guarantees is not a unique and invariant path, but a pre-announced reaction function. Agents know how the central bank will react to any level of inflation or output. It is this predictability that anchors expectations, not the rigidity of the path.

However, Taylor's goal is not to propose a rule to be followed blindly. He states from the outset that his objective is not to provide a formula to be followed mechanically, but to show that rigorous monetary policy can be conducted systematically even in an environment too complex to be entirely captured by an algebric equation. To this end, he proposes the term *systematic policy*, defined as "methodical, according to a plan" (Taylor, 1993). A systematic policy is not a mechanical rule: it is a framework that disciplines human judgment without eliminating it. Taylor explicitly writes that "a policy rule can be implemented and operated more informally by policymakers who recognize the general instrument responses that underlie the policy rule, but who also recognize that operating the rule requires judgment and cannot be done by computer" (Taylor, 1993). He illustrates this point with two episodes from 1990: the Gulf War oil-price shock and German unification, two situations in which a mechanical application of his rule would have led to inappropriate prescriptions, precisely because unquantifiable factors (the anticipated duration of the shock and international contagion effects) required a judgmental adjustment. Judgment is therefore not an exception to the rule; it is constitutive of its operation in every period.

This position has decisive analytical implications regarding K&P's argument. The latter had shown that any discretionary judgment, even when exercised in good faith, structurally generates an inflation bias because agents anticipate the temptation to deviate. By making judgment a constitutive element of his rule's operation, Taylor reintroduces exactly the room for maneuver that K&P sought to eliminate. His rule is no longer a rule in the strict K&P sense; it is a framework that disciplines discretion without suppressing it. In this sense, although Taylor presents himself as a defender of rules, his position can already be read as a form of *constrained discretion* (a concept later formalized by Bernanke and Mishkin, 1997), even if he does not express it in these terms. By admitting that judgment is necessary in every period, Taylor unwittingly reveals that the true debate is not about the choice between rules and discretion, but about the degree of constraint to which discretion must be subjected.

1.5 What the Chapter Implies for the Future

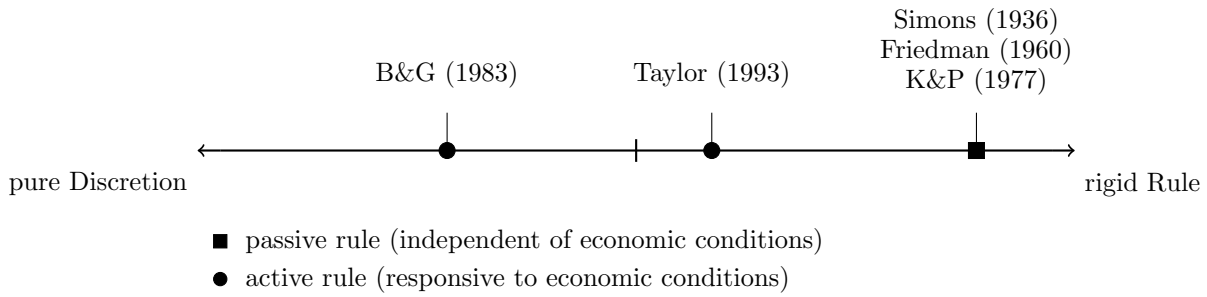
An examination of these contributions reveals a common trajectory: at each stage, the proposed solution moves away from the requirement of a perfect external constraint while still preserving some form of commitment regarding future policy. Simons and Friedman establish the fundamental opposition between rules and discretion, advocating for strictly binding rules in the name of predictability and expectational stability, yet without providing a formal demonstration that the problem is structurally inevitable. K&P provide this demonstration, showing that even an ideal policymaker will generate an inflation bias under discretion, thereby making an external constraint necessary, though without prescribing its precise form. By sharing the same rejection of discretion and the same conviction that a formal constraint is indispensable, these three

contributions jointly occupy the *passive rule* pole, meaning a rule whose prescriptions are independent of the state of the economy and apply mechanically regardless of economic conditions.

Conceptual Benchmark: The Emergence of Active Rules

B&G and Taylor represent a turning point. They both introduce *active rules*, which are responsive to the state of the economy, but they do so from opposite shores. B&G start from the side of discretion: institutionally, their model imposes no external legal or mathematical constraint. The central bank retains total discretion and could choose to cheat at any moment. The contingent rule they put forward is an endogenous behavioral strategy, a reputational equilibrium that the policymaker freely chooses to respect to preserve credibility. Consequently, on our conceptual benchmark below, they are positioned to the left of the central line, within the discretion half, while moving away from pure discretion through the strength of reputation. Taylor starts from the opposite shore: his mathematical equation aims to bind the policymaker's hands, anchoring him firmly within the realm of rules. Yet, by making judgment a constitutive element of his rule's operation, his stance softens, moving toward the center without reaching the furthest extremity. He is thus positioned to the right of the central line, within the rule half, without aligning with Friedman's rigid pole.

The vertical line in the middle of the graphic thus takes on a precise analytical meaning: it represents the boundary between the realm of formal commitments (on the right) and that of reputational commitments (on the left). B&G and Taylor face each other from opposite sides of this border, offering two hybrid answers to the same problem: how can a policymaker respond to shocks while remaining credible? One answers through reputation, the other through the equation. Neither, however, explicitly embraces the intermediate space as an optimal position.



What this trajectory reveals is decisive. First, between Simons (1936) and Taylor (1993), the very definition of a rule underwent a fundamental mutation. For the Chicago School, a rule was a blind, passive constraint designed to eliminate discretion entirely. With Taylor, the rule becomes a conditional reaction plan, or an active rule. A rule is no longer an immobile formula that ignores economic conditions; it is a contingent plan specifying in advance the central bank's response to all possible economic configurations. Yet the concept of "discretion" underwent an equally radical transformation. For the Chicago School, discretion denoted human arbitrariness and submission to political pressures. With K&P (1977) and then B&G (1983), it received a strict mathematical definition: period-by-period re-optimization, reflecting the inability to commit ex ante. Finally, with Taylor (1993), discretion loses its status as an anomaly, being rehabilitated under the guise of "judgment"; it is no longer the absolute opposite of a rule, but rather the indispensable margin of flexibility required to handle shocks that no equation can anticipate. Furthermore, none of these contributions explicitly champions this intermediate space between rules and discretion as a coherent, defensible theoretical position in its own right. Simons and Friedman reject it out of conviction. K&P reject it through formal demonstration. B&G produce it without claiming it. Taylor inhabits it without naming it. The question that

inevitably arises is therefore the following: is it possible to theorize this space not as a default compromise, but as the optimal, realistic configuration of monetary policy? This is precisely what Bernanke and Mishkin (1997) would set out to do.

Chapter 2: *Constrained Discretion* as an Assumed Position

2.1 The 1990s: A Practical Failure and a Theoretical Achievement

The question raised at the end of the previous chapter does not remain without an empirical answer for long. What would force the theorization of the intermediate space between rules and discretion is the conjunction of a practical failure and a theoretical achievement pointing in the same direction. The practical failure is that of monetary aggregate targeting, which constituted the closest application to the spirit of Friedman's rule. The relationship between the money supply and inflation proved to be so unstable in the 1980s that even the central banks that had adopted it gradually abandoned it. As Bank of Canada Governor Gerald Bouey famously put it at the time: "We didn't abandon monetary aggregates, they abandoned us."[1] The theoretical achievement is the one established by K&P in the previous chapter: pure discretion structurally generates an inflation bias. Both converge on the same conclusion: neither the formal rule nor pure discretion is viable, and an intermediate position is necessary. Indeed, several central banks occupied this position before theory claimed it: New Zealand (1990), Canada (1991), the United Kingdom (1992), Sweden, and Finland (1993) adopted inflation targeting, publicly announcing a numerical target and organizing all their communication around this objective. The result is striking: inflation stabilized and expectations became anchored, without a formal rule in the sense of Friedman or K&P. It is precisely this apparent paradox that Bernanke and Mishkin (1997) would theorize, providing an already existing practice with the intellectual justification it lacked.

2.2 Bernanke and Mishkin's Breakthrough: Embracing and Grounding the Intermediate Space

Bernanke and Mishkin (1997) argue that inflation targeting should be understood as a "policy framework" that grants the central bank "constrained discretion," rather than as a rigid policy rule in the classic Friedman sense (Bernanke and Mishkin, 1997). This seemingly technical formulation represents a major conceptual breakthrough in the debate. For the first time, the intermediate position between rules and discretion is not presented as a shameful compromise or a default solution; instead, it is claimed as the realistic, optimal configuration for monetary policy.

In doing so, B&M make an implicit yet decisive concession to K&P. By recognizing that credibility requires explicit commitments to objectives, they tacitly admit that K&P were right on the fundamental issue: pure discretion structurally generates a credibility problem. However, they diverge from K&P regarding the remedy. For K&P, constraint had to take the form of external institutional commitments that prevent the policymaker from re-optimizing. For B&M, a public commitment to objectives, backed by reputation and transparency, is sufficient to discipline discretion. The constraint, therefore, does not need to apply to the instruments themselves.

The central analytical contribution of B&M consists of grounding this asymmetry on a distinction that Debelle and Fischer (1994) had formalized in the context of central bank independence: the distinction between goal independence and instrument independence (Bernanke and Mishkin, 1997). The commitment must apply to objectives, but not to instruments. The central bank retains full freedom over how it achieves its objective, provided it always brings

[1] Statement by Gerald Bouey before the House of Commons Standing Committee on Finance, Trade and Economic Affairs, March 28, 1983. Cited notably in Mishkin and Schmidt-Hebbel (2011).

inflation back toward its medium-term target. B&M further specify that goal independence is not required; a democratically elected government can set the inflation target, while the central bank must possess full instrument independence to achieve it (Bernanke and Mishkin, 1997).

2.3 Svensson's Formal Justification

Svensson (1997) provides the formal justification for why this commitment to objectives is preferable to a commitment to instruments, by formalizing the distinction between *target rules*, which specify the objective without prescribing the means, and *instrument rules*, which directly specify the reaction function, such as the Taylor rule. Svensson shows that target rules are inherently more stable and robust: they depend only on the parameters of the Phillips curve and the central bank's loss function, whereas instrument rules also depend on the structure of aggregate demand and become obsolete if the economic structure changes (Svensson, 1997).

This demonstration raises a practical question: how can a target rule be implemented concretely? Svensson's answer is that inflation targeting necessarily implies *inflation forecast targeting*. Because monetary policy affects inflation with long and variable lags, the central bank cannot target current inflation. What it can target is its inflation forecast at a two-year horizon. The target rule then takes the following form: adjust the policy rate so that the two-year inflation forecast equals the target. This reformulation produces an optimal reaction function of the same form as the Taylor rule, confirming Taylor's intuition about the need for systematicity, but without sharing its rigidity. *Forecast targeting* thus reconciles two requirements that the preceding debate struggled to combine: the systematicity necessary to anchor expectations, and the flexibility needed to react to shocks.

Finally, in section 6 of his article, Svensson shows that if the central bank places a positive weight on short-term output stabilization, it must adjust its inflation forecast back toward the target gradually rather than immediately, to avoid causing an unnecessary recession. Discretionary flexibility is therefore integrated as a parameter within the optimal solution itself: the more the central bank cares about the real economy, the slower the convergence will be.

2.4 The three institutional pillars of constrained discretion

If the constraint does not need to be formally enshrined in law, how do Bernanke and Mishkin ensure that it is effectively respected? Before answering, one must understand the central problem they seek to resolve, which the B&G framework left untouched. In B&G, any rise in inflation mechanically triggers the reputational punishment: the public treats any deviation as an attempt to cheat. But in reality, inflation can rise not because the central bank is cheating, but because an exogenous oil shock hits the economy. If the public blindly applies the B&G logic, it punishes the central bank for a deviation it did not control. The answer of B&M is to institutionalize flexibility *ex ante*: announcing to the public in advance the rules of the game in the event of a shock, so that when the central bank deviates within the agreed framework, the public knows it is not cheating and does not trigger the reputational punishment. It is this logic that unifies the three institutional pillars they describe (Bernanke & Mishkin, 1997).

The first pillar is transparency: communicating regularly on objectives, forecasts and decisions creates a public accountability that makes deviation costly in terms of credibility. The second is accountability: the central bank must explain any lasting deviation and present a plan to return to the target, institutionalizing the reputational cost of B&G in a more explicit manner. The third is institutional independence: being sufficiently independent from political pressures to maintain the target even when electoral circumstances would push toward deviation, echoing the type of external constraint envisaged by K&P.

These three pillars are complemented by three concrete mechanisms that follow directly from the logic of *ex ante* contractualization. The core CPI acts as a noise filter: by targeting inflation excluding energy and indirect taxes, the central bank signals to the public that the rise in headline inflation stems from an exogenous shock rather than from excessive money creation (Bernanke & Mishkin, 1997). The target range is an operational margin: as long as inflation remains within the range, the central bank is on track, preventing inevitable minor fluctuations from needlessly eroding credibility (Bernanke & Mishkin, 1997). The *escape clauses* act as an emergency protocol: in the event of a major crisis, the central bank may deviate from its target while preserving its long-term reputation, provided it explains the deviation through a pre-approved framework and presents a plan to return to the target (Bernanke & Mishkin, 1997). This is the reputational equilibrium of B&G made more robust by an explicit institutional framework, but one that also inherits its structural vulnerabilities. Discipline remains reputational, not mechanical.

2.5 What this chapter implies for the rest of the analysis

This chapter introduces two shifts in the vocabulary of the debate. The first concerns the notion of a rule. In Chapter 1, whether in Friedman, B&G or Taylor, a rule was always a constraint on the instrument, a formula prescribing the central bank's immediate action. With B&M and Svensson, the rule becomes a constraint on the objective: an obligation of outcome. It is no longer synonymous with rigidity over tools, but with transparency and accountability over the destination. The second shift concerns the notion of discretion. Taylor had begun its partial rehabilitation by making judgment a constitutive element of his rule's operation. In this chapter, that rehabilitation becomes total and explicit: under the name of *constrained discretion* or *instrument independence* (Svensson, 1997), discretion over instruments is no longer a structural defect to be eliminated; it is a vital flexibility claimed as a condition of optimal policy.

The contribution of Bernanke, Mishkin and Svensson represents the moment at which the rules versus discretion debate reaches an increasingly sophisticated formulation. *Constrained discretion*, operationalised through *inflation forecast targeting* (Svensson, 1997) and justified by the superiority of *target rules* over *instrument rules* (Svensson, 1997), offers a coherent theoretical framework that explicitly assumes and defends the intermediate space. The gradual shift of the cursor towards increasingly constrained forms of discretion was thus already well underway before 2008.

Conceptual landmark: the debate as a two-dimensional space

Chapter 1 represented the debate as a straight line, but this chapter reveals that line to have been insufficient: once Svensson introduces the distinction between a constraint on objectives and a constraint on instruments, the debate gains a second dimension. The diagram below represents this evolution: the horizontal axis measures the degree of rigidity imposed on the instrument, while the vertical axis measures the degree of rigidity imposed on the objective.

