

BitStrategy: Terminal Accumulation Theory

Part 1: Foundations

Introduction

This paper develops a framework for understanding Bitcoin as a system in which supply is fixed at the protocol level but variable in its availability to the market. In conventional markets, price is stabilised through a responsive supply function, where production expands and contracts in response to demand. Bitcoin removes this mechanism entirely. Its supply cannot adjust to price, and therefore price must adjust to the availability of existing supply.

As a result, the relevant concept of supply shifts from total issuance to effective supply—the quantity of Bitcoin available at the margin. This paper introduces the concept of tradable float to describe this availability and reframes price elasticity of supply in terms of distribution rather than production. Within a layered market structure, liquidity is not static but migrates between entities with differing incentives, altering the responsiveness of supply over time.

The framework establishes liquidity migration as the central mechanism through which scarcity is expressed in Bitcoin. As supply concentrates in holders and structures that do not sell, effective supply contracts, increasing the sensitivity of price to demand. This provides the foundation for analysing Bitcoin's long-run behaviour as a system characterised not by equilibrium, but by progressive inelasticity.

Supply and Demand

Bitcoin's long-run behaviour must be understood from first principles. In all markets, price is determined at the margin through the interaction of supply and demand, as first formalised in classical economics [1]. In conventional systems, these forces are linked through a stabilising mechanism: when demand increases and price rises, supply expands in response, and when prices fall, supply contracts. This responsiveness ensures that scarcity is not fixed, but adaptive, allowing markets to tend toward equilibrium over time. The capacity of supply to respond to price is therefore central to how prices evolve, as it determines whether demand shocks are absorbed or amplified.

Bitcoin operates outside this framework. Its supply cannot expand in response to demand, removing the primary mechanism through which markets restore balance. This does not simply increase scarcity in a static sense; it alters how scarcity is expressed within the system. Without a responsive supply function, price must adjust entirely through changes in demand and the availability of supply within the market, rather than through production. As a result, the behaviour of supply is no longer governed by output, but by how existing units are held and made available at the margin. This shift, while subtle at first, is foundational to understanding Bitcoin's long-run dynamics.

Supply (Production)

In conventional economic systems, supply is governed by production, and production is responsive to price. As prices rise, previously uneconomic resources become viable, capital is deployed into exploration and extraction, and technological innovation expands what can be produced. Over time, this process increases both output and known reserves, ensuring that

supply adjusts to demand. Empirical evidence supports this dynamic. As demonstrated by Friedman [2], commodity scarcity has not increased over long periods despite ongoing consumption, as higher prices consistently incentivise new supply. In such systems, scarcity is not a fixed constraint, but an economic variable shaped by incentives, cost structures, and technological progress.

This mechanism is central to how markets stabilise. When demand increases, supply expands to meet it; when demand falls, supply contracts. The responsiveness of production ensures that price movements are ultimately self-limiting, as additional supply is brought to market to absorb demand. This stands in contrast to Bitcoin, where no such mechanism exists.

Production cannot respond to price, and supply cannot expand beyond its predetermined schedule. As a result, the concept of supply must be reconsidered. Without production as an adjustment mechanism, the relevant question is no longer how much can be produced, but how much of the existing supply is available to the market at the margin.

Bitcoin Supply

Bitcoin is an electronic system with a fixed and predetermined issuance schedule, enforced at the protocol level rather than through economic constraints [3]. Its total supply is capped at 21 million coins, and new issuance declines over time through a halving mechanism that cannot be altered in response to price. Unlike natural commodities, where higher prices incentivise increased production, no amount of capital investment, technological advancement, or demand can increase the quantity of Bitcoin produced. The mining process adjusts only in terms of difficulty, not output, ensuring that supply remains inelastic with respect to price.

