



## Research Article

# Price Stability Without Prosperity: Why Orthodoxy and Heterodoxy Miss South Africa's Growth Problem and How Metanomics Reframes It

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### Abstract

South Africa's inflation targeting has kept prices within 3–6% since 2000, yet growth has stalled, unemployment remains high, and investment is weak. Orthodoxy assumes low inflation catalyses expansion while underweighting structural bottlenecks, treating the exchange rate as exogenous, and rationing risk-sharing capital securing prices without prosperity. Heterodoxy credit quotas, directed lending, fiscal dominance, and protectionism mobilises liquidity but rarely disciplines it to verifiable output, eroding credibility and inviting mismatch. We advance Metanomics as a middle path: Resource-Based Monetary Sovereignty (RBMS) theorised and enacted through an Endogenous Resource-Backed Currency (ERBC). Money is a living contract linking people, land, and production. Policy pivots from aggregates to measured real-sector flows via: (i) registry → tokenisation → compliance → flow-orchestration of assets (energy, minerals, crops); (ii) programmable liquidity settling against metered kilowatt-hours, delivered tonnage, and certified invoices; (iii) rules targeting employment, investment, and export diversification; and (iv) FX buffers drawn from resource-backed notes and AfCFTA settlement corridors. G-Wallet is the forceful path to executing a digital public finance rail tying disbursement to milestones with transparent, identity-anchored audit trails that hard-wire RBMS–ERBC discipline. When registries, enforcement, and measurement align, failure loopholes narrow: liquidity binds to productivity, time-to-cash falls, capacity utilisation rises, and jobs expand-delivering stability with prosperity.

**Keywords:** *Metanomics; Resource-Based Monetary Sovereignty (RBMS); Endogenous Resource-Backed Currency (ERBC); Digital Public Finance (G-Wallet); Inflation Targeting; Structural Transformation; South Africa*

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## 1 Introduction

Since New Zealand's pioneering adoption of inflation targeting (IT) in 1990, the framework has become the dominant template of modern central banking. By the early 2020s more than forty countries including South

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Africa had institutionalised variants of IT under the imprimatur of the IMF and World Bank (Mishkin, 2004; Roger, 2010). The creed is clear: rules should bind discretion; price stability is the precondition for prosperity because inflation distorts signals, impedes investment, and erodes long-run efficiency (Bernanke et al., 1999; Svensson, 1997; Woodford, 2003).

South Africa embraced this orthodoxy in February 2000 with a 3–6% CPI target. On its own terms the regime “worked”: headline inflation fell from an annual average of over 14% in the 1980s and 9% in the 1990s to approximately 5.3% between 2000 and 2023 (SARB, 2023). Core inflation also remained within target for significant periods, and inflation expectations, though sticky, trended downward. Yet the promised dividends higher investment, faster productivity growth, structural transformation did not materialise. Since the global financial crisis, real GDP growth has averaged roughly 1½ per cent, unemployment has exceeded thirty per cent with youth joblessness even higher, and the investment rate has stagnated below the levels associated with sustained industrialisation (World Bank, 2023; UNCTAD, 2021; StatsSA, 2023). South Africa thus exhibits a wider paradox visible across IT adopters: price stability without prosperity.

International experience clusters into three stylised outcomes. A few small advanced economies combined flexible IT with active industrial strategy and counter-cyclical fiscal policy, achieving moderate, steady growth. Many emerging markets South Africa among them secured disinflation at the cost of suppressed output, tight credit to production, and chronically high unemployment (Arestis et al., 2011; Aron and Muellbauer, 2007). Others kept inflation low while leaning on household leverage and asset booms to prop up demand (Kim, 2016). These patterns weaken the orthodox claim that stable prices reliably deliver robust, inclusive growth; at best, the relationship is contingent and mediated by structure (Rodrik, 2008).

The theoretical scaffolding of orthodoxy helps explain the disconnect. IT presumes inflation is primarily demand-pull; a higher policy rate should therefore tame prices at acceptable output cost (Taylor, 1993). But in South Africa, inflation is largely structural and cost-push shaped by administered prices, energy bottlenecks, climate shocks, exchange-rate pass-through, and concentrated mark-ups (Fedderke and Wang, 2017; Bhorat et al., 2021). Interest-rate hikes poorly target these drivers while reliably raising borrowing costs, depressing investment, and entrenching unemployment (Pollin, 2008; Ndikumana, 2016). In practice, the regime anchors around financial-asset preservation rather than production, privileging balance-sheet stability over capacity expansion (Tymoigne, 2006).