Each positioning on this plane is explained by the internal logic of each contribution. Simons, Friedman and K&P are located in the lower right: they prescribe strict institutional rules to constrain instruments, whether a fixed rate of money growth or constitutional rules prohibiting any discretionary judgment, but they set no explicit inflation objective. The lower left corner of the diagram embodies the regime of pure discretion: no rule on the instrument, no announced objective. It represents the initial theoretical foil that K&P demonstrated structurally generates an inflationary bias.

B&G are positioned in the centre-left, slightly above the horizontal axis. On the horizontal axis, they belong fundamentally to the world of discretion: in their model, the policymaker's

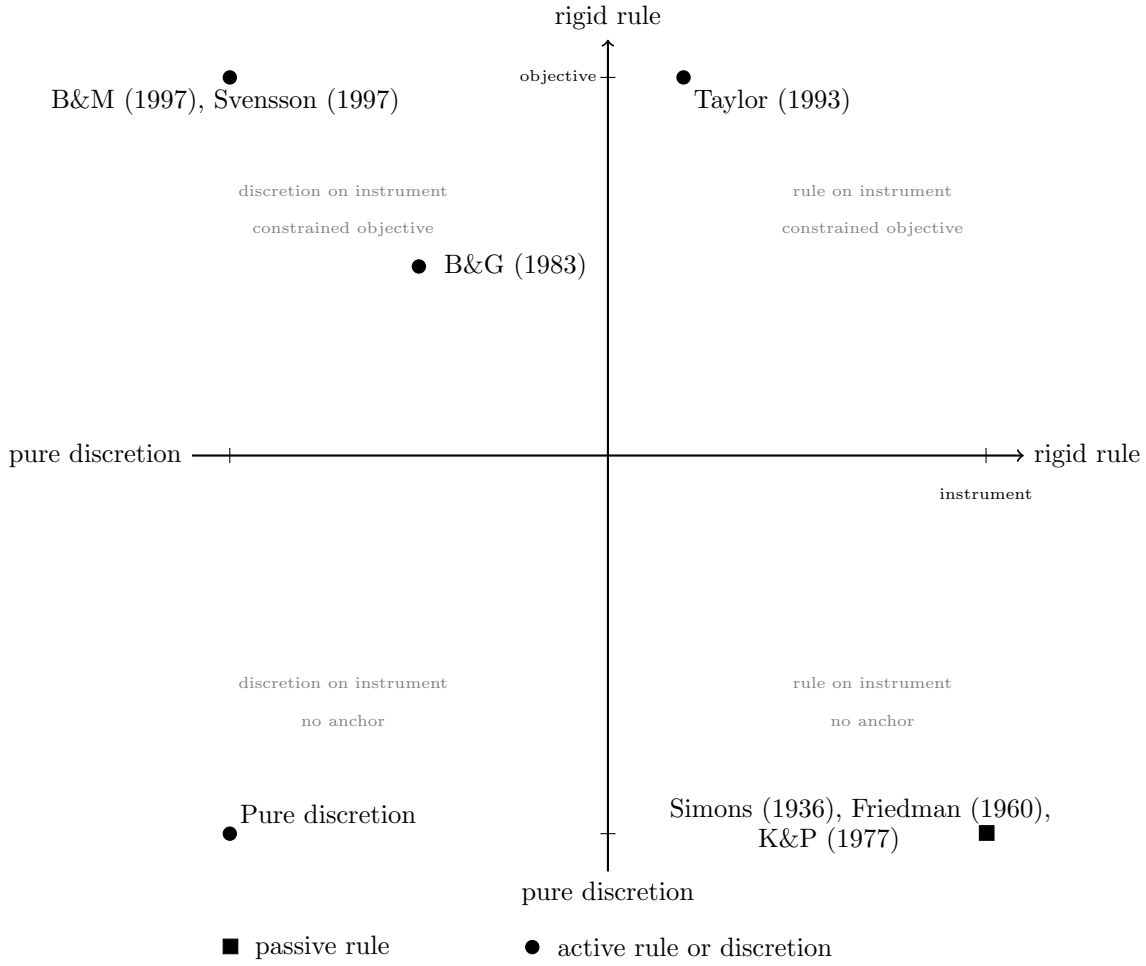
hands are entirely free with respect to the instrument. If he chooses to deviate at any moment, nothing exogenous prevents him from doing so. The only force holding him back is an endogenous constraint, his own fear of losing his reputation, not an externally imposed rule enshrined in law. On the vertical axis, however, they occupy an intermediate position: their model assumes that the central bank seeks to keep inflation expectations low and stable, which constitutes an implicit objective, even in the absence of a publicly announced numerical target.

Taylor is located in the upper right. On the vertical axis, he sits at the extreme: his formula explicitly incorporates a 2% inflation target, the objective is public and mathematically locked into the equation. On the horizontal axis, he is to the right but not at the extreme: his formula disciplines the instrument, yet he acknowledges himself that its operation requires judgment and cannot be executed by a computer. The rule is a dashboard, not an absolute mechanical constraint. He therefore does not reach the strict instrument-rule pole.

B&M and Svensson are located in the upper left. On the vertical axis, they share with Taylor a maximal position: the public inflation target and *forecast targeting* lock the objective to the fullest extent, representing the triumph of the *target rule* (Svensson, 1997). On the horizontal axis, however, this marks a break with Taylor: they claim full and unconditional freedom over the setting of interest rates, rejecting any reference equation for the instrument and making this freedom the condition of the flexibility needed in the face of shocks. They sit at the far left on the instrument axis. One might be tempted to read this positioning as a paradox: by formalizing the conditions for credibility through a public target and *forecast targeting*, did B&M and Svensson not precisely reinforce the constraint on instruments, shifting rightward on the horizontal axis? The opposite occurs. It is precisely because the objective is credibly and publicly locked in that freedom over the instrument becomes fully available without reputational cost. When an exogenous shock occurs and the central bank deviates sharply from its usual behaviour on interest rates, agents do not read this deviation as cheating: the pre-announced objective framework provides the interpretive grid that distinguishes legitimate flexibility from opportunism. In B&G, this distinction does not exist; any unanticipated deviation is structurally ambiguous and risks being interpreted as an attempt at inflationary surprise. The objective rule therefore performs a function that reputation alone could not perform: it liberates the instrument by framing the reading that agents make of its use.

This diagram thus allows two simultaneous historical movements to be read. The first is vertical: all modern authors are located at the top of the plane, the inflation target has become the consensus. The question of the objective is settled. The second movement is horizontal, and this is where the debate remains open: these same authors are scattered across the full width of the plane, from total discretion over the instrument to a systematic rule. The real question of the debate is no longer "rule or discretion" but "what degree of constraint must be imposed on the instrument, once the inflation target is accepted?"

It is precisely this question that the framework of B&M does not resolve. By claiming total freedom over the instrument, they maintain precisely the type of room for manoeuvre that K&P had shown structurally generates credibility problems. Nothing in K&P's argument justifies this asymmetry: their demonstration concerns discretion in general, not only over objectives. It is the answer to this question that Woodford will provide in the next chapter, by showing that discretion over instruments generates a second structural inefficiency that *constrained discretion* leaves entirely intact.



Chapter 3: Woodford and Strong Commitment

3.1 A Minority Position, Yet an Internally Consistent One

It is in *Interest and Prices* (2003) that Michael Woodford offers the most rigorous and demanding answer in the literature. His position is a minority one in the debate for a precise reason: whereas Taylor, and B&M, had accepted explicitly or implicitly that monetary policy requires some degree of day-to-day discretionary judgment, Woodford is the only author to push the logic of commitment to its most radical conclusions. He argues, indeed, that any form of *sequential optimization*, that is, resetting the decision problem at each period without regard for past commitments is structurally suboptimal (Woodford, 2003). What he rejects is not flexibility in the face of unforeseen shocks, but rather what one might call the *institutional amnesia* of sequential reoptimization: a procedure that treats previously formed expectations as given facts rather than as the direct product of the commitments the policy had undertaken to honor (Woodford, 2003). Where B&M claimed *constrained discretion* as the realistic optimal position (Bernanke & Mishkin, 1997), Woodford maintains that commitment to objectives alone is insufficient: for the management of expectations to be effective, the central bank must commit to a rule that also constrains its future instrument decisions.

3.2 The Problem of *Sequential Discretion* and *Expectations Management*

Woodford's argument takes as its starting point the pitfalls of the conventional approach to optimal control. Sequential optimization is structurally suboptimal because, at each period,

the central bank treats existing expectations as *"taken as given"* (Woodford, 2003) and simply seeks the best decision conditional on those expectations, without exploiting its capacity to shape them through future commitments. This observation extends the argument of K&P, but Woodford reformulates it within a different analytical framework that considerably broadens its scope. In the New Keynesian model he develops which preserves short-run price rigidity while assuming fully rational and forward-looking agents, the monetary transmission mechanism is fundamentally different from the one K&P had in mind. In K&P, it is inflationary surprises on real wages that stimulate employment in the short run. In Woodford, it is expectations about the future path of policy rates that determine present economic conditions: aggregate demand today depends on anticipated real rates tomorrow, and inflation today depends on expectations of future inflation (Woodford, 2003). Monetary policy is therefore fundamentally a problem of managing expectations about future rates. A discretionary central bank that reoptimizes at each period cannot create such expectations, because agents know that it will reoptimize tomorrow and incorporate this knowledge into their decisions today.

It is here that the notion of *history dependence* (Woodford, 2003) imposes itself as the logical consequence of this analysis. If monetary policy operates primarily through expectations about future rates, then optimal policy under commitment must bind itself to those future paths, which necessarily implies that it depends on past history. Consider a deflationary shock hitting the economy. Under discretion, the optimal response is to stimulate today and normalize policy once the shock has dissipated. But this response is suboptimal in a forward-looking framework, because agents know this in advance and cannot rely on the promise of future stimulus since the central bank will reoptimize when the time comes. Under commitment, the optimal response is different: the central bank pledges to maintain an accommodative stance even after the shock has passed, that is, to allow inflation to temporarily overshoot its target in order to compensate for past deflation (Woodford, 2003). This promise, if credible, stimulates the economy today through expectations, precisely because agents know the central bank will honor its commitment even when doing so is no longer optimal *ex post*. An illustrative example is price-level targeting, which Woodford mobilizes as a particular case of a history-dependent rule: unlike inflation targeting, where past errors are forgotten, price-level targeting forces the central bank to compensate for any past deviation, rendering commitment to the future path credible through the rule itself rather than through reputation alone (Woodford, 2003).

These two dimensions, expectations management and history dependence, thus turn K&P's argument against B&M. K&P had shown that discretion generates an inflationary bias because agents anticipate that the central bank will reoptimize at each period. B&M believed they had resolved this problem by committing to an inflation target. But Woodford shows that, in a New Keynesian framework, discretion also generates a second inefficiency, distinct from the inflationary bias: a discretionary central bank cannot credibly commit to a future accommodative policy path. The central bank may commit to a 2% inflation target, but it cannot credibly commit to the future path of its policy rates, which is precisely what determines present economic conditions. K&P's argument, pushed to its most rigorous conclusions, therefore invalidates the very solution that B&M had proposed (Woodford, 2003).

3.3 Theoretical Rigor Versus Institutional Practicability

The tension between Woodford's position and Taylor's reveals something important about the real practicability of strong commitment. Taylor and Woodford share the same fundamental objective: to substitute for pure discretion a systematic and predictable policy that anchors expectations. But their disagreement concerns what this systematicity implies. Taylor presents his rule as a methodical, non-arbitrary policy that requires judgment at each period in order to be operated. This judgment is not an exception to the rule: it is constitutive of it. Woodford ac-

cepts the objective of systematicity but additionally requires that the rule be *history-dependent*: a policy that allows free judgment over instruments at each period without being bound by past commitments reintroduces precisely the *sequential optimization* he has just shown to be structurally suboptimal. A policy that leaves instrument decisions unconstrained at each period is not a rule in Woodford's sense, it is a *guideline*, which is precisely what B&M had defended under the name of *constrained discretion*.

Woodford is aware of the difficulty this raises and mobilizes an argument akin to philosophical *rule utilitarianism*: it is better to commit to a suboptimal but credible rule than to seek the optimum case by case and lose all credibility (Woodford, 2003).[2] A central bank committed to explicit analytical principles can adapt to new circumstances without losing its credibility, provided that any such change can be justified on those same principles. But this argument, compelling within an academic framework, runs into three concrete institutional obstacles that explain why Woodford's strong commitment has remained largely confined to academic circles.

- The first obstacle is the political cost of the compensation phase. A *history-dependent rule* obliges the central bank, following a period of below-target inflation, to promise to allow inflation to temporarily overshoot its target in order to compensate for past shortfalls. On paper, this is optimal: such a promise stimulates the economy today through expectations. But two years later, when inflation is effectively running above 2%, deliberately maintaining an accommodative stance while the tools to tighten are available is difficult to justify publicly. If it applies Woodford's framework, the central bank must say: inflation is too high today, I have the tools to bring it down immediately, but I am forbidding myself from doing so because I made a mathematical promise during the recession. No democratic institution accepts that a central bank deliberately allows inflation to run freely solely out of fidelity to a past commitment. The political pressure to break the rule and reoptimize then becomes unsustainable.

- The second obstacle is the complexity of communication. For the rule to anchor the expectations of households and firms, it must be simple enough to be understood by a business owner or a banker. B&M's framework offers this simplicity: the target is 2%, and if inflation deviates, the central bank responds accordingly. Woodford's rule, by contrast, requires explaining that today's policy rate depends on the integral of past inflation shortfalls and the cumulative path of the price level. As Woodford himself acknowledges, the notion of an adjusted price level that accounts for accumulated deviations since a crisis would not readily appear natural to a non-specialized audience (Woodford, 2003). A rule that is incomprehensible to the public cannot anchor its expectations, which destroys precisely the mechanism through which Woodford intended to improve monetary policy outcomes.

