Equilibrium, Effective Demand, and the Crisis of Valuation: A Critical Re-examination of Marxian Dynamics

The Theoretical Antinomy of Production and Realization

The relationship between Marxian and Keynesian economics is defined by a shared recognition of the inherent instability of capitalism, yet divided by a fundamental disagreement regarding the locus of that instability. For Keynes, and the subsequent Post-Keynesian tradition, the central flaw of the capitalist mode of production is the lack of a mechanism to guarantee sufficient effective demand to clear markets at full employment. In the Keynesian framework, investment is the *primum movens*—the independent variable that drives income, consumption, and savings. When "animal spirits" flag or the marginal efficiency of capital declines below the rate of interest, investment falters, leading to a deficiency in aggregate demand. The remedy, therefore, is exogenous intervention: the state must act as the "spender of last resort" to sustain effective demand and, by extension, the capitalist system itself.

Marxian scholars, however, have historically viewed this Keynesian focus on effective demand as superficial, a critique of the "circulation" sphere that ignores the deeper contradictions within the "production" sphere. The standard Marxian argument posits that Keynesian stimulus merely sustains the capitalist desire to realize surplus value but cannot resolve the structural inability of the system to generate that surplus value indefinitely. For Marx, the ultimate limit to capital is capital itself—specifically, the production of surplus value (profit) relative to the total capital advanced. This perspective creates a theoretical bifurcation: crisis is either a failure of *realization* (selling the commodity) or a failure of *valorization* (producing the surplus value). Orthodox Marxism privileges the latter, treating realization crises as phenomenal manifestations of the underlying tendency of the rate of profit to fall.

However, a rigorous critique of this stance reveals a significant theoretical blind spot. By arguing that capitalism fails *only* because of unsustainability in surplus value creation (the long run), Marxian theory risks ignoring the mechanism by which that failure manifests in real time: the short-run response of firms to insufficient sales. If firms respond to demand signals by cutting production (a quantity adjustment), the "bust" can occur long before the secular tendency of the rate of profit to fall reaches its asymptotic limit. The rejection of Keynesian effective demand theory, therefore, may stem less from empirical observation and more from a methodological commitment to a framework where "demand" plays a passive role in value determination.

The core tension lies in the dual nature of the commodity in Marx's theory: it is both a use-value and a value. For the value contained in a commodity to be realized, the commodity must be sold. If effective demand is insufficient, the labor expended on the unsold commodity is retroactively rendered "socially unnecessary". This creates a peculiar feedback loop that Marx acknowledged but which his followers, particularly those adhering to equilibrium interpretations, struggle to model dynamically. If aggregate demand falls below aggregate supply, the *monetary expression* of the labor performed drops. In the Marxian framework, this appears as a deviation of "market price" from "value" (or "price of production"). But in a Keynesian or Kaleckian framework, this appears as a rise in unplanned inventories and a subsequent reduction in output.

The Ontological Split: Use Value vs. Value

To understand why the Marxian and Keynesian frameworks talk past one another regarding effective demand, one must look at the fundamental distinction Marx draws between **Use Value** and **Value** (Labor Value). This distinction is not merely definitional; it is the source of the rupture between the physical world of production and the social world of market validation.

- **Use Value** corresponds to the physical properties of a commodity that satisfy a human need (e.g., the coat keeps you warm; the machine presses steel). It is the product of *concrete labor* (specific, useful activity). In many economic models (like Sraffa's or Neoclassical growth models), the economy is essentially a system of producing and distributing use values (physical quantities).[1]
- **Value (Labor Value)** is a purely social property. It represents the "gelatinous mass" of abstract human labor embodied in the commodity. It is determined not by the physical utility, but by the *socially necessary labor time* required for production. Crucially, Value is only fully established—or realized—upon exchange (sale).[2]

This distinction highlights the peril of **"Physicalism"**—a term used by critics like Andrew Kliman to describe interpretations of Marx (such as the Sraffian view) that derive value and profit directly from physical input-output coefficients (use values).[3] In a physicalist or equilibrium framework, if you produce 100 tons of corn using 50 tons of corn, you have created a surplus of 50 tons. The value is assumed to exist because the physical surplus exists.