This removes the primary mechanism through which markets stabilise. In commodity systems, rising prices lead to increased supply, which absorbs demand and restores equilibrium. In Bitcoin, this adjustment cannot occur. Supply cannot expand to meet demand, and therefore price must bear the full burden of adjustment. However, the implications of this extend beyond the absence of production. In a system where total supply is fixed, the relevant variable is no longer how much supply exists, but how much of that supply is available to the market. The distinction between total supply and effective supply becomes critical. Bitcoin's issuance schedule defines the former, but it is the latter—the portion of coins available at the margin—that determines price behaviour. Understanding this distinction is the starting point for analysing Bitcoin not as a static asset, but as a system in which scarcity is shaped by availability rather than production.

Medium of Exchange and Store of Value

Money is commonly understood to perform multiple functions, most notably as a medium of exchange and a store of value. While these functions are often presented as co-equal, their relationship is sequential rather than simultaneous. As articulated by Carl Menger [4], the emergence of money is a market-driven process in which goods with superior saleability are progressively adopted as intermediaries of exchange. This process implies that an asset must first be widely accepted and retained before it can function effectively as a medium through which transactions are conducted.

Empirical evidence supports this ordering. As shown by Baur and others [5], Bitcoin has historically exhibited characteristics more consistent with a store of value than with a

medium of exchange, with limited transactional usage relative to its role as a held asset. This distinction reflects not a failure of adoption, but the economic properties of the asset itself. Assets that are expected to preserve or increase in value are less likely to be spent, particularly in the absence of stable short-term purchasing power.

Within the framework developed in this paper, this behaviour follows directly from Bitcoin's supply structure. With supply fixed at the protocol level and effective supply determined by availability at the margin, the incentive to retain rather than spend becomes structurally embedded. As liquidity migrates toward holders who do not sell, Bitcoin's role as a store of value is reinforced, while its use as a transactional medium remains secondary.

It is important to distinguish this framework from the conventional use of "Layer 2" within Bitcoin discourse. The term is often used narrowly to describe payment-focused scaling solutions, such as Lightning Network, which are designed to facilitate high-frequency, low-cost transactions and therefore emphasise medium-of-exchange functionality. In this paper, Layer 2 is defined more broadly to include all structures through which Bitcoin is held, intermediated, and made available to the market, including custodial platforms, exchanges, and corporate balance sheets. This broader definition is necessary to analyse not only how Bitcoin is transacted, but how its availability as supply is determined.

This does not preclude the use of Bitcoin in exchange. Rather, it suggests that such usage emerges from, and is conditional upon, its prior establishment as a store of value. In a system where supply cannot expand to meet demand, retention is rational, and medium-of-exchange functionality develops, if at all, on top of that foundation.

Price Elasticity of Supply

Price Elasticity of Supply measures the responsiveness of supply to changes in price [6]. In conventional markets, this responsiveness is expressed through production: when prices rise, output increases, and additional supply is brought to market. This expansion moderates price movements and restores equilibrium. The concept therefore assumes that supply can adjust in response to economic incentives. Bitcoin does not satisfy this assumption. Its supply is fixed by protocol and cannot expand in response to price. As a result, elasticity cannot be expressed through production, and the conventional definition must be reconsidered.

In the absence of production, the relevant measure of supply is not total issuance, but the quantity of Bitcoin available to the market at the margin. This quantity can be described as the tradable float. Elasticity in Bitcoin is therefore determined by the size of the float rather than the capacity to produce new units. When the float is large, supply is relatively responsive, as demand can be absorbed across a broad base of available coins. As the float contracts, supply becomes increasingly inelastic, and each unit of demand exerts a greater impact on price. This reframing establishes that supply in Bitcoin is not governed by production, but by availability. The distribution of Bitcoin across holders—specifically, whether it is held in forms that are responsive to price—becomes the central determinant of how the system behaves.

Layer 1 and Layer 2 Liquidity

Bitcoin operates within a layered system that separates the definition of supply from its expression in markets. At the protocol level (Layer 1), Bitcoin exists as a bearer asset with a

fixed and predetermined supply schedule. This layer defines total supply, enforces scarcity, and records ownership. However, it does not determine how Bitcoin is traded, financed, or priced. Price formation does not occur on-chain. It occurs within the systems that intermediate ownership and provide liquidity.