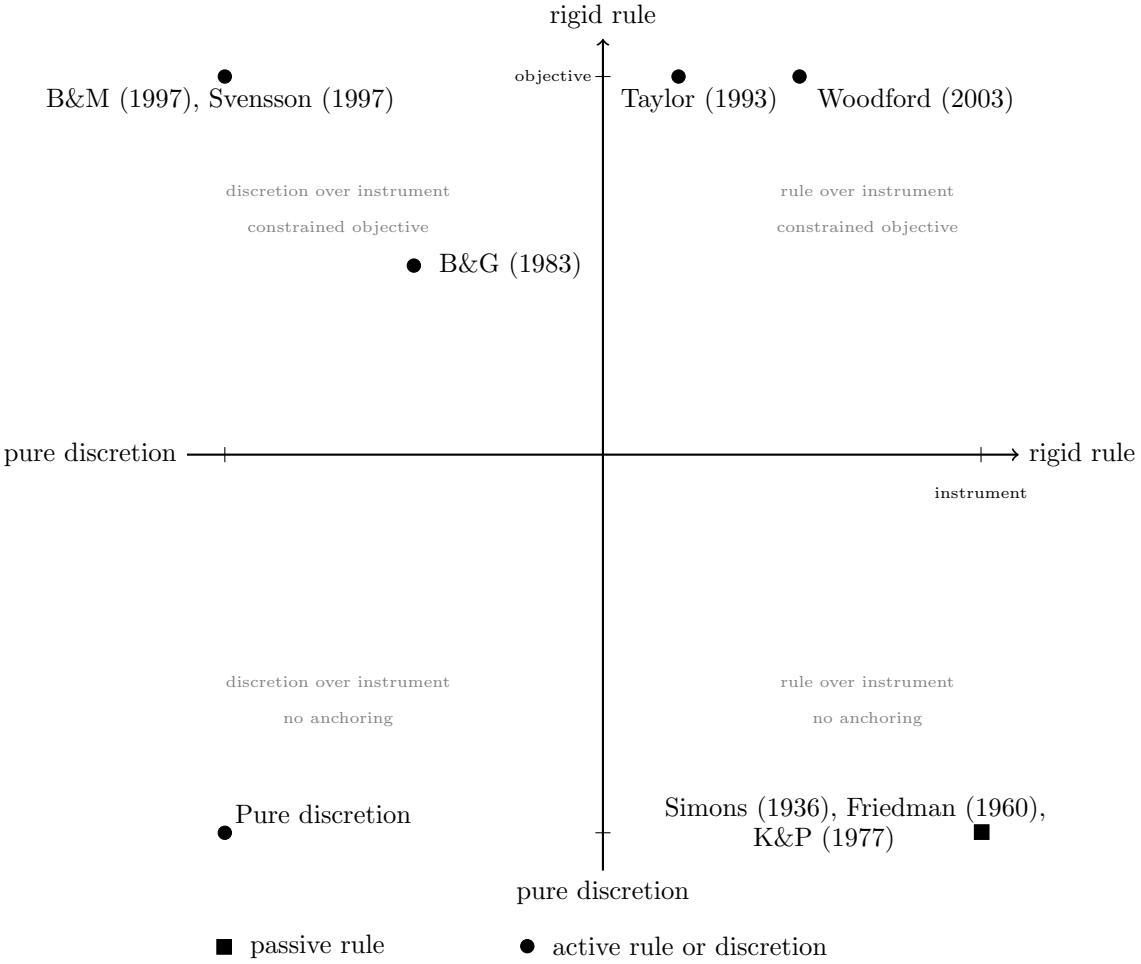
- The third obstacle is the renewal of mandates. Central bank governors change regularly. How can a new governor be institutionally bound to the precise history-dependent commitments made by his predecessor during a recession several years earlier? If the new governor refuses to bear the cost of past commitments, the entire credibility of the system collapses. Yet nothing in existing institutional frameworks guarantees this continuity of commitments beyond individual mandates. Woodford's rule presupposes an institutional memory that the actual governance structures of central banks cannot mechanically ensure.

Conceptual landmark: the debate as a two-dimensional space

Woodford's position thus represents the highest point of intellectual coherence reached in the debate before 2008: theoretically rigorous, it nonetheless proves institutionally fragile. His

[2]Woodford explicitly draws this analogy with rule utilitarianism, referring to Brandt (1959) and Harsanyi (1982).

commitment to future instrument decisions, though mathematically total within his model, rests in practice solely on the central bank's reputation and self-discipline, without any external legal mechanism. The space in which real monetary policy operates stretches across the full width of the diagram. Central bank practice oscillates permanently between the two poles of this theoretical ceiling: on one side, the need for full flexibility over the instrument defended by Bernanke, Mishkin and Svensson; on the other, the theoretical optimum of a history-dependent commitment to future rates theorized by Woodford, with Taylor's rule serving as a computable landmark between the two. It is within this space that the 2008 crisis will force central banks to improvise a form of commitment to future rate paths that no one had anticipated in its concrete modalities.



This third chapter shifts the vocabulary of the debate once more. The notion of a rule undergoes a further displacement: Chapter 2 had confined it to a locking-in of the objective, while Woodford reintroduces the instrument. A rule is no longer merely a target for outcomes, it is a history-dependent commitment to the future path of policy rates. Discretion over instruments, which Chapter 2 had rehabilitated as legitimate flexibility, is here turned against itself: the freedom to reoptimize at each period deprives the central bank of its capacity to bind tomorrow's decisions in order to steer today's expectations.

Part II 2008: Catalyst or Revelation?

Chapter 4: The 2008 Crisis and the Credibility Vacuum

4.1 Before the Crisis: A Structural Limitation of Communication

Chapter 3 concluded with a clear observation: *constrained discretion* is practicable but theoretically incomplete, while Woodford's strong commitment is theoretically consistent but institutionally inaccessible. *Constrained discretion* relies on a logical consequence necessitated by its theoretical framework: by committing to objectives without constraining instruments, B&M made communication the indispensable vector for establishing credibility. Transparency regarding inflation forecasts and accountability for deviations from the target made deviation costly in terms of reputation, without any formal mechanism constraining instrument decisions. This is precisely what B&M (1997) had theorized by establishing transparency and accountability as two of the three institutional pillars of their framework.

Blinder et al. (2008) provide an assessment of this communication at the exact moment the crisis erupts, and their analysis reveals a structural limitation that B&M's framework had not fully addressed: communication does not constitute a formal pre-commitment. The mere transmission of information regarding policy decisions, forecasts, or future intentions does not bind the central bank to future action or inaction, even if it may signal it. They add that no consensus had yet emerged on what constitutes an optimal communication strategy, as evidenced by the considerable variation in communication practices across central banks (Blinder et al., 2008). These two findings describe the state of communication when the crisis hits: an effective tool for anchoring inflation expectations around the announced target, yet lacking any binding mechanism on future instruments. Crucially, both theoretical frameworks examined so far share an implicit assumption that had gone unformalized: that monetary policy always possesses operational conventional instruments. It is this very assumption that the 2008 crisis would render obsolete.

4.2 The Crisis: A Theoretical Gap Made Visible

The shock of the 2007–2009 financial crisis plunged the American and global economies into a deep recession, far beyond what traditional monetary policies could manage. Faced with the collapse of economic activity, the Fed lowered its federal funds rate from 5.25% in September 2007 to a range of 0 to 0.25% in December 2008, reaching the effective lower bound for the first time in its history. As Bernanke (2020) notes, the fundamental problem the Fed confronted at the zero bound was that traditional monetary policy could no longer provide any additional stimulus, even as the severity of the crisis demanded more.

This moment exposed a theoretical gap that *constrained discretion* had carried since 1997 without prior circumstances revealing it. *Constrained discretion* had established a clear framework: commit to objectives, while leaving full discretion over instruments. However, this frame-

work relied on an implicit assumption that had never been explicitly articulated: that discretion over instruments would be exercised in a world where those instruments are familiar, tested, and operational. Although certain theoretical works, notably those of Woodford, had anticipated the challenges of the *zero lower bound*, no standardized operational framework had been established to guide central banks on how to deploy unconventional instruments credibly and optimally. Bernanke (2020) confirms this, noting that the alternative tools deployed after 2008 were "novel and relatively untested" when first implemented. Central banks were thus forced to improvise tools for which their theoretical framework had not prepared them, without a precise understanding of their effects or how to make commitments regarding these new instruments credible to economic agents. This lack of a framework to anchor expectations about future instruments can be termed the credibility vacuum: as long as conventional instruments functioned normally, this gap remained invisible; once they were exhausted, it became the central problem of monetary policy.

4.3 Why Neither Pure Discretion Nor Existing Rules Can Fill the Vacuum

Faced with this credibility vacuum, the two extreme positions of the rules-versus-discretion debate proved equally inadequate. Pure discretion cannot resolve the issue due to the structural flaws of sequential discretionary optimization that Woodford had identified, and existing rules are no better suited. Bernanke (2020) notes that simulations of the Fed's primary macroeconometric model suggest that using policy rules developed before the crisis would have resulted in policy rates being constrained by zero up to one-third of the time, with severe consequences for economic performance. The Taylor rule prescribed a negative policy rate under the economic conditions of 2009, which the zero bound made physically impossible to implement. While *constrained discretion* provides a framework for committing to objectives, it fails to do so for future instruments. The situation thus reveals a fundamental asymmetry in the pre-crisis framework: the problem of credibility regarding objectives had been resolved, but credibility regarding instruments remained unaddressed.

4.4 Improvised Responses and What They Reveal for the Future

Bernanke (2020) identifies the two primary instruments deployed by the Fed in its attempt to fill this vacuum. The first is *quantitative easing*: by purchasing large amounts of long-term assets, the Fed sought to lower long-term interest rates and ease financial conditions when short-term rates could no longer fall. Bernanke concludes that these asset purchases proved effective at easing financial conditions even when markets were not under unusual stress (Bernanke, 2020). However, this response does not send an explicit signal regarding the future path of policy rates; agents may interpret QE as a sign that rates will remain low for an extended period, but this is merely an indirect inference, not a commitment. In a New Keynesian framework, where expectations about future interest rates are precisely what determine current economic conditions, this ambiguity limits the effectiveness of QE as a tool for managing expectations.

It is *forward guidance* that attempts to address this directly: Bernanke (2020) notes that it became increasingly valuable for helping the public understand how policy would respond to economic conditions and for facilitating policymaker commitments to low-for-long interest rate policies. Yet this response immediately runs into the structural limitation that Blinder et al. (2008) had identified even before the crisis: communication does not constitute a precommitment. When the central bank announces that it expects to maintain low rates until a certain date, it communicates an intention, but nothing mechanically prevents it from changing its mind if economic conditions evolve. This is not a binding commitment in the K&P sense; it is an indication of intent that agents know is subject to revision. This is precisely the problem Woodford had identified: a discretionary central bank cannot credibly commit to keeping rates

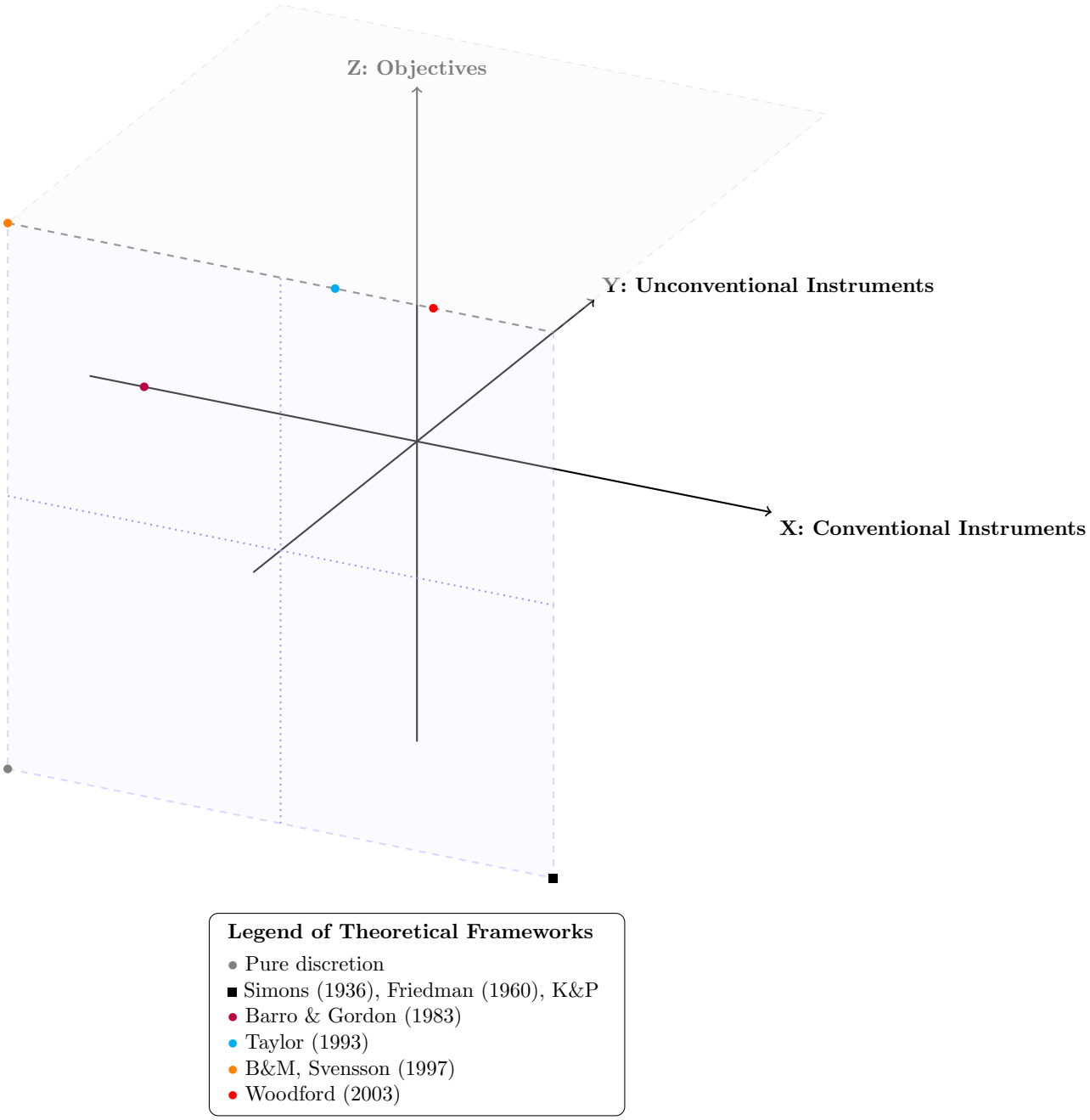
low for long, because agents anticipate that it will reoptimize when the time comes. Consequently, *forward guidance*, deployed without a pre-established binding framework, reproduces the exact same problem of *time inconsistency* on unconventional instruments for which *constrained discretion* had provided no commitment mechanism.

The crisis therefore does not settle the rules-versus-discretion debate; it shifts and intensifies it. It reveals that *constrained discretion* relied on an implicit assumption that fails at the *zero lower bound*, and that pre-crisis communication does not constitute a pre-commitment regarding future instruments. *Forward guidance* attempts to fill this vacuum by pushing the logic of *constrained discretion* toward a commitment to instruments that B&M had deliberately excluded from their framework. It is this form of commitment to future instruments, adopted under the pressure of circumstances rather than by deliberate theoretical choice, that the next chapter will analyze.