However, Marx's theory insists that **Use Value does not automatically equal Value**. A firm may produce a massive physical surplus of corn (high use value), but if effective demand fails and the corn cannot be sold, the *Value* of that surplus is zero (or effectively destroyed). The labor spent producing it was "wasted" in a social sense, even if the physical corn sits in a warehouse.[4] This is where the critique of effective demand gains traction: Keynesianism focuses on the *realization* of Use Value into Value (money), whereas equilibrium Marxists often assume this realization happens automatically, collapsing the two categories into one. This

conflation blinds the theory to short-run realization crises where the physical surplus exists, but the value surplus has vanished due to a lack of buyers.

The Equilibrium Trap in Classical and Marxian Frameworks

The Legacy of Say's Law and Simultaneous Equations

The complication in discussing effective demand within Marxian theory arises precisely because Classical economists, including Marx, utilized equilibrium frameworks—at least in their mathematical expositions. In the history of economic thought, the equilibrium method was solidified by the adoption of simultaneous equation systems. This approach, formalized later by Ladislaus von Bortkiewicz, Paul Sweezy, and Piero Sraffa, treats the economy as a set of interdependent linear equations where input prices and output prices are determined simultaneously to ensure that the system reproduces itself.

In a simultaneous equation system, two critical conditions hold:

1. **Inputs = Outputs:** The price of corn used as seed at the start of the year is identical to the price of corn harvested at the end of the year.
2. **Market Clearing:** The system is solved for a vector of prices that clears all markets. By definition, Supply equals Demand ($S=D$).

This mathematical structure implicitly reinstates Say's Law ("supply creates its own demand") even if the theorist explicitly rejects it in prose. In a simultaneous system, there is no mathematical space for a firm to "notice demand is less than production" and cut output, because the model solves for the state where production and demand are already equated. Consequently, "unsold goods" or "unintended inventory accumulation"—the physical manifestations of a lack of effective demand—cannot exist within the solution set of a standard simultaneous equilibrium model. They can only exist as "disequilibrium errors" or external shocks, not as endogenous drivers of the system's trajectory. This constitutes a methodological tautology: the method itself excludes the phenomenon of short-run quantity adjustment by assuming the convergence to a long-run center of gravity where such adjustments have already resolved themselves.

Marx's Reproduction Schemes as Balanced Growth Models

Marx's most rigorous attempt to model the aggregate economy is found in the Reproduction Schemes of *Capital, Volume II*. These schemes divide the economy into Department I (Means of Production) and Department II (Means of Consumption). Marx uses these schemes to show the *conditions* necessary for simple and expanded reproduction.

Crucially, standard interpretations of these schemes (e.g., by Sweezy or Morishima) treat them as conditions of **balanced growth**. They solve for the precise ratios of exchange

between the departments that allow all goods to be sold and all surplus value to be reinvested. When Marxists use these schemes to discuss crisis, they often look for "disproportionality"—a mismatch in the ratios—rather than a general deficiency of effective demand. Because the Reproduction Schemes are equilibrium models (showing how the system *can* work, not necessarily how it *does* work), they are ill-equipped to model the *process* of a bust.

The New Keynesian Synthesis: Effective Demand within Simultaneous Equilibrium

It is not only Marxian theory that falls into this methodological trap; the modern "New Keynesian" framework, despite its name, suffers from a similar limitation. New Keynesian models (such as the standard IS-LM or Dynamic Stochastic General Equilibrium (DSGE) models) attempt to model effective demand failures, but they do so within a **simultaneous equilibrium framework**.

Equilibrium Cycles vs. Effective Demand Cycles

In New Keynesian models, the economy is described by a system of equations (IS curve, LM curve/Taylor Rule, Phillips Curve) that are solved simultaneously to find the equilibrium level of output (Y^*) and interest rate (r^*). This implies that at any given moment in the model, the goods market and the money market are in simultaneous equilibrium.