Heterodoxy is right to challenge this. Post-Keynesians emphasise employment targeting, developmental credit, and capital-flow management (Ocampo, 2017); structuralists call for monetary-industrial coordination (Bresser-Pereira, 2019). Yet heterodox prescriptions often falter on discipline and anchoring. They can recycle dependence on external finance, slip into fiscal dominance, and risk chronic inflation if credit creation outruns productive supply. Absent a sovereign value base and clear collateral architecture, they invite currency fragility and political capture (Heintz, 2019). In short, orthodoxy protects prices while starving production; heterodoxy stimulates demand while courting instability.

This impasse masks a deeper epistemic flaw shared by both camps: money is treated as essentially neutral either a passive stabiliser (orthodoxy) or a generic stimulus lever (heterodoxy). Neither view substantively grounds currency in measurable flows of productive energy, real assets, and ecosystem services. The result is a policy pendulum in which countries like South Africa oscillate between capital flight and credit crunch, austerity and inflation scares, without confronting the binding constraints: thin productive density, weak inter-mediation to the real economy, and persistent resource leakage through extractive financial and trade structures.

A different monetary philosophy is therefore required one that dissolves the false choice between stability and growth by delivering stability through production. This article introduces Metanomics, an endogenous framework rooted in Resource-Based Monetary Sovereignty (RBMS) (Alagidede, 2025). Here, money is not merely an abstract numéraire administered through the interest rate; it is a living contract among people, land, and production. Issuance must be collateralised by verifiable productive streams energy generation, agricultural output, mineral royalties, infrastructure receivables, and digitised registries of real assets brought onto transparent settlement rails. Rather than monetising deficits or courting volatile capital inflows, RBMS tokenises domestic productive capacity and uses it to back liquidity creation within sovereign digital infrastructures (e.g.,

G-Wallet-type rails), thereby combining anchor and elasticity: discipline from collateral, dynamism from endogenous expansion of capacity.

South Africa is unusually well placed for such an approach: mineral endowments, renewable-energy corridors, industrial nodes, agricultural belts, and sophisticated logistics coexist with liquidity dependence and offshore price discovery. Orthodoxy counsels raising rates to defend the rand; heterodoxy counsels printing and spending. Metanomics reframes the problem: collateralise resources, issue asset-backed sovereign liquidity, and circulate value through a productivity-indexed architecture. Inflation then becomes not a purely monetary phenomenon but a misalignment between currency issuance and productive capacity.

The contribution of this article is twofold. First, it shows that South Africa's growth-stability disconnect is not a policy accident but a design feature of orthodox regimes operating in resource-rich, liquidity-poor settings. Second, it articulates a disciplined yet developmental alternative Metanomics binding liquidity to production and securing stability from endogenous capacity rather than imported austerity. Section 2 reviews the IT literature; Section 3 sets out the theoretical foundations of Metanomics; Section 4 diagnoses South Africa's structural gaps; Section 5 proposes a policy reconfiguration grounded in RBMS.

## 2 Literature Review

### 2.1 Origins of inflation targeting and the orthodox canon

Inflation targeting (IT) crystallised from late-twentieth-century debates over rules versus discretion in monetary policy. Building on monetarist critiques of activist stabilization (Friedman, 1968) and the time-inconsistency problem (Kydland and Prescott, 1977; Barro and Gordon, 1983), IT promised a rule-like commitment device that would anchor expectations while preserving instrument flexibility. The New Keynesian synthesis supplied the microfoundations for how an interest-rate rule, guided by a publicly announced inflation objective, could stabilise both inflation and output around potential via credible forward guidance (Clarida et al., 1999; Woodford, 2003). Policy handbooks by Bernanke et al. (1999), Mishkin (2000, 2004), and Svensson (1997, 1999) gave the template: (i) an explicit quantitative target (often a band); (ii) operational independence for the central bank; (iii) a short-term interest-rate instrument; (iv) transparency and communication; and (v) accountability via regular reporting.

Beneath the operational schema sat three core claims. First, price stability is the primary sometimes the only durable contribution monetary policy can make to long-run prosperity. Second, low and stable inflation lowers risk premia and fosters investment. Third, a credible target compresses the sacrifice ratio, allowing disinflation at lower output cost (King, 1997; Mishkin, 2000). This "price stability → prosperity" arc became orthodoxy as more than 40 economies adopted IT first New Zealand (1990), then Canada, the U.K., Sweden, and subsequently a wave of emerging and developing economies (EDEs) across Latin America, Central-Eastern Europe, and Africa.

African political economy scholars warned early that the transplantation of imported frameworks could reproduce dependency structures (Ake, 1981; Nkrumah, 1965; Mkandawire, 2010). Yet in the 1990s–2000s, the rising prestige of independent central banks and the perceived successes of early adopters outweighed these cautions, and IT became the accepted grammar of "sound policy."