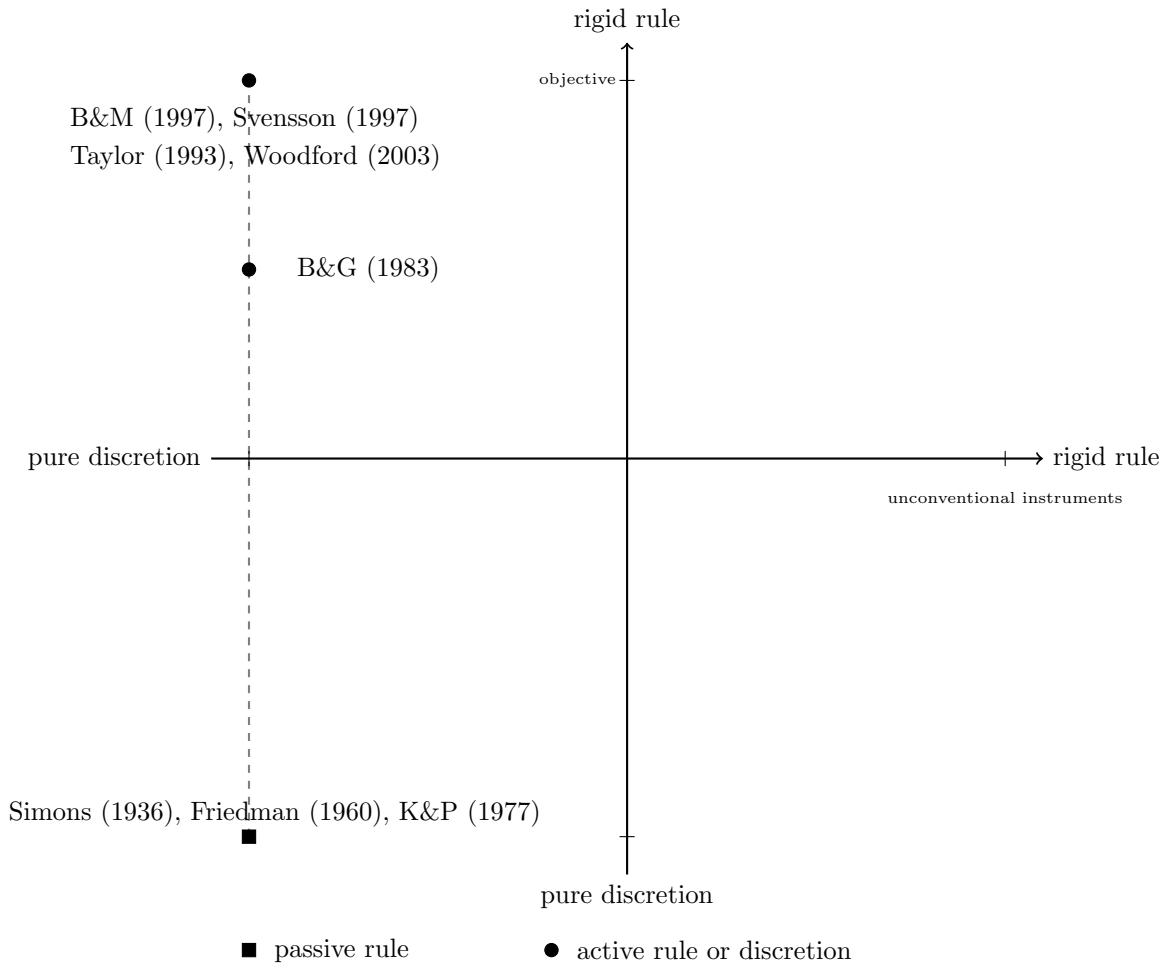
Conceptual Landmark: The Debate as a Three-Dimensional Space

The diagram in Chapter 2 represented the debate in two dimensions: the degree of rigidity imposed on the objective on the vertical axis, and the degree of rigidity imposed on instruments on the horizontal axis. This chapter reveals that this representation was incomplete. What we called the instrument axis was in reality only the conventional instrument axis, the policy rate managed through open-market operations. As long as these instruments functioned normally, this limitation remained invisible, as monetary policy knew no other tool. The 2008 crisis brought to light a facet of the debate that no one had mapped: the degree of rigidity imposed on unconventional instruments, specifically *forward guidance* and *quantitative easing*. The debate thus gains a third dimension.

The first diagram below represents this evolution in three dimensions. The Z-axis measures rigidity on the objective, the X-axis measures rigidity on conventional instruments, and the new Y-axis measures rigidity on unconventional instruments. What is immediately striking is that all the authors examined so far align on the Y-plane corresponding to pure discretion for unconventional instruments. This is neither an accident nor an oversight; these instruments existed as a theoretical possibility as explored in the academic literature regarding the *zero lower bound* but they had never been integrated into the standard operational framework of monetary policy. They belonged to academic reflection on extreme scenarios, lacking any institutional framework to govern them through rules. It was the crisis that forced them to become active instruments, before theory had time to provide a prior commitment framework.



The second diagram represents this same plane but replaces the horizontal axis with unconventional instruments. It allows for a simpler reading of what the 3D graph shows in perspective: all authors are at the far left, at the pure discretion pole, without exception. Their positioning on the objective axis is preserved exactly as it was, confirming that the third dimension does not erase the achievements of the previous chapters. It simply reveals that all these frameworks, regardless of their position on conventional instruments or objectives, shared a common blind spot: none had developed a formal rule to govern instruments that still belonged to theoretical reflection on extreme scenarios.



Chapter 5: Forward Guidance as a Rule-Discretion Hybrid

5.1 Why Forward Guidance is Necessary at the Zero Lower Bound

Chapter 4 demonstrated that the 2008 crisis created a credibility vacuum that neither pure discretion nor existing rules could fill. Woodford (2012) provides the most rigorous theoretical response available as the crisis unfolds. His starting point revisits a central argument from *Interest and Prices* (2003), which was already at the heart of Chapter 3: within the New Keynesian framework, the anticipated path of future interest rates, rather than the current policy rate level, serves as the primary lever of monetary policy. When the policy rate is pinned at zero, this first lever becomes ineffective, meaning all stabilization efforts must rely on the second. Consequently, expectations regarding the conduct of policy after the constraint lifts exert an amplified effect on current economic conditions; each additional quarter of low interest rates that is credibly announced adds to the total stimulus. It is precisely when the zero lower bound is binding that forward guidance ceases to be an auxiliary tool and becomes the core of monetary policy.

Woodford (2012) identifies two distinct reasons why forward guidance is necessary in this environment. The first is informational. Even if the central bank possesses a clear intention regarding its future policy path, it is difficult for the public to discern it without explicit guidance. This is particularly true when the desired behavior is *history-dependent*; the central bank must promise to be more accommodative than its standard reaction function would dictate, precisely because the zero lower bound forced it to be too restrictive in the past. Such behavior is too complex to be inferred through simple observation, especially in an unprecedented situation. The second

reason involves commitment. The future policy that agents are expected to anticipate is precisely the policy that the central bank will lack the incentive to implement ex post if it decides in a purely forward-looking manner based on its usual stabilization objectives. Therefore, an explicit public commitment is required, formulated clearly enough to make it costly for policymakers to ignore in subsequent decisions. This problem is structurally analogous to K&P's analysis: the lack of ex-post motivation to be as expansionary as agents anticipated reproduces the exact logic of *time inconsistency*, but this time applied to unconventional instruments.

5.2 The Delphic and Odyssean Distinction

Woodford (2012) identifies a central tension in the practice of forward guidance: central bankers are often tempted to believe they can influence financial conditions simply by offering forecasts of the likely future policy path without actually tying their hands. This temptation corresponds to what Campbell et al. (2012) define as *Delphic forward guidance*. This form consists of statements regarding the future path of interest rates that reflect the central bank's economic forecasts under its standard reaction function, without signaling any alteration to that reaction function itself. Conversely, *Odyssean forward guidance* represents a firm commitment to the future path of interest rates, implying a policy stance that is more accommodative than what the standard reaction function would prescribe under expected economic conditions.

This distinction is analytically decisive. *Delphic forward guidance* aligns with communication in the sense of Blinder et al. (2008); it transmits information about what the central bank expects to do, but it does not constrain future decisions and does not constitute a formal precommitment. In contrast, *Odyssean forward guidance* approaches an explicit rule; it binds the central bank to a trajectory defined by publicly announced criteria, thereby generating a reputational cost in the event of a deviation. Woodford (2012) explicitly argues that only this second form is effective at the zero lower bound, and that the temptation to rely on the Delphic form leads to less effective, or even counterproductive, policies.

The fundamental problem with *Delphic forward guidance* is that it fails to modify agents' beliefs regarding the central bank's reaction function. Campbell et al. (2012) empirically demonstrate the exact opposite of the intended stimulatory effect: when the Fed announces a lower-than-expected future rate path, markets frequently revise their unemployment forecasts upward and their inflation forecasts downward. If the announcement were interpreted in an Odyssean manner, as a strong commitment to stimulate the economy regardless of the cost, the opposite should occur, namely lower unemployment and higher inflation. However, Campbell et al. (2012) show that these revisions reflect a Delphic interpretation; markets read the announcement as a pessimistic signal. They deduce that if the central bank anticipates persistently low interest rates, it must possess somber private information about the future state of the economy. The announcement is treated like a weather forecast predicting a storm, rather than a commitment to alter behavior. Consequently, agents interpret these announced rate cuts as a signal of serious cyclical deterioration, rather than as the announcement of a more accommodative reaction function.

5.3 The Practice of Forward Guidance: Between Institutional Reluctance and the Quest for Credibility

The trajectory of the Federal Reserve between 2008 and 2012 clearly illustrates the tension between the theoretical necessity of an Odyssean commitment and the institutional reluctance to abandon discretion. Woodford (2012) traces this evolution with precision. Initially, faced with the economic collapse of 2008, the Federal Reserve resorted to deliberately ambiguous language. Phrases such as "for some time" in 2008 and "for an extended period" in 2009 sought to influence the yield curve without formulating any binding commitments. This represents *Delphic forward*

guidance in its most characteristic form, where the Fed signals a direction without promising to follow it. This deliberate opacity was not accidental; it reflects an institutional culture in which central banks have historically been incentivized to speak as little as possible about future scenarios, precisely to preserve their discretionary flexibility. Accepting a commitment to a future rate path requires abandoning some of this freedom, which central bankers perceive as a major risk to their credibility should circumstances force them to deviate. This is the institutional paradox identified by Woodford (2012): traditional prudence pushes toward opaque discretion, yet it is precisely this opacity that renders monetary policy ineffective at the *zero lower bound*.

In response to the persistent economic stagnation, the Fed eventually adopted what Woodford (2012) terms date-based forward guidance. The central bank committed to maintaining low interest rates until a specified date or period, without conditioning this commitment on the state of the economy. In August 2011, it pledged to keep policy rates near zero "at least through mid-2013." Woodford (2012) emphasizes that this announcement provides a particularly clean empirical test of the effects of forward guidance, as it contained no other simultaneous policy alterations. The effect was immediate and measurable, crashing forward rates across shorter maturities. However, date-based guidance possessed a fatal flaw that subsequent developments would expose. In January 2012, the Fed extended the horizon to late 2014, using the word "anticipate" rather than "commit," thereby preserving its discretionary escape hatch. The following day, the *New York Times* ran the headline: "Fed Signals Full Recovery Will Take Years." (as cited in Woodford, 2012) Markets did not interpret the announcement as a stimulative signal but rather as bad news regarding the state of the economy. If interest rates were to remain at zero for longer, it implied that the economic outlook was bleaker than expected. Instead of increasing spending, agents increased their precautionary savings out of fear of the future. Woodford (2012) explicitly notes that such an announcement could produce a contractionary rather than expansionary effect, proving worse than making no comment at all.

To avoid this pitfall, Woodford (2012) advocates for a second approach: state-contingent forward guidance. Unlike date-based guidance, which fixes a specific timeframe, state-contingent guidance commits the central bank to maintaining low interest rates until a precise economic threshold is met, independent of the calendar. This form corresponds directly to the *history-dependent* logic of his 2003 model, where the commitment centers on catching up on the losses accumulated during the crisis, forcing the bank to accept a period of moderate overshooting after the crisis to compensate for past periods of under-inflation. This is the Odyssean sacrifice: accepting short-term adjustments after the crisis to secure credibility during it. The Bank of Canada's actions in April 2009 illustrate the success of this approach; its explicit conditional commitment to maintain its policy rate at 0.25% until the end of the second quarter of 2010, conditional on the inflation outlook, caused an immediate and lasting collapse of the yield curve. The resulting flattening proved that markets granted it real credibility, in sharp contrast to the Fed's vague announcements.

Woodford (2012) acknowledges that even state-contingent guidance has its limitations. His theoretically optimal model, targeting an adjusted price level that accounts for accumulated gaps, is mathematically rigorous but pedagogically inaccessible to the general public. He therefore proposes nominal GDP trend targeting as a practical compromise, committing to maintain low rates as long as nominal GDP has not returned to the trajectory it would have followed had the crisis not occurred. This rule is publicly verifiable, comprehensible without advanced economic training, and respects the logic of a *history-dependent* catch-up. This proposal can be seen as the spiritual heir to Friedman's rule. Like Friedman's rule, it constrains the central bank via a simple, publicly verifiable quantitative target. Yet, where Friedman deliberately ignored the past, Woodford makes it the core of his rule, shifting from a fixed percentage of monetary

growth to a nominal GDP trajectory that must be recovered before the constraint is relaxed.

For forward guidance to function as a genuine commitment rather than a mere forecast, Woodford (2012) outlines four conditions: the announcement must be exceptional, the central bank must explicitly articulate a commitment rather than a forecast, this commitment must be *history-dependent*, and the central bank must clarify the rationale justifying its trajectory so that markets do not mistake it for a pessimistic economic forecast.