- **The IS Curve** represents the locus of points where **Investment = Savings** (or Supply = Demand in the goods market).
- **The Simultaneous Solution** finds a single point where this equality holds.

Critically, this means New Keynesian models only model **Simultaneous Equilibrium Cycles**. They depict the economy moving from one constrained equilibrium state to another (e.g., from a full-employment equilibrium to an under-employment equilibrium due to sticky prices). They do *not* model the dynamic process of **Effective Demand Failure** itself.

In a true effective demand crisis (as described by Post-Keynesians like Kalecki or disequilibrium theorists like Malinvaud), the economy passes through a state where **Supply > Demand**. Firms produce goods that are *not* sold, leading to unintended inventory accumulation. This "unsold good" is a disequilibrium phenomenon that cannot exist in a model where $S=D$ is a condition for the solution.[12] The New Keynesian model skips the disequilibrium adjustment (the inventory shock) and jumps straight to the new, lower equilibrium where supply has already been cut to match demand.

By restricting the analysis to simultaneous equilibrium, New Keynesian models—like their Marxian equilibrium counterparts—exclude the very mechanism that propagates the bust: the panic of realization failure. They model the *result* of the crash (lower output) but not the *cause* (the inability to sell what was produced). Thus, the Marxian critique that Keynesianism

ignores the "production" side is partially validated by the New Keynesian methodology itself: by enforcing simultaneous equilibrium, these models assume that whatever is produced (at the new lower level) is successfully sold, glossing over the crisis of realization that destroys value.

Short-Run Adjustments: The Missing Link in Marxian Crisis Theory

Quantity vs. Price Adjustment

In neoclassical and equilibrium-Marxian frameworks, markets clear through price adjustments. If there is excess supply, prices fall until demand absorbs the surplus. However, in the real world—and in Keynesian/Kaleckian theory—prices are often sticky in the short run. Firms operate in imperfectly competitive markets with "administered prices".

When a firm faces insufficient demand (effective demand < production), it does not immediately slash prices to clear the market (which would destroy profit margins). Instead, it experiences an accumulation of **unintended inventories**. The firm's rational response is a **quantity adjustment**: it cuts production, reduces shifts, and lays off workers. This quantity adjustment mechanism is the primary driver of the business cycle (boom and bust) in the short run. A cut in production leads to a cut in wages paid, which further reduces effective demand, creating a multiplier effect.

The Marxian Blind Spot and the Use-Value Trap

Standard Marxian crisis theory, with its focus on the *Rate of Profit* ($s/(c+v)$), often overlooks this quantity adjustment mechanism. By focusing on the *value* parameters (the mass of surplus value, the organic composition), it treats the output level as determined by the capacity to produce and the drive to accumulate.

This blind spot is a direct result of ignoring the Use Value vs. Value distinction in the short run. When a firm cuts production, it is responding to a "use value" signal (piles of unsold cars), but the consequence is a "value" crisis (no surplus value realized). If the "bust" is explained *only* in terms of capitalism's tendency to continue surplus value creation (overaccumulation), the explanation becomes "too far-sighted." It ignores the fact that firms cut production *before* the rate of profit hits zero or becomes negative in value terms; they cut production as soon as the *realization* of profit is threatened by inventory build-up. Thus, the Marxian critique of effective demand—that it is merely superficial—is partially a defensive posture arising from a framework that cannot mathematically represent the inventory-production feedback loop.

The Temporal Single System Interpretation (TSSI) and Effective Demand

TSSI: Resolving Inconsistency, But What About Demand?

The Temporal Single System Interpretation (TSSI), championed by scholars like Andrew Kliman and Alan Freeman, emerged to refute the allegations of internal inconsistency in Marx's value theory (specifically the Transformation Problem and the Okishio Theorem). The TSSI restores consistency by adopting a **temporal** framework: input prices at time t determine the cost of production, while output prices at time $t+1$ are determined by the value added during production and market conditions at $t+1$. Inputs and outputs are not forced to be equal simultaneously. This temporal approach allows TSSI proponents to prove that the rate of profit *can* fall as the organic composition rises, refuting the Okishio theorem (which relies on simultaneous valuation).