### 2.2 Global empirical performance of inflation targeting

The empirical record is mixed. In advanced economies, IT coincided with lower and more stable inflation than in preceding decades, but its marginal contribution is debated once global disinflationary forces (trade integration, technology, demographics) are controlled for (Ball and Sheridan, 2005; Cecchetti and Ehrmann, 2002). Sweden and Canada are often cited as "flexible IT" successes that combined inflation control with respectable growth, aided by robust fiscal institutions and social compacts (Svensson, 2010; Sørensen, 2015).

By contrast, Japan's pre-Abenomics era illustrates how IT-style thinking (and zero lower bound constraints) delivered price stability of the wrong sign deflation alongside persistent stagnation (Ito and Mishkin, 2006).

In EDEs, three stylised outcomes recur. First, "price stability without prosperity": inflation falls within target bands, but growth remains weak and unemployment high (South Africa, Brazil, Thailand). Second, "price stability with leverage": inflation is low, but household leverage and asset prices inflate, temporarily masking sluggish real wages (Chile, South Korea; Kim, 2016). Third, "target misses under structural stress": structurally volatile economies repeatedly breach targets despite significant tightening (Turkey, Ghana, Argentina) (Arestis and Sawyer, 2013; Epstein, 2019). Meta-analyses find that while IT can reduce inflation variability, robust growth effects are elusive, particularly where supply-side constraints dominate and transmission mechanisms are weak (Aron and Muellbauer, 2007; Brito and Bystedt, 2010; Ball, 2010).

South Africa fits the first pattern. Since adopting IT in 2000 (3–6% band), headline inflation largely remained within the band; however, post-2008 real GDP growth averaged near 1.5%, unemployment remained structurally high, and investment stagnated (Aron and Muellbauer, 2007; Fedderke and Wang, 2017). The gap between inflation control and developmental outcomes raises the central question of this article: does IT, as practiced, supply the right instrument for South Africa's binding constraints?

### 2.3 What orthodoxy explains and what it misses

Orthodox models explain several successes. Transparent targets can reduce inflation persistence by aligning expectations, especially in economies with established nominal anchors (Svensson, 1997; Gürkaynak et al., 2010). Clear communication lowers uncertainty and term premia; operational independence reduces political cycles in money creation. Credibility can also limit second-round effects after supply shocks by signalling a strong reaction function.

Yet orthodoxy is systematically incomplete in EDE contexts. First, the composition of inflation matters: when food, energy, and administered prices drive CPI, the short-rate is a blunt tool. Tightening raises financing costs for producers facing cost-push pressures, thereby delaying the very investments (storage, logistics, energy capacity) that would ease inflation (Pollin, 2008; Ndikumana, 2016). Second, the monetary transmission mechanism (MTM) is attenuated by shallow capital markets, informality, and weak competition in banking; policy-rate hikes pass through asymmetrically, and declines are sticky, pulling banks toward sovereign "carry trade" instead of SME credit (Iddrisu and Alagidede, 2021; Akosah et al., 2021). Third, orthodox frameworks delegate growth and jobs to "other policies," but, in practice, the coherence of those other policies is limited by fiscal rules, debt dynamics, and external vulnerability (De Grauwe, 2012). The result is a thermostat that works in a house with missing walls: the number (inflation) responds somewhat, but the indoor climate (growth, jobs) remains uncomfortable.

### 2.4 Heterodox responses: insights and inadequacies

Heterodox traditions structuralist, post-Keynesian, developmentalist push back on the idea that price stability is sufficient for development. They emphasise income distribution, demand regimes, industrial policy, and the role of the state in coordinating investment (Bresser-Pereira, 2019; Ocampo, 2017; Lavoie, 2014). Practical proposals include employment-targeted monetary policy, directed credit for strategic sectors, capital flow management, exchange-rate competitiveness, and public development banks (Rodrik, 2008; Epstein, 2021).

These literatures add essential lenses especially for economies with commodity dependence, high informality, and external fragility. But their operational programmes can be underspecified regarding nominal anchors and governance. Credit guidance without hard constraints on fiscal dominance risks entrenched inflation and currency pressures; exchange-rate activism without productivity upgrades invites stop-go cycles; and broad state activism can be captured by rent-seeking coalitions (Heintz, 2019). In essence, orthodoxy prunes the branches to keep the tree neat; heterodoxy waters the leaves in hopes of revival. Neither repairs the roots the productive base that feeds prices, jobs, and external balance.

African political economy deepens the critique. Samir Amin (1976, 2011) argued that peripheral capitalism is structured by unequal exchange; without altering production structures and external linkages, financial policy will stabilise dependency rather than transform it. Claude Ake (1981) warned that imported economic “science” often obscures the politics of who gains and loses from stability. Thandika Mkandawire (2010) showed how “good governance” conditionalities, including narrow central-bank mandates, depoliticised development choices while entrenching austerity. Nkrumah (1965) framed these tensions as neocolonialism: political sovereignty constrained by external economic disciplines. These perspectives anticipate the orthodox-heterodox deadlock observed in contemporary IT debates.