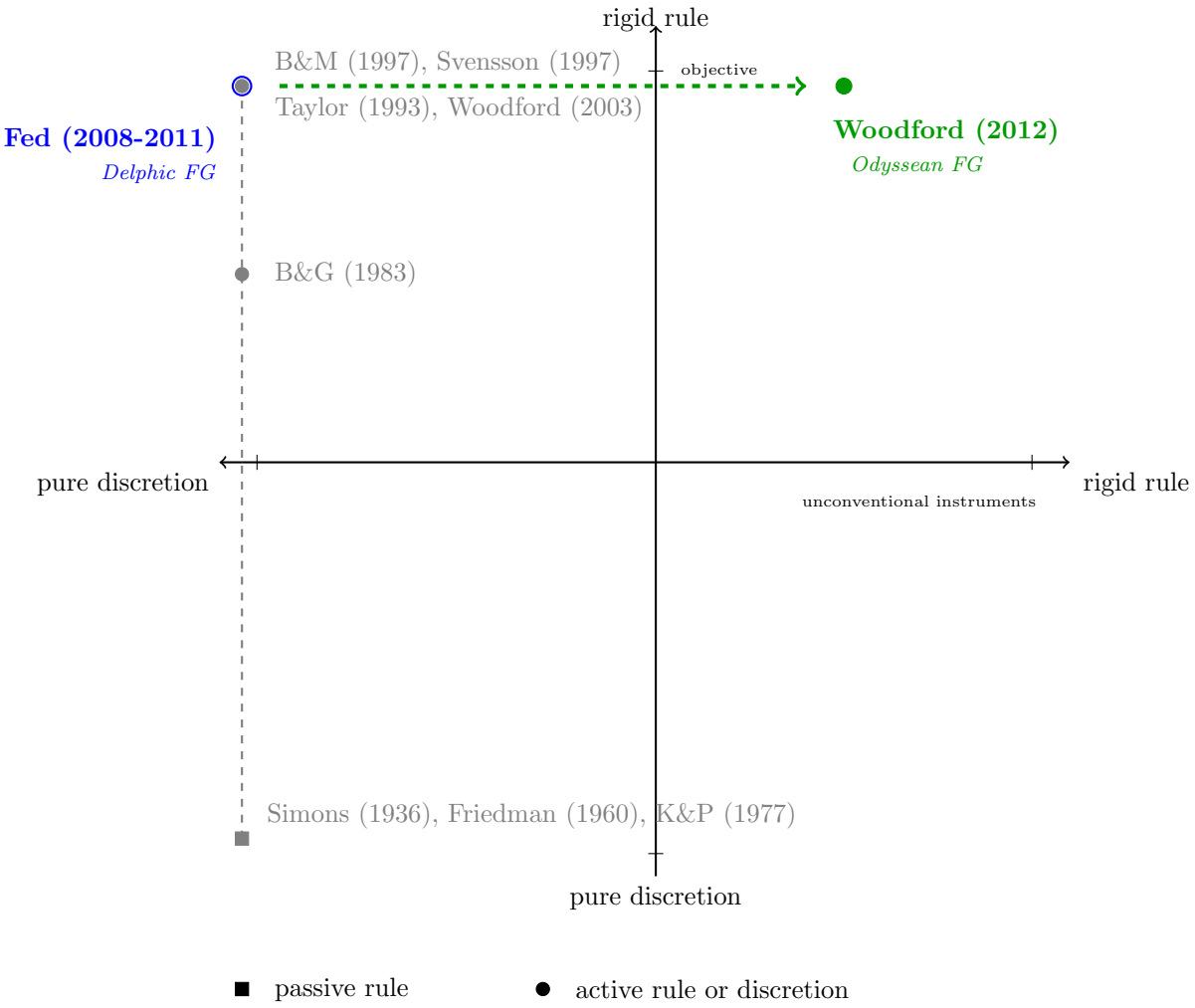
5.4 Quantitative Easing as Subordinated to Forward Guidance

A central argument in Woodford (2012) concerns the relationship between quantitative easing and forward guidance. Many central bankers hoped to utilize QE to revive the economy without having to formulate binding commitments. Woodford (2012) demonstrates that this expectation is unfounded, relying on a crucial distinction between the size and the composition of the central bank's balance sheet.

Purchasing short-term government bonds by issuing bank reserves, which Woodford (2012) terms pure QE, or the size effect, amounts to exchanging one zero-yield asset for another zero-yield asset. At the *zero lower bound*, money and short-term bonds are perfect substitutes, meaning there is no mechanical reason for this to alter spending decisions. Conversely, selling short-term bonds to buy long-term bonds, meaning modifying the composition rather than the size of the balance sheet, removes duration risk from the market and can lower long-term interest rates. This is what Woodford (2012) calls the *qualitative targeting of assets*, and it represents the only component of QE capable of directly influencing financial conditions.

However, even if this form of QE creates a certain type of implicit commitment, because a massive and premature resale of assets would entail significant financial losses, this commitment remains fundamentally limited. Asset purchases are technically reversible at any time, which limits the commitment strength of QE in the eyes of the markets. Without an explicit commitment not to sell these assets prematurely, markets cannot interpret the purchase as a promise to maintain interest rates low for an extended period. Empirical evidence is provided by Japan and the United States. Between 2001 and 2006, the Bank of Japan increased its monetary base by approximately 75% without nominal GDP or inflation reacting significantly. The American experience after 2008 reproduces the same pattern; the Fed's monetary base more than tripled, yet nominal GDP only increased by about 11%. Woodford's (2012) conclusion is direct: the pure quantitative mechanism of QE is ineffective at the *zero lower bound*. In cases where QE appeared to produce effects, these occurred through the signaling channel on future expectations, representing the implicit Odyssean forward guidance it conveyed rather than the mechanical expansion of the monetary base.

5.5 Forward Guidance in the Rules-versus-Discretion Debate: A Shift in Terms



The emergence of forward guidance at the *zero lower bound* marks the contemporary culmination of the transformation of the concepts of rule and discretion. Forward guidance stands as a pragmatically defensible but intellectually fragile hybrid, a reality visually captured by the diagram above. On one hand, discretion takes on an unprecedented form: *Delphic forward guidance*. It remains at the far left of the unconventional instruments axis, yet it is no longer the silent improvisation of the past; it disguises itself as a commitment through announcement effects while refusing to bear the mechanical cost. This is discretion operating under the name of guidance. On the other hand, the rule metamorphoses into an Odyssean pact. Devoid of conventional levers or legally binding status, it becomes a linguistic and conditional contract. It moves toward the right side of the graph without ever reaching the rigid-rule pole, as no institution exists to force the central banker to honor his word. What disciplines it is solely the reputational cost of a deviation visible to the public. It claims commitment without possessing a legal mechanism, and aspires to a rule without possessing its structural rigor.

This structural fragility stems from three reasons. First, the reputational credibility underlying *Odyssean forward guidance* is guaranteed by no formal mechanism; a central bank that deviates suffers a loss of reputation, but nothing mechanically prevents it from doing so. Second, the distinction between *Delphic* and *Odyssean forward guidance* is difficult to maintain consistently in practice; markets will always interpret a portion of the announcements as mere pessimistic forecasts rather than firm commitments, as Campbell et al. (2012) have empirically

demonstrated. Finally, the theoretically optimal form of *Odyssean forward guidance* is acknowledged by Woodford himself to be too complex to be understood by the general public, thereby destroying the very mechanism through which it is intended to anchor expectations.

It is precisely this fragility that Taylor (2011) refuses to accept. In his view, if forward guidance is merely discretion dressed up as a commitment, the solution is not to improve the dressing but to return to genuine formal rules and institutionalize them in a binding manner. According to Taylor (2011), the 2008 crisis was itself the consequence of abandoning rules between 2003 and 2005, rather than the starting point of an era where creative discretion should replace failing rules. It is this thesis, and its implications for the post-2008 rules-versus-discretion debate, that Chapter 6 will analyze.

Chapter 6: Taylor (2011) and the Institutionalization of Rules

6.1 The Diagnosis: The Abandonment of Rules as the Cause of the Crisis

Chapter 5 concluded by highlighting the intellectual fragility of forward guidance, viewing it as a hybrid framework constructed under duress that claims the mantle of a rule without possessing its structural mechanism. Taylor (2011) denounces this illusion. For him, forward guidance and other post-2008 unconventional policies do not represent a solution to the crisis; rather, they are a direct extension of it. His argument rests on a precise historical diagnosis: a clear deviation from rules observed during the early 2000s, a period during which macroeconomic policy became more interventionist, less rule-based, and less predictable.

The Federal Reserve maintained its policy rate at 1% for over a year starting in 2003, whereas the Taylor rule would have prescribed a rate between 3% and 4%, given that inflation was not exceptionally low and the economy was beginning to rebound. According to Taylor (2011), this deviation between the actual rate and the prescribed rate was greater than any other observed during the Great Moderation, reaching a magnitude characteristic of the stagflationary 1970s. It was this cheap money, made possible by abandoning the rule in favor of discretionary judgment guided by the fear of deflation, that fueled the housing bubble and led to the sequence of events analyzed in Chapter 4. Taylor (2011) relies on his own empirical work to conclude that these discretionary interventions were, on balance, deeply harmful.

This diagnosis is analytically decisive because it completely inverts the conventional narrative of the crisis. Whereas there is a widespread tendency to present 2008 as a demonstration of the limits of rules and a justification for discretion, Taylor (2011) demonstrates that it was precisely the abandonment of rules that produced the crisis. The Great Recession is not an argument against rules; it is the direct consequence of their neglect. The 2008 crisis is not a market failure, but rather a failure of discretionary monetary policy. This inversion lies at the heart of his normative stance and forms the conceptual foundation of his institutional proposal.

6.2 The Institutional Response: The Federal Reserve Policy Rule Act

Faced with this diagnosis, Taylor (2011) does not propose mechanically mandating his own equation as a compulsory rule. His proposal is institutional, taking the form of a legislative act he refers to as the Federal Reserve Policy Rule Act. This legislation would not require the Fed to adopt any specific interest rate rule; it would merely require the central bank to establish a rule of its own choosing and communicate it publicly. The Fed would be required to submit a written report to Congress twice a year, detailing its strategy or rule for systematically adjusting interest rates. Should it choose to deviate from its own rule due to changing conditions, it would be legally obligated to explain and justify these deviations during congressional hearings. The

objective is to discipline discretion without eliminating it entirely.

This proposal is analytically significant because it represents an attempt to reconcile the rigor of rules with the flexibility that central banks demand. In this sense, his proposal extends the institutional pillars of B&M's *constrained discretion*, but adds a legal, binding dimension that the latter had deliberately excluded. The difference is one of kind, not merely of degree. Under *constrained discretion*, the central bank can choose not to explicitly state its instrument rule and can avoid justifying its deviations. Under the framework of the Federal Reserve Policy Rule Act, it would be legally compelled to do so. Where B&M relied on reputation and voluntary transparency, Taylor (2011) proposes mandatory transparency regarding instrument rules. This marks a significant step toward the rules pole of the debate, even though flexibility in choosing the rule and the option to deviate with justification preserve a residual element of discretion.

6.3 The Critique of Unconventional Policies

Taylor (2011) does not confine his critique to the 2003–2005 period; he severely criticizes the unconventional policies deployed after 2008, particularly large-scale asset purchase programs. His arguments are twofold, spanning both economic and institutional dimensions.

The first argument is economic. Taylor (2011) warns that these massive asset purchases increase long-term inflation risks and create the potential for major disruptions when the Fed's balance sheet must eventually be reduced. He further points out that QE2[3] ignited severe tensions within the international community, notably during the G20 meetings, where it was perceived as a competitive devaluation of the dollar. The legacy of this bloated balance sheet, according to Taylor (2011), poses a significant problem for the future stability of monetary policy.

The second argument is constitutional and institutional. Unconventional interventions by the central bank resemble credit subsidies and resource allocation decisions, which should normally be approved by Congress through the budgetary process. By making such decisions autonomously, the central bank encroaches upon the prerogatives of the legislative branch and compromises its own institutional independence. This is no longer conventional monetary policy; it is fiscal policy or credit allocation exercised without an explicit democratic mandate. By venturing into these domains, central banks expose themselves to political pressures that could compromise their ability to conduct rigorous monetary policy in the future.

6.4 The Defense of the New Keynesian Framework

An often overlooked aspect of Taylor's argument is his explicit defense of the New Keynesian macroeconomic framework against the criticisms leveled at it after 2008. For Taylor (2011), the crisis provides no reason to abandon empirical models based on rational expectations and price rigidities. It is precisely this type of model that generated rule-based policy recommendations. These models did not fail in their prescriptions; rather, policymakers adopted a more discretionary approach, ignoring those recommendations. Taylor (2011) explicitly addresses arguments that macroeconomists failed policymakers by not providing guidelines to avert the crisis, countering that the rules were indeed provided, but decision-makers chose to follow a different, more discretionary path.

This position is important because it shows that the disagreement between Taylor (2011) and the partisans of post-2008 creative discretion is not a disagreement over the underlying economic model. Instead, it is a disagreement over the institutional conclusions to be drawn from

[3]QE2 (Quantitative Easing 2) refers to the Fed's second asset purchase program, announced in November 2010, which committed to buying $600 billion in US Treasuries over an eight-month period.

it. Taylor and Woodford share the same New Keynesian framework with rational expectations and rigid prices, but they derive opposite prescriptions regarding the role of rules. Taylor (2011) concludes with a quote from Milton Friedman that encapsulates his normative position, noting that yielding to political pressures to "do something" often does more harm than good. The temptation to attempt more than economic science suggests is possible is precisely what renders discretionary policies counterproductive. The best is frequently the enemy of the good.

6.5 Taylor in the Rules-versus-Discretion Debate

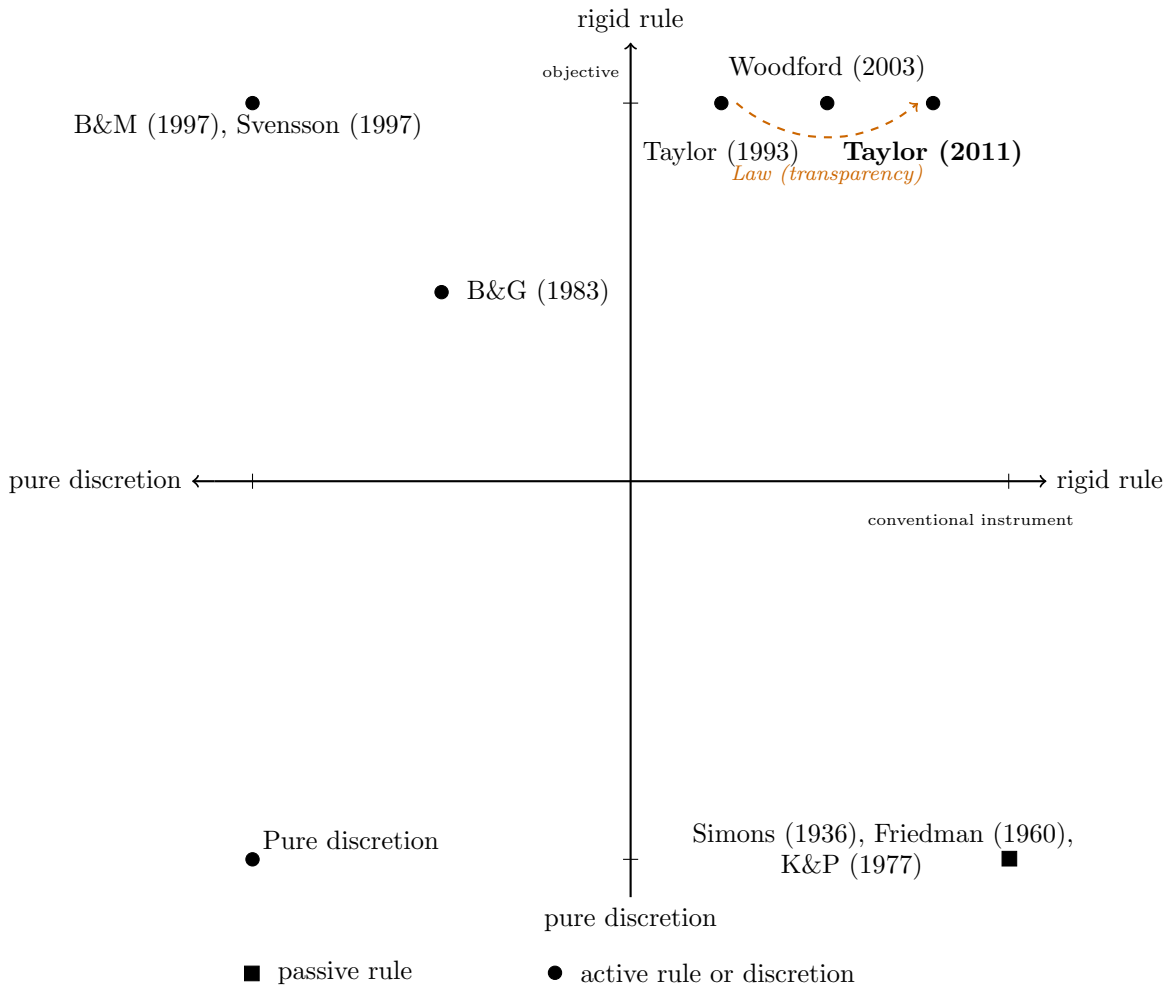
Taylor's (2011) contribution to the rules-versus-discretion debate is twofold. On one hand, he provides a historical diagnosis: the abandonment of rules, rather than their limitation, caused the crisis. On the other hand, he offers a concrete institutional response that attempts to discipline discretion through mandatory transparency over instrument rules, without eliminating it entirely.