Does TSSI Handle Short-Run Effective Demand?

While TSSI successfully introduces time (and thus the *possibility* of disequilibrium), the question remains whether it handles the issue of short-run effective demand adjustments. The analysis suggests that while TSSI is *compatible* with effective demand failure, it does not explicitly *model* the quantity adjustment mechanism as its primary focus.

TSSI is primarily a theory of **value determination** and **profit rate dynamics**. Its main victory is showing that *value* transfers from period to period and that price changes (revaluation) affect the rate of profit. For example, if prices fall due to a lack of demand, the value of capital stock is devalued, affecting the profit rate.[6] However, TSSI models typically assume that "market prices" deviate from values, but they do not necessarily model the **unsold goods** (quantity rationing) explicitly in the core algebraic proofs of the TRPF. Therefore, while TSSI fixes the *logical consistency* of the Marxian profit law in historical time, it treats the crisis of effective demand largely as a *price/value* adjustment (devaluation) rather than a pure *quantity* adjustment (production cut).

The Tendency of the Rate of Profit to Fall (TRPF) and Marginal Productivity

The Conceptual Convergence of Marx and Neoclassical Theory

A profound insight emerges when comparing the Marxian Law of the Tendency of the Rate of Profit to Fall (TRPF) with the Neoclassical theory of the Diminishing Marginal Product of Capital (MPK). Despite their opposing political conclusions, both theories grapple with the same physical and value phenomenon: the accumulation of capital relative to labor leads to a decline in the return on capital.

Marxian View (Organic Composition):

- Capitalists are compelled by competition to innovate.
- Innovation is "labor-saving" and "capital-using" (Marx-biased technical change).

- The **Technical Composition of Capital** (TCC) rises: this is the physical ratio of machines to workers (Use Value side).
- The **Organic Composition of Capital** ($OCC = C/V$) rises as a value reflection of the TCC.
- Since living labor (V) is the only source of surplus value (S), and C grows faster than V, the rate of profit $r = S / (C+V)$ tends to fall.[7]

Neoclassical View (Capital Deepening):

- As the capital stock (K) increases relative to labor (L), the economy experiences "capital deepening."
- Due to the Law of Diminishing Returns, the Marginal Product of Capital (MPK) falls as K/L rises.
- In a competitive market, the rate of profit (or interest) is determined by the MPK. Therefore, capital accumulation leads to a falling rate of profit.[8]

Unsustainable Capital Accumulation: Use Value vs. Value

The suggestion that TRPF arises "mostly out of the conceptual idea that surplus values continue to increase in an unsustainable way" is accurate, but it is best understood through the lens of the **Use Value vs. Value split**.

Capitalists accumulate "Capital" in its physical form (Use Values: machines, factories, robots) to increase physical productivity. They succeed in creating a massive abundance of use values. However, Marx argues that this physical abundance (TCC) leads to a scarcity of *Value* creation relative to the investment (OCC). The "unsustainable" aspect is that the system is flooding itself with physical capital (Use Values) that requires a profit return, but it is simultaneously ejecting the labor (Value creator) needed to generate that return.

This is conceptually identical to the Neoclassical notion of **capital saturation**. If capital increases without limit while labor growth is constrained, capital becomes less scarce, and its return *must* fall. The "unsustainable" aspect in Marx is that this falling rate of profit eventually chokes off accumulation, leading to crisis and the destruction of capital value (the "bust"). In Neoclassical growth theory (Solow), the system smoothly converges to a "steady state" where capital stops deepening. Neoclassical theory sees the fall in profit as an equilibration mechanism; Marx sees it as a catastrophic contradiction between the physical expansion of production (Use Value) and the limited expansion of valorization (Value).[9]

Anwar Shaikh: Synthesizing Real Competition and Production Functions

The work of Anwar Shaikh provides the critical bridge between these perspectives. Shaikh criticizes the Neoclassical Aggregate Production Function as a tautology ("Humbug Production Function") that merely reflects accounting identities rather than physical laws of

technology.[10]