## 2.5 South Africa in comparative perspective

South Africa’s inflation dynamics are heavily shaped by administered prices (electricity), regulated and oligopolistic sectors (fuel, transport), imported cost shocks via the exchange rate, and food prices sensitive to climate variability and logistics (Fedderke and Wang, 2017; Bhorat et al., 2021). In such a structure, hiking the repo rate to counter CPI spikes can move the CPI only indirectly via demand suppression while directly raising financing costs for investments that would relax the bottlenecks (energy, rail/port, storage). Furthermore, bank incentives in low-growth, high-yield environments favour sovereign paper over riskier SME and infrastructure lending, reinforcing the “price stability without prosperity” syndrome (Aron and Muellbauer, 2007; Iddrisu and Alagidede, 2021).

Counter-examples exist where IT and growth co-moved as theory predicts typically where supply constraints were addressed in tandem with credible monetary policy. Sweden combined flexible IT with active labour-market institutions and exchange-rate flexibility, containing shocks while sustaining innovation (Svensson, 2010). Canada’s IT operated alongside commodity-cycle buffers and robust fiscal federalism, which helped absorb terms-of-trade swings (Longworth & Poloz, 2015). These cases suggest that IT can coexist with growth where: (i) supply-side capacity is steadily expanded; (ii) fiscal-monetary coordination is strong; and (iii) credible automatic stabilisers cushion shocks. They do not, however, contradict the structural critique for EDEs where those conditions are absent.

## 2.6 The binary’s epistemic gap: money without roots

Orthodoxy and heterodoxy share a hidden assumption: money is neutral with respect to production. For orthodoxy, money is a nominal yardstick to be stabilised; for many heterodox programmes, money is a tool for stimulating demand and investment. In both, the link between issuance, intermediation, and measurable productive flows is weak. This is the epistemic hole that fuels recurring cycles of disinflation without development (orthodox) and stimulus with instability (heterodox).

African monetary history points to a different ontology of value. Pre-colonial systems cowries, gold-dust, iron bars, woven textiles, livestock were socially embedded and resource anchored: currencies were claims on usable wealth and obligations enforceable by communal institutions (Hogendorn & Johnson, 1986; Garrard, 1980; Martin, 1986; Alagidede, 2025). Colonial currency boards and, later, narrow post-independence central-bank mandates severed this anchor, subordinating domestic liquidity to external pegs and imported policy norms (Hopkins, 1970). Contemporary inflation targeting, layered onto commodity dependence and shallow intermediation, completes the abstraction: a lighthouse shining at noon, visible but not useful for navigation when the reefs (logistics), currents (FX), and weather (climate) drive outcomes.

Recent African scholarship proposes rebuilding the anchor. In *From Cowries to Crypto: The Long Arc of Monetary Policy in Africa*, Alagidede advances Metanomics a synthesis that grounds money in verifiable domestic resources and productive flows, institutionalised through Resource-Based Monetary Sovereignty (RBMS) and an Endogenous Resource-Backed Currency (ERBC) architecture. The argument is historical, structural, and technological: reclaim the resource anchor; align issuance with measurable capacity; and run it on transparent, programmable rails (digital registries, tokenised collateral, rule-based convertibility).

## 2.7 Emerging monetary alternatives and why they fall short

Several alternatives have surfaced. Commodity standards (e.g., a return to gold) promise discipline but are brittle under shocks and concentrate power where a single commodity dominates (Bordo, 1993). Sovereign wealth funds (Chile's copper fund; Norway's oil fund) convert resource cycles into financial buffers, yet they do not anchor domestic money; they stabilise fiscal policy while monetary regimes remain fiat-based (Davis et al., 2001). Islamic finance insists on asset-backed claims and risk-sharing useful microfoundations but does not in itself deliver a macro-anchor for issuance (Iqbal and Mirakhor, 2011). CBDCs digitise fiat and can lower transaction frictions, but absent a real-sector anchor they risk becoming "fiat with an app," improving plumbing without changing where liquidity flows (BIS, 2020). Stablecoins replicate the dollar offshore, potentially entrenching external anchors and narrowing policy space in EDEs (Adrian and Mancini-Griffoli, 2019).

These options illustrate a pattern: each offers either discipline (commodity rules, fiscal buffers) or flexibility (fiat-crypto, CBDCs) rarely both, and seldom an endogenous linkage to productive capacity.

## 2.8 Metanomics and Resource-Based Monetary Sovereignty in the Literature

Metanomics emerges in the literature as a philosophical and institutional response to the long-standing impasse between orthodox and heterodox