To understand his position, one must return to the geometric representation constructed throughout the previous chapters. Chapter 4 showed that the 2008 crisis opened a third dimension in the debate, namely that of unconventional instruments, where all pre-crisis theoretical frameworks sat at the pole of pure discretion. Woodford (2012) accepted this third dimension as irreversible and sought to construct new rules of engagement within it, such as state-contingent anchoring and Odyssean forward guidance. Taylor (2011) categorically rejects this strategy. In his view, this third dimension is not a natural evolution of monetary policy; it is the artifact of a past error. It only opened because the Fed violated rules within the conventional space between 2003 and 2005. By abandoning the Taylor rule, the Fed fueled the bubble, caused the crash, reached the zero bound, and forced policy into this unconventional realm. Taylor's response, therefore, is not to theorize commitments within the third dimension, but to close this parenthesis and force a definitive return to the two-dimensional plane that prevailed during the Great Moderation.

Conceptual Benchmark: The Forced Return to the Two-Dimensional Plane (Taylor 2011)

The diagram below illustrates this return to a two-dimensional plane. Taylor (2011) does not seek to occupy a new position on the unconventional instruments axis; instead, he aims to render this axis obsolete by placing conventional instruments back at the center of monetary policy, framed by a legal constraint of transparency. His position on the conventional plane is clear: an explicit objective integrated into the rule, an instrument disciplined by a mathematical equation but allowing a margin of judgment, and now a legal obligation to justify any deviation. This represents an institutionally reinforced form of *constrained discretion* rather than a return to the mechanical rules of Simons, Friedman, or K&P, but its underlying logic is to make the third dimension structurally unnecessary by making the second indestructible.

The graph reveals a precise analytical progression along the conventional instrument axis. The three aligned points at the top right share the same maximal level of rigidity regarding the objective but differ in the degree of constraint imposed on the instrument. Taylor (1993) is the least rigid of the three: his rule was merely a compass for the Fed committee, without any obligation to follow it, making it a guideline rather than a strict constraint. Woodford (2003) sits in the center: his commitment to future instruments is mathematically total within his model but institutionally fragile, as it relies solely on reputation and self-discipline without an external legal mechanism.



Taylor (2011) is the furthest to the right of the three. The legal obligation to testify before Congress and justify any deviation creates a transparency constraint that goes beyond Woodford's mere goodwill and approaches a genuine institutional constraint. However, it falls short of the total lock-in envisioned by Simons, Friedman, and K&P; whereas the latter prescribed a mechanical rule that eliminated any possibility of deviation, Taylor (2011) preserves this possibility on the condition of public justification. The constraint targets the transparency of the deviation, not its prohibition.

This shift also performs a sementic counter-revolution: discretion becomes once again a fallible human judgment that is legally auditable, and the rule ceases to be a reputational pact or a mathematical equation to become a legal and procedural obligation. The arrow between Taylor (1993) and Taylor (2011) precisely illustrates what the 2008 crisis produced in his thinking: not a change in position regarding the objective, but a mutation of the rule itself, shifting from a mathematical compass toward a democratic requirement for transparency. This finding allows us to formulate the central normative question. Woodford and Taylor offer two diametrically opposed visions of the post-2008 monetary space: one seeks to tame the third dimension through new rules of engagement, while the other seeks to close it through a return to conventional rules. If forward guidance remains an unstable hybrid, and if the institutionalization of rules according to Taylor (2011) does not definitively settle the debate since it preserves a residual margin of judgment, what is the realistic optimal position for a central bank that wishes to be simultaneously credible, flexible, and democratically legitimate? It is this question, left without a definitive answer in the literature examined thus far, that will structure our critical evaluation and our normative position in the following chapter.

Part III: after 2012, institutional responses to the credibility vacuum

Chapter 7: The Contemporary Debate: Toward Doubly Constrained Discretion

7.1 Mishkin (2017): Diagnosing an Ill-Posed Debate

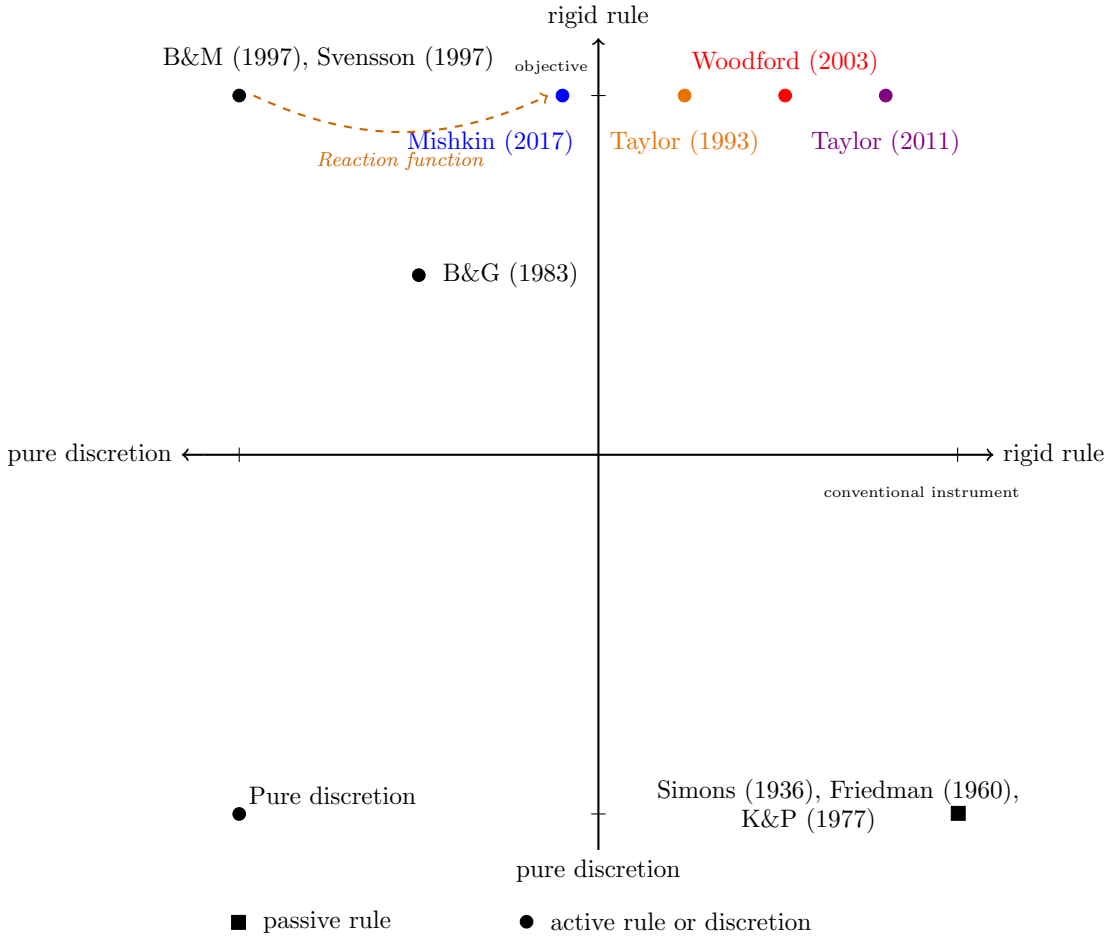
The preceding chapters have demonstrated that neither Woodford's pure commitment nor Taylor's institutionalization of rules provides a definitive resolution to the rules-versus-discretion debate. Mishkin (2017) builds on this observation to advance a more radical thesis: the debate has been fundamentally ill-posed from the outset. The central bank does not have to choose between an automatic instrument rule and pure discretion. It can opt for a discretionary regime equipped with rule-like attributes, a framework B&M (1997) termed *constrained discretion*. However, twenty years after this initial proposal, Mishkin (2017) observes that *constrained discretion*, as it has been practiced, remains insufficiently constrained.

The reason for this insufficiency is precise. The 1997 version of *constrained discretion* relied on a single constraint: the nominal anchor. B&M (1997) believed that a central bank merely needed to publicly announce a credible inflation target for markets to trust it, regardless of its decisions regarding instruments. The 2008 crisis exposed the limits of this logic. When interest rates hit zero and the Fed had to resort to unconventional policies, merely announcing that it was still targeting 2% was no longer sufficient to discipline the external perception of its policy. From the markets' perspective, day-to-day decisions regarding quantitative easing and forward guidance resembled total improvisation rather than constrained discretion; the public did not know the algorithm the Fed was using to make decisions, nor when or why it would halt its asset purchase programs or raise rates. Mishkin's (2017) conclusion is straightforward: constraining the objective is not enough; the method must also be constrained.

His response, therefore, rests on two conditions. The first is the adoption of a nominal anchor, a publicly announced inflation target that creates a reputational cost for deviation. Mishkin (2017) deliberately chooses inflation targeting over the price-level targeting advocated by Woodford (2003). The rationale is highly practical: price-level targeting requires compensating for past errors, which implies inducing deflation following an inflationary shock or tolerating high inflation after a recession, two prescriptions that are politically indefensible and incomprehensible to the general public. Inflation targeting, on the contrary, follows a *bygones are bygones* logic: the past is in the past, and the aim is simply for prices to rise by approximately 2% from today forward.

The second condition is novel and constitutes the central contribution of Mishkin (2017): the communication of a monetary policy reaction process. This involves more than just announcing a target; it requires explicitly describing how the future policy path will change in response to

evolving economic conditions. This is what Mishkin (2017) refers to as *data-based forward guidance*. By describing its reaction function, the central bank constrains its own future discretion without adopting a rigid instrument rule. Agents can accurately anticipate its future conduct, which anchors expectations while preserving the necessary flexibility to deal with unforeseen shocks. Mishkin (2017) illustrates this point by demonstrating that the Taylor rule would have recommended raising rates by 38 basis points between the second and fourth quarters of 2007, and then maintaining them at a high level throughout 2008, a prescription that could have proven catastrophic in the face of a collapsing financial system. *Constrained discretion* is superior not because it is generally more flexible, but because it can incorporate information that no mathematical formula can capture, provided that this flexibility is disciplined by transparency regarding the reaction function.



On the two-dimensional plane, Mishkin's (2017) shift relative to B&M (1997) is visually striking. In 1997, *constrained discretion* was located at the far left of the horizontal axis: the objective was locked to the maximum extent, but the instrument remained under total discretion. Mishkin (2017) makes a massive leap toward the center, stopping just short of crossing the median line. This positioning is not arbitrary; it perfectly reflects the logic of his article, whose title conveys its essence: *Making Discretion in Monetary Policy More Rule-Like*. Mishkin (2017) does not propose abandoning discretion over the instrument; rather, he seeks to push it to its absolute limit of rigor without transforming it into an equation.

7.2 Svensson (2017): Forecast Targeting as a Theoretical Solution

Svensson's (2017) paper is situated within a highly specific political context. In 2017, the United States Congress was pushing legislative proposals aimed at legally compelling the Federal Reserve

to follow a mechanical mathematical formula, specifically a Taylor-type rule, with a statutory obligation to justify any policy deviations before a congressional committee. For economists such as Svensson (2017), this type of legal constraint threatened to undermine central bank independence. His article serves as a direct counter-argument to this threat; he does not defend pure discretion against rules, but rather redefines the very concept of a rule to demonstrate that the Federal Reserve already operates under a framework far superior to the Taylor rule.

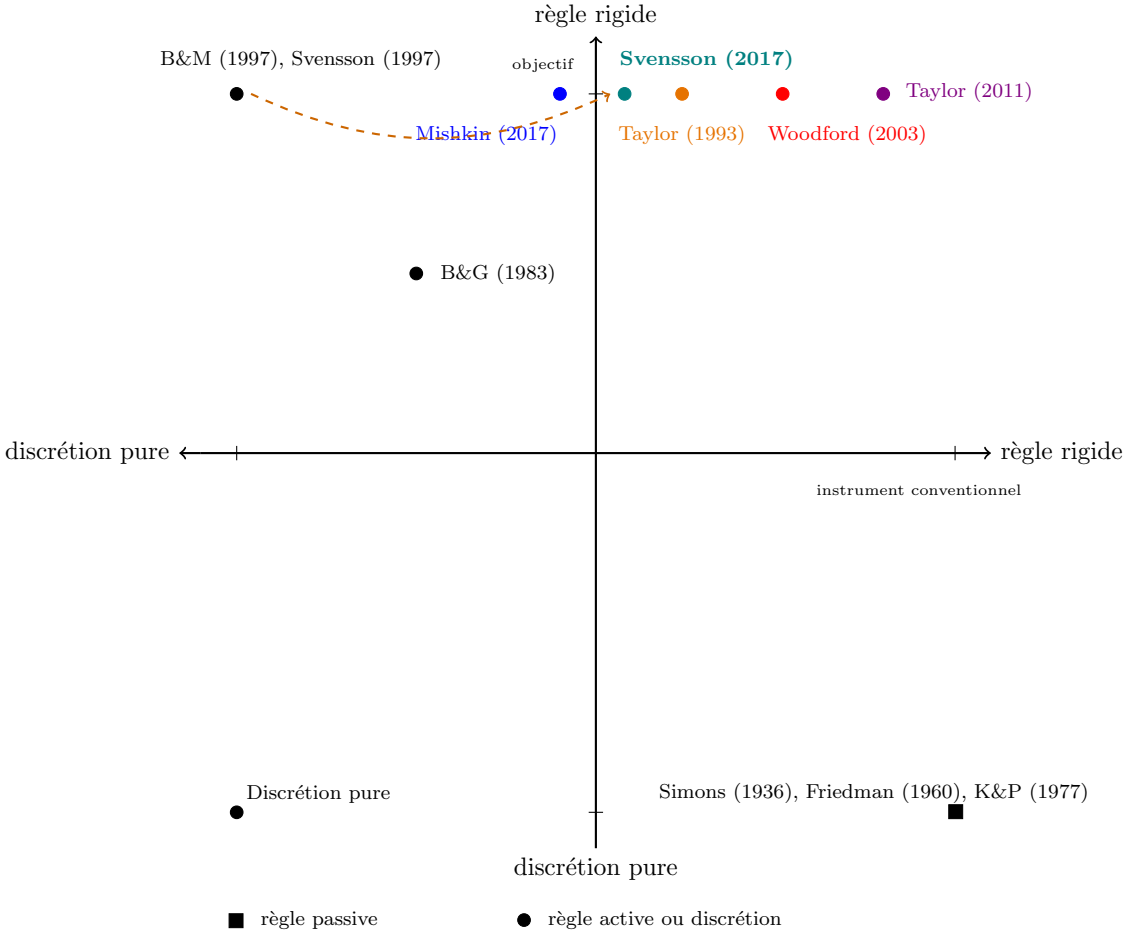
His argument against the Taylor rule is precise. The rule is not criticized for incorporating qualitative judgment, as Taylor himself had made judgment a constitutive element of his framework, as established in Chapter 1. Rather, Svensson (2017) critiques its rigid, backward-looking mathematical structure, which relies solely on contemporaneous inflation and production data, with coefficients calibrated to a specific historical period. Given that monetary policy operates with long and variable lags, piloting an economy using the Taylor rule is akin to driving while looking only in the rearview mirror. It becomes fundamentally suboptimal when structural economic shifts occur and remains incapable of integrating the type of non-quantifiable information that had allowed Mishkin and the Fed to avert a systemic collapse in 2007–2008. Furthermore, Svensson's (2017) central political point is that the legislators seeking to enshrine the Taylor rule into law interpret it as an automatic equation stripped of human judgment, and it is against this rigidified version that his paper is directed.