However, Shaikh vigorously defends the *classical* and *Marxian* view of the falling rate of profit through the lens of **Real Competition**. Unlike "Perfect Competition" (which assumes equilibrium), Real Competition is a turbulent war where firms cut costs to survive. Firms adopt capital-intensive technologies (raising the TCC/Use Value ratio) to lower *unit costs*, lowering prices and undercutting competitors. However, this raises the capital-output ratio for the sector. The result is a lower *average* rate of profit for the system, even though the innovating firm sought a higher *transient* profit.[11] Here, Marxian theory is consistent with the *phenomenon* described by marginal productivity theory (more capital -> lower returns) but explains it through the coercive laws of competition and the contradiction between use-value expansion and value-generation, rather than technological properties of a production function.

Feature	**Marxian TRPF**	**Neoclassical MPK**
Driver	Capitalist Competition & Accumulation Drive	Profit Maximization & Capital Deepening
Ratio	Organic Composition (C/V) (Value of Capital / Labor)	Capital-Labor Ratio (K/L) (Physical Capital / Labor)
Mechanism	Value Source (V) shrinks relative to Capital (C)	Diminishing Returns to Factor (K)
Outcome	Crisis / Destruction of Capital Value	Convergence to Steady State
Sustainability	Inherently Unsustainable (Value vs Use Value conflict)	Sustainable at Equilibrium

The Implications of the Equilibrium Framework on Economic Explanation

The "Too Far-Sighted" Critique

The argument that explaining boom and bust *only* via the long-term surplus value tendency (TRPF) is "too far-sighted" holds significant weight. The TRPF is a secular trend—a "law of

motion" operating over decades. A specific recession (e.g., 2008, 2020) is triggered by immediate liquidity crunches, demand collapses, and inventory shocks.

By relying on equilibrium frameworks that treat these short-run adjustments as "deviations" from the trend, Marxian economics often lacks a granular theory of the *turning point*. It can explain why the system is *prone* to crisis (fragility), but often fails to explain the *mechanics* of the crash itself without resorting to ad-hoc descriptions that sound suspiciously Keynesian (underconsumption, disproportionality).

The Tautology of Method

The tautology identified—"equilibrium deals with historical tendency... implies short-run adjustments cannot be discussed"—is the fatal flaw of Simultaneism. If the model assumes $S=D$ to determine prices (as in Sraffa/Bortkiewicz), then *by definition*, the model cannot simulate a situation where $S > D$ leads to a production cut. It can only simulate a situation where prices change to restore $S=D$. This methodological choice forces Marxian economists to discuss crises in terms of *value destruction* and *price collapses* rather than *output contraction*, obscuring the primary experience of recession: unemployment and idle factories.

Conclusion

The Marxian critique of Keynesian effective demand—that it merely patches the realization of surplus value without addressing its production—is theoretically robust within its own paradigm but suffers from a methodological blindness. This blindness arises from the reliance on equilibrium frameworks (both Classical and Simultaneist-Marxian) that mathematically preclude the short-run quantity adjustments (unsold goods, production cuts) that define the immediate experience of economic crises. These frameworks often conflate **Use Value** (physical output) with **Value** (social validity), assuming that production automatically generates its own market validation.

Simultaneously, the New Keynesian attempt to integrate effective demand into General Equilibrium models (via IS-LM or DSGE) falls into a similar trap. By modeling effective demand as a locus of **simultaneous market-clearing** points, they reduce the business cycle to a sequence of equilibrium states, effectively defining away the disequilibrium processes (inventory accumulation, coordination failure) that constitute the actual mechanics of a recession.

Ultimately, explaining the boom and bust cycle requires integrating the "far-sighted" Marxian insights on profitability limits (TRPF) with the "short-sighted" Keynesian insights on effective demand adjustments. However, this integration requires abandoning simultaneous equilibrium methods in favor of dynamic, temporal models that can accommodate the existence of unsold goods and the divergence of supply and demand in real time.