These systems constitute what can be described as Layer 2. Layer 2 encompasses all structures through which Bitcoin is held, exchanged, and made available to the market, including centralised exchanges, custodial platforms, exchange-traded products, and corporate balance sheets. It is within these systems that bids and offers are matched, leverage is introduced, and capital is aggregated. While Layer 1 defines what exists, Layer 2 determines what is available.

This distinction is not merely conceptual; it is structural. Bitcoin's base layer is constrained by design. Transaction throughput is limited, and block space is scarce. As a result, it is not possible for the full spectrum of market activity to occur directly on-chain. As documented in analyses of Bitcoin's scaling constraints, the protocol's limited capacity necessitates the emergence of off-chain systems to support liquidity and exchange activity [7]. These systems are not peripheral to Bitcoin; they are essential to its functioning as a market.

Once this distinction is established, the analysis of supply must shift accordingly. Total supply remains fixed at the protocol level, but effective supply—the quantity of Bitcoin available to meet demand—is determined by its distribution within Layer 2. Coins held within trading systems contribute to supply at the margin. Coins held within structures that do not sell do not. The same Bitcoin, depending on its position within Layer 2, can either participate in price formation or be effectively removed from it.

This leads to a critical implication. Scarcity in Bitcoin is not solely defined by its hard cap, but by how supply is organised within Layer 2. The protocol defines the boundary condition, but the market experiences scarcity through the availability of float. As the distribution of Bitcoin across Layer 2 changes, so too does the effective supply available to the market, and with it, the system's responsiveness to demand.

Liquidity Migration Within Layer 2

Once Bitcoin is understood as a layered system, it becomes clear that liquidity is not static. The distribution of Bitcoin across Layer 2 is not fixed, but evolves over time as capital moves between structures with different incentives and behaviours. Historically, the majority of Bitcoin liquidity has been concentrated in trading environments such as exchanges and custodial platforms, where coins are held for the purpose of facilitating transactions, market making, and speculative activity. These structures are inherently price-responsive. Their function is to provide supply to the market, and as such, the Bitcoin they hold remains available at the margin.

The emergence of alternative Layer 2 structures introduces a different dynamic. Bitcoin can also be held within entities whose objective is not to provide liquidity, but to retain it. These entities acquire Bitcoin as long-duration capital and do not return it to the market in response to price. When capital flows into such structures, the Bitcoin they acquire is not destroyed, nor removed from total supply, but it is removed from effective supply. It no longer participates in price formation in the same way as coins held within trading systems.

This results in a migration of liquidity within Layer 2. Coins move from structures that recycle supply to structures that retain it. The total quantity of Bitcoin remains unchanged, but its distribution shifts in a way that alters availability. The tradable float declines not because supply is reduced at the protocol level, but because an increasing proportion of supply is held in forms that are unresponsive to price.

This process is gradual but cumulative. Individual transfers may appear insignificant in isolation, but over time they produce a structural change in the composition of the market. Liquidity becomes increasingly concentrated in holders who do not sell, while the pool of supply available to absorb demand contracts. The system does not need to reach an extreme state for this to matter. Even modest, persistent migration is sufficient to alter the relationship between supply and demand.

The implication is that Bitcoin's behaviour cannot be understood by observing total supply alone. It must be understood by observing how liquidity moves within Layer 2, and how that movement changes the availability of supply at the margin. This dynamic provides the mechanism through which the theoretical framework established in earlier sections becomes operative in practice. Without liquidity migration, float would remain stable. With it, float becomes a variable, and its evolution becomes central to understanding Bitcoin's long-run behaviour.

This paper has established a framework for understanding Bitcoin as a system in which supply is fixed at the protocol level, but variable in its availability to the market. In the absence of a responsive production function, supply is no longer governed by output, but by distribution. The distinction between total supply and effective supply—expressed through the tradable float—becomes central to how price is formed.

Within this structure, liquidity migration emerges as the mechanism through which scarcity is expressed in practice. As Bitcoin moves from price-responsive holders to structures that retain it, the quantity of supply available at the margin declines, altering the system's responsiveness to demand.

Part 2 builds on this foundation by examining the specific structures and incentives that drive this process, and the implications for price formation as effective supply continues to contract.

References

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