Svensson's (2017) proposed solution is *forecast targeting*. Under this procedure, the central bank selects an instrument-rate path and a corresponding macroeconomic projection trajectory such that its inflation and employment forecasts optimally satisfy its mandate, subsequently publishing and justifying these paths. While this was not an entirely new concept in 2017, as Svensson had advocated for its core principles since the 1990s and central banks such as the Swedish Riksbank or the Reserve Bank of New Zealand had already practiced it rigorously, its formal application to the Federal Reserve was novel. Between 2008 and 2017, the Fed had operated within an informal version of what Mishkin (2017) termed *constrained discretion*, featuring an explicit 2% inflation target adopted in 2012 and regularly published forecasts, yet lacking a systematic obligation to demonstrate that its chosen interest rate path was uniquely consistent with its mandate. In 2017, Svensson urges the Fed to formalize its existing practices to build a legally defensible rule against congressional overreach. The quote from Ben Bernanke used as an epigraph encapsulates this view, illustrating that the Fed does follow a rule, but it is a rule defined by aiming for a 2% inflation target and the natural rate of unemployment with equal weight, alongside publishing its projections and interest rate path.

What *forecast targeting* shares with Woodford (2003) is the conviction that the anticipated path of future interest rates, rather than the current rate alone, is the primary transmission channel of monetary policy. However, while Woodford (2003) demanded a *history-dependent* commitment tied to past price levels, Svensson (2017) proposes a more flexible constraint, where the interest rate path is dictated purely by the continuous optimization of forecasts. When new information arrives and forecasts shift, the trajectory immediately adjusts to maintain optimality. This provides Woodford's analytical rigor without his institutional rigidity. What Svensson (2017) formalizes is thus a dual constraint on discretion: an objective-based constraint via the mandate, and a reaction-process constraint via the mandatory publication and justification of the interest rate path consistent with that mandate. Any unauthorized deviation from what the forecasts prescribe would be immediately visible on the published charts, meaning transparency fosters self-discipline. Svensson (2017) notes that *forecast targeting* can accommodate more specific strategies, such as *temporary price-level targeting* at the effective lower bound, where the central bank commits to compensating for past under-inflation before returning to flexible inflation targeting. It is this very logic of *history-dependent* compensation that Flexible

Average Inflation Targeting (FAIT), adopted in 2020, would attempt to institutionalize.

On the two-dimensional axis, Svensson (2017) slightly crosses the median line toward the rules pole, whereas Mishkin (2017) remained on the discretion side. The reason for this distinction is precise: rather than merely calling for qualitative communication regarding the reaction function, Svensson (2017) mandates a formal mathematical demonstration. The central bank must prove, supported by published projections, that its interest rate path is uniquely consistent with its target. Yet, he remains well to the left of Taylor (1993) and Woodford (2003) because he rejects any direct constraint on the instrument itself; the instrument remains completely unconstrained as long as the published forecasts justify the decisions. Where Woodford (2003) required honoring commitments even as economic conditions shifted, Svensson (2017) alters the trajectory the moment new information arrives.



7.3 Flexible Average Inflation Targeting (FAIT) in 2020: Institutional Implementation and Its Limits

The Flexible Average Inflation Targeting (FAIT) framework adopted by the Federal Reserve in August 2020 represents the institutional culmination of the theoretical debates examined thus far, emerging from a highly specific empirical context (Powell, 2020). Between 2008 and 2019, the Federal Reserve confronted an unprecedented challenge, as inflation remained chronically below its 2% target despite interest rates being held near zero. The effective lower bound rendered conventional monetary policy powerless, and the threat of a deflationary spiral haunted policymakers.

Within this environment, Powell (2020) announced a doctrinal shift at Jackson Hole, stating that the Fed would henceforth seek to achieve inflation that averages 2% over time, which implies tolerating inflation moderately above 2% following periods of persistent under-shooting. This make-up strategy draws directly from the logic of temporary price-level targeting, which Svensson (2017) identified as the optimal form of forecast targeting at the effective lower bound, compensating for past deviations to anchor future inflation expectations and restore monetary policy effectiveness when conventional tools are exhausted.

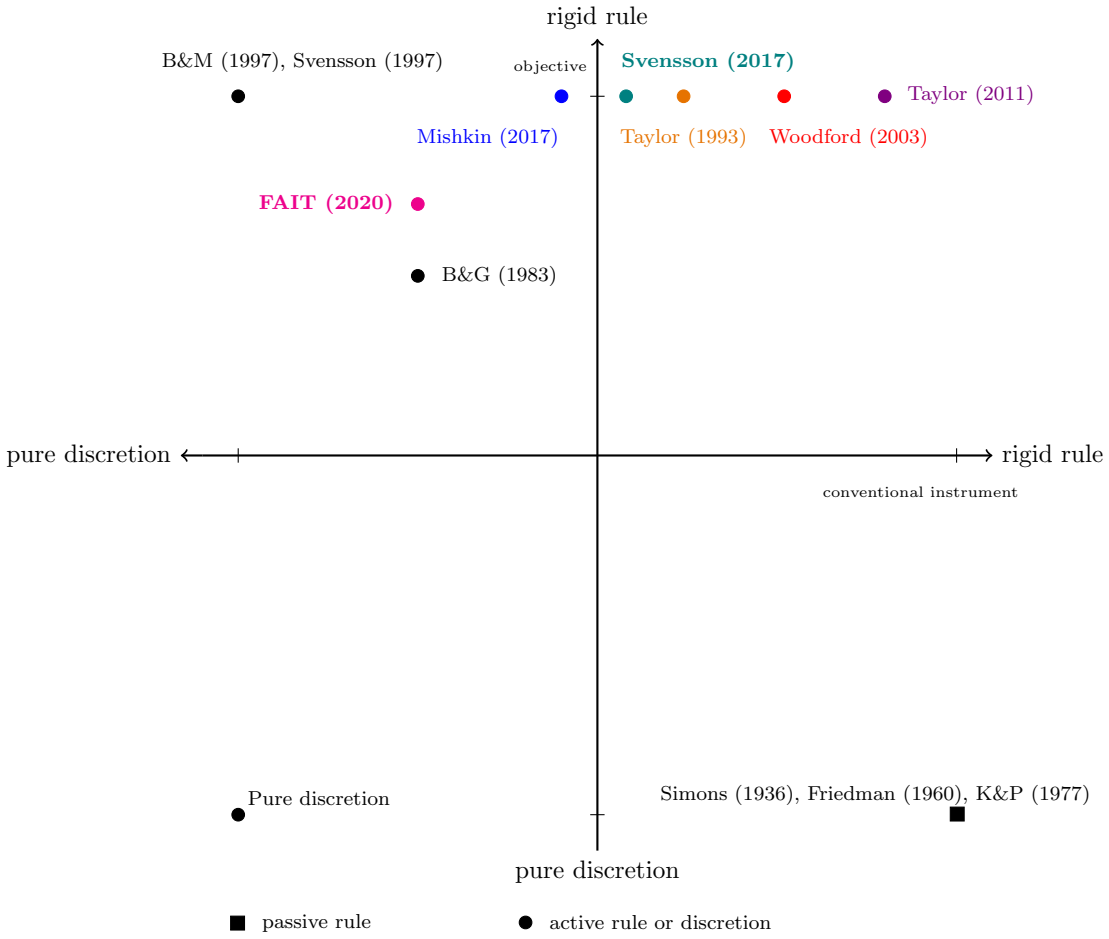
However, FAIT also clearly illustrates the precise boundaries that Mishkin (2017) and Svensson (2017) had identified. Powell (2020) explicitly declared during the announcement that the Committee was not tying itself to any particular mathematical formula to define this average. The Federal Reserve did not specify the exact timeframe over which the inflation average would be calculated, nor how it would weight past shortfalls against the future overshoots it intended to tolerate. The word "flexible" in FAIT does not represent a theoretical refinement; instead, it serves as a discretionary reservoir that preserves the freedom to deviate without clearly defined reputational consequences. From Svensson's (2017) perspective, this constitutes an incomplete form of forecast targeting, as the central bank fails to fully reveal the reaction function driving its projections. From Mishkin's (2017) perspective, it represents a reaction-process communication that is too vague to fully anchor expectations. Rather than the dual constraint described by Mishkin and Svensson, FAIT commits to a principle without committing to its operational modalities.

Although occurring after the primary papers studied in this section, the inflationary episode of 2021–2022 provides an empirical illustration of this structural vulnerability. In 2021, as inflation surpassed 5% and subsequently 8%, the Federal Reserve maintained its policy rates at zero by labeling these inflationary pressures as "transitory," sheltering behind the flexibility of FAIT to justify its inaction. Lacking a precise formula or a published trajectory for returning to the target, the central bank could not be held accountable for its deviation through any clear institutional mechanism. To restore its credibility, the Fed was forced in 2022 to initiate the most rapid series of rate hikes in forty years, climbing from 0% to over 5% in less than a year. This is exactly what Mishkin (2017) and Svensson (2017) had anticipated as a primary failure mode of constrained discretion, showing that without maximum transparency regarding the reaction function, flexible discretion degenerates into improvisation, making the eventual catch-up far more costly than timely prevention would have been.

On the two-dimensional diagram, FAIT operates a double retreat relative to Mishkin (2017) and Svensson (2017). Along the horizontal axis, it drops deeply to the left; by refusing to specify the calculation window for the average or the method for weighting deviations, Powell (2020) rejects the very constraint on methodology that Mishkin and Svensson had advocated. FAIT returns squarely into the zone of instrument discretion, well to the left of Mishkin (2017). Along the vertical axis, the nominal anchor is similarly weakened, because by aiming for an average inflation rate rather than a fixed target, the Fed effectively shifts its objective in each period. If inflation stands at 0% today, the implicit target becomes 4% to restore the average to 2%; once that 4% is achieved, the target drops back to 2%. Without a precise formula defining the duration or calculation method of the average, this moving target ceases to provide a clear nominal anchor for economic agents.

This double retreat positions FAIT in the immediate vicinity of B&G (1983) on the graph. This proximity is analytically telling, as the desire to introduce flexibility without the constraint of transparency inadvertently reproduced the regime of poorly controlled discretion characteristic

of the 1980s, an outcome empirically validated by the inflationary episode of 2021–2022.



7.4 Chapter Implications: The End of Frontal Opposition

What Mishkin (2017) and Svensson (2017) jointly establish, and what the FAIT framework of 2020 illustrates in both its achievements and its limitations, is a profound transformation of the rules-versus-discretion debate. Presenting their respective papers at the same Boston Federal Reserve conference in October 2017, they arrived at the identical diagnosis: following 2008, post-crisis discretion had extended too far. Successive waves of quantitative easing and vague rate commitments had rendered monetary policy so opaque that it increasingly resembled improvisation. The 1997 iteration of *constrained discretion*, which contented itself with a fixed objective while leaving the method entirely free, was no longer sufficient.

Their convergent response is what could be described as a glass prison: neither a mathematical rule that locks the central bank into a rigid equation, nor the total freedom that alarms markets, but rather the strict obligation of absolute exposure. Mishkin (2017) terms this *data-based forward guidance*, while Svensson (2017) calls it *forecast targeting*, yet the underlying logic is identical: if the central bank publishes its models, its forecasts, and its interest rate path, it becomes constrained by public exposure.

This convergence marks the ultimate semantic mutation of the debate. The rule strips itself of its algebraic armor (Taylor, 1993) and its legal requirement (Taylor, 2011) to become a purely methodological obligation: no longer a formula that sets the rate, but an injunction for

total transparency over forecasts and the reaction function. Discretion, for its part, permanently loses its status as opaque improvisation or a Delphic mirage to become flexibility under close surveillance; the central banker retains the freedom to adapt instruments to shocks, but this freedom is conditional on publicly proving its consistency with the bank's own internal models. The tragedy of FAIT in 2020 is precisely its attempt to escape this fusion: the Fed sought to reap the reputational benefits of the word "rule" while restoring the opacity of an outdated discretionary era, and paid for it with the most aggressive tightening cycle in forty years.

The frontal opposition between rules and discretion has therefore given way to a definitive answer: *constrained discretion* is only valid under two simultaneous conditions. The first is an explicit nominal anchor on objectives; without it, discretion regenerates the inflationary bias that Kydland and Prescott (1977) demonstrated to be structurally inevitable. The second is maximum transparency regarding the reaction function; without it, discretion reproduces the credibility vacuum that the 2008 crisis exposed. These two conditions are not optional refinements of the framework – they are its load-bearing walls. A central bank that satisfies only one of them is not practicing *constrained discretion*; it is practicing ordinary discretion under a more flattering name. The task that remains is institutional: how can these conditions be made binding rather than merely aspirational? That is the question Chapter 8 will answer.

Part IV: Critical Evaluation and Normative Position

Chapter 8: Normative Position: For an Institutionally Monitored Discretion

8.1 What This Thesis Implies: The Debate Has Changed in Nature

The preceding seven chapters have traced a profound transformation. The debate began as a binary opposition between rules and discretion, progressively shifting toward a more precise question: under what conditions can discretion be disciplined? The 2008 financial crisis did not initiate this shift, but rather accelerated it by generating two simultaneous pressures. The first pressure stems from the fact that post-crisis discretion became highly visible and contested. Quantitative easing (QE) and forward guidance were massive, unprecedented interventions enacted discretionarily without a formal framework. Taylor, Mishkin, and Svensson all reacted by demanding greater rules or transparency regarding methodology. Without the crisis, this practical pressure would not have materialized. The second pressure arose because existing rules revealed their limitations at the zero lower bound. The Taylor rule prescribed negative interest rates that were physically impossible to implement, forcing a reassessment of what a rule must accomplish when conventional instruments are exhausted. This is precisely why Woodford (2012), Mishkin (2017), and Svensson (2017) all published their key works following 2008; the crisis presented them with a fundamentally new problem to solve.

Mishkin (2017) and Svensson (2017) demonstrated that two constraints are essential: a nominal anchor on objectives and maximum transparency regarding method. However, the FAIT framework adopted in 2020 highlighted the limitations of this response, revealing that transparency without an enforcement mechanism remains insufficient. When nothing formally compels a central bank to honor its commitments, the word "flexible" becomes an escape hatch. Consequently, the real question is no longer the one driving the original rules-versus-discretion debate; it is entirely institutional: who monitors whether discretion is properly exercised within the announced boundaries, and what enforcement powers do they possess?

Confronted with this question, Taylor (2011) offers a response consistent with his 1993 logic: since reputation and voluntary transparency are insufficient, a legal constraint is required. His proposal, the Federal Reserve Policy Rule Act, obliges the Fed to publish its rule, compare it to the standard Taylor rule, and justify any deviation before Congress, utilizing the Government Accountability Office (GAO) as an external audit body. This is precisely the step that Mishkin (2017) and Svensson (2017) stopped short of proposing: a formal, external, and enforceable sanction. The argument is compelling because it extends the logic of Chapter 6 to its most radical institutional conclusions.

However, this response introduces a macroeconomic dilemma that Taylor (2011) leaves unre-

solved: it severely undermines the very independence that the debate since K&P (1977) has sought to establish. Entrusting the audit of monetary policy to the GAO, an agency accountable to Congress, effectively subjects the central bank to the political business cycle. A Congress during an election year has no incentive to penalize a central bank for keeping interest rates low to support economic growth. Therefore, Taylor's (2011) legislative constraint risks reproducing the exact electoral inflation bias that K&P (1977) identified as the fundamental pathology of discretion.

Furthermore, the GAO is a legal and budgetary oversight body, not a macroeconomic authority; it can verify whether the Fed has published its rule, but it lacks the technical competence to evaluate whether the inflation forecasts underlying a policy decision were economically justified. The external sanction proposed by Taylor (2011) is thus bound to be either politicized, technically deficient, or both.

This chapter attempts to resolve this impasse. My normative position is as follows: the doubly constrained discretion advocated by Mishkin (2017) and Svensson (2017) points in the right direction, yet it lacks a mechanism to make enforcement real rather than purely reputational. Conversely, Taylor's (2011) legislative constraint identifies the right objective but targets the wrong location, externalizing enforcement to a political and non-expert body. To remedy this without placing monetary policy back into the hands of political authorities, I propose internalizing the principle of the separation of powers within the central bank itself, establishing one body to set the rules, one body to apply them, and one body to evaluate whether they have been respected.

8.2 Separating Those Who Establish the Rules from Those Who Apply Them

The first necessary reform is to clearly distinguish between two functions that contemporary central banks frequently conflate. Frisell, Roszbach, and Spagnolo (2008) demonstrate that in many central banks, the same individuals are responsible for both long-term strategic design and day-to-day interest rate decisions. This overlapping of roles creates a severe governance flaw, as those who write the rules of the game are also those who execute them, thereby undermining internal discipline and accountability. This finding leads me to propose a structural separation that their clinical analysis does not explicitly articulate, yet whose necessity it clearly reveals.

My proposal consists of creating two distinct bodies within the central bank. The first, the Strategy Council, would have the sole mandate of translating the general framework established by the state into a clear, public methodological rule. It would define the parameters of forecast targeting, the conditions under which the central bank may deviate from them, and the specific criteria triggering a mandatory justification for such deviations. It would have no authority over interest rate decisions.

The second body, the Operational Committee, would be uniquely responsible for policy rate decisions. It would retain complete operational freedom over instrument selection, provided that it regularly publishes its forecasts and explicitly demonstrates that its decisions are consistent with the rule established by the Strategy Council. The separation between these two entities ensures that no single body can simultaneously author the rules and evade their enforcement.

8.3 An Internal Evaluation Body to Make Enforcement Tangible

Separating these two bodies is insufficient if the Operational Committee remains accountable only to itself. The time-inconsistency dilemma identified by K&P (1977) remains unresolved without a credible constraint, as policymakers will always face incentives to deviate from their

commitments. Walsh (1995) demonstrated that this problem can be mitigated if the central banker is subject to a rigorous incentive contract that makes deviations costly. My proposal applies this contractual logic to an institutional rather than financial penalty by introducing a third entity: the Independent Evaluation Bureau.

The mandate of this bureau would be to audit the decisions of the Operational Committee following the methodology established by Svensson (2009), which evaluates the quality and consistency of forecasts at the exact moment policy decisions are made, rather than focusing solely on ex-post macroeconomic outcomes. If the bureau publicly demonstrates that the Operational Committee has deviated from its own projections without a valid economic justification, the resulting reputational cost is immediate and highly visible. It is the mere threat of this systematic audit that incentivizes policymakers to remain consistent with their commitments.

Enforcement is no longer merely reputational in the diffuse sense of B&G (1983); it becomes formal, public, and generated by an independent entity whose sole mission is oversight. This is what distinguishes this proposal from the frameworks of Mishkin (2017) and Svensson (2017), where transparency remains largely voluntary.

8.4 How to Appoint Members Without Reintroducing Politics

The most delicate challenge concerns the appointment process. If the members of the Evaluation Bureau are appointed by the executive or legislative branches, the political pressure that this framework seeks to eliminate is inadvertently reintroduced. The solution rests on two core principles.

The first principle is collegiality. Blinder (1998) demonstrates that group decision-making is superior to individual decision-making because it limits individual biases and reduces the likelihood of extreme policy errors. Consequently, the Evaluation Bureau must operate as a committee rather than a single individual.

The second principle governs the selection mechanism: members of this committee would be designated exclusively by an independent consortium of academic peers, entirely bypassing government intervention. They would hold non-renewable, single terms long enough to allow them to operate without any incentive to appease external actors for reappointment. This architecture, severing all links between the evaluator and the political business cycle, is the indispensable condition for its structural credibility.

8.5 Limitations and Scope of This Proposal

This proposal possesses clear limitations. Such an architecture does not exist in its complete form within any contemporary central bank, and its implementation would require profound institutional reform. The primary obstacles are political rather than economic; governments typically prefer a central bank they can publicly criticize without formal accountability, rather than an institution whose independence is secured by an internal audit process they cannot influence. This proposal does not claim to be an ultimate, definitive blueprint; instead, it outlines the reform trajectory most consistent with the lessons derived from the historical debate traced throughout this thesis.

Furthermore, it represents the final stage of the semantic evolution observed since Chapter 1. Within this framework, a rule is no longer a fixed mathematical formula or a statute enacted by Congress; it becomes an institutional procedure of evaluation and accountability. Discretion is no longer synonymous with unconstrained improvisation or a fleeting mirage; it is transformed

into an explicit exercise of human judgment, bound by the statutory obligation of rational justification before professional peers. The two historical concepts cease to operate in opposition, merging instead into an operational equilibrium: the operational freedom to act in the face of shocks, structurally bound by the mandate to demonstrate its internal coherence.

General Conclusion

This thesis began with a straightforward question: what was the impact of the 2008 financial crisis on the rules-versus-discretion debate in monetary policy? The answer constructed over the preceding eight chapters can be formulated as follows: the 2008 crisis did not initiate this debate, but it accelerated it by exposing a critical gap that the preexisting theoretical framework harbored without prior circumstances having revealed it, namely the complete absence of a formal framework to govern discretion over unconventional instruments. In doing so, the crisis forced the debate to shift from a question of binary choice to a question of degree.

The Trajectory of the Debate

Before 2008, the debate centered on a core question: should monetary policy be governed by a rule or by discretion? Chapters 1 through 3 demonstrated that this binary opposition had gradually frayed long before the crisis. Simons (1936) and Friedman (1960) advocated for passive, mechanical rules. Kydland and Prescott (1977) demonstrated that discretion was structurally suboptimal. Barro and Gordon (1983) showed that reputation could partially discipline discretion without fully eliminating its flaws. Taylor (1993) operationalized the contingent rule by making it computable, while simultaneously reintroducing judgment as a constitutive element of its application. Bernanke and Mishkin (1997) claimed the intermediate space as the realistic optimal position under the name of *constrained discretion*. Woodford (2003) revealed that even this position left a second structural inefficiency unresolved: the inability of a discretionary central bank to make its promise of future accommodative policy credible.

The debate was therefore already in motion prior to 2008. The crisis accelerated this evolution by generating two simultaneous pressures. On one hand, post-crisis discretion became highly visible and contested; unconventional policies deployed massively without a pre-established framework exposed the risks of discretion lacking formal methodological constraints. On the other hand, existing rules revealed their limitations at the effective lower bound. These two pressures forced a fundamental rereading of the debate itself, as traced in Chapters 4 through 7.

Forward guidance attempted to fill this vacuum by producing a rule-discretion hybrid. It acted as Delphic guidance when disguised as a commitment without the enforcement mechanism, and as Odyssean guidance when approaching a conditional, linguistic rule without the formal rigor. Taylor (2011) rejected this hybrid, proposing instead to discipline discretion through a legal obligation of transparency before Congress, at the risk of reintroducing the very political pressure the debate initially sought to eliminate. Mishkin (2017) and Svensson (2017) converged toward a doubly constrained form of *constrained discretion*, anchored by objectives and transparent in methodology. The adoption of Flexible Average Inflation Targeting (FAIT) in 2020 illustrated the limits of this response, proving that transparency without an enforcement mechanism remains insufficient.

The Semantic Mutation

In answering the research question, we observed a result that was not initially anticipated: the very terms of the debate changed meaning at each stage. A rule for Simons (1936) is a pas-

sive and mechanical constraint. A rule for Taylor (1993) is a conditional reaction function that incorporates judgment. A rule for Svensson (2017) is an obligation of transparency regarding forecasts. A rule in our normative proposal is a procedure for evaluation and accountability. These four objects bear the same name but designate analytically distinct realities. A similar mutation affects discretion: a structural anomaly for Kydland and Prescott (1977), a legitimate flexibility for Bernanke and Mishkin (1997), a forced improvisation after 2008, a Delphic mirage for Campbell et al. (2012), and a justifiable judgment in our normative proposal.

This finding is not incidental. It demonstrates that the disagreements within the literature do not always concern the same objects, which explains why the debate may have seemed endless: the protagonists were not always defining rule and discretion in the same way.

The Normative Position

Faced with the limitations highlighted by our analysis, our normative position is as follows. The doubly constrained discretion of Mishkin (2017) and Svensson (2017) represents the most realistic direction and the one most consistent with the lessons of the debate. Woodford's (2003) strong commitment is theoretically superior but institutionally inaccessible due to the three structural reasons identified in Chapter 3. Returning to the formal rules of Taylor (1993) assumes that central banks will never again require unconventional instruments, an assumption no current framework can guarantee. His legal constraint (Taylor, 2011) targets the right objective but in the wrong location, externalizing enforcement to a political and non-expert body. However, *constrained discretion* lacks a mechanism to make enforcement real rather than merely reputational. We propose remedying this by internalizing the separation of powers within the central bank itself: a Strategy Council that establishes the methodological rule, an Operational Committee that applies it exercising *constrained discretion*, and an Independent Evaluation Bureau that audits decisions based on the quality of the forecasts at the exact moment they were made.

Limitations and Future Perspectives

This thesis possesses limitations that must be acknowledged. It relies on a selection of authors which, while justified by the research question, does not claim to exhaust the entirety of the literature. Important contributions regarding optimal monetary policy, international monetary policy coordination, or the interactions between monetary and fiscal policy were not examined. Furthermore, our normative proposal remains a theoretical architecture; it has never been implemented in this complete form, and its political feasibility depends on institutional conditions that this thesis cannot guarantee.

These limitations open avenues for future research. The coordination between the Strategy Council and the Operational Committee during extreme crises merits in-depth analysis. The question of the precise evaluation criteria for the Independent Evaluation Bureau, beyond Svensson's (2009) methodology, also remains open. Finally, whether this architecture would be compatible with the governance structures of existing central banks, particularly the European Central Bank (ECB), has not been addressed here.

What this thesis hopes to have demonstrated is that the rules-versus-discretion debate is not exhausted. It has shifted, grown more complex, and its core terms have mutated. Yet the fundamental question remains: how can human judgment in monetary policy be constrained so as to produce the benefits of a rule without suffering its rigidities? The 2008 crisis did not answer this question; it merely made it more urgent.

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Executive Summary

This thesis examines the impact of the 2008 financial crisis on the rules-versus-discretion debate in monetary policy. The central argument posits that the crisis did not initiate this debate, which dates back to Simons (1936) and was formally modeled by Kydland and Prescott (1977), but rather accelerated a transition already underway: a shift from a binary opposition between rigid rules and pure discretion toward increasingly constrained forms of discretion.

Prior to 2008, the debate had progressively moved away from its original terms. Barro and Gordon (1983) showed that reputation could partially discipline discretion. Taylor (1993) operationalized a contingent rule while reintroducing judgment as a constitutive element of its application. Bernanke and Mishkin (1997) championed *constrained discretion* as the optimal realistic configuration. Woodford (2003) revealed that even this position left a structural inefficiency unresolved: the inability of a discretionary central bank to credibly commit to a future accommodative policy stance.

The 2008 crisis exposed a blind spot shared by all pre-crisis frameworks: the absence of formal structures to discipline discretion over unconventional instruments. *Forward guidance* emerged as a hybrid oscillating between a Delphic form, which operates as discretion disguised as a forecast, and an Odyssean form, which aspires to act as a rule without a formal enforcement mechanism. Taylor (2011) proposed a legal obligation of transparency before Congress; however, externalizing enforcement to a non-expert political body risks reintroducing the very pressures the debate sought to eliminate. Mishkin (2017) and Svensson (2019) converged toward a doubly *constrained discretion*. The adoption of Flexible Average Inflation Targeting by the Federal Reserve in 2020 illustrated the limits of this approach: transparency without a formal enforcement mechanism remains inadequate.

A secondary finding is that the core terms of the debate mutated at each juncture. What was defined as a rule in 1936, 1993, or 2017 refers to analytically distinct objects. Tracing this semantic mutation proved essential for understanding what was truly at stake.

Building on these analyses, this thesis advances a normative position: the doubly constrained discretion of Mishkin and Svensson points in the right direction but requires a formal sanction mechanism. We propose internalizing the principle of separation of powers within the central bank through three distinct entities: a Strategy Council defining the methodological rule, an Operational Committee applying it with *constrained discretion*, and an Independent Evaluation Bureau auditing decisions based on forecast quality at the moment they were made, integrating Svensson's (2009) ex-ante evaluation methodology with Walsh's (1995) contractual incentive logic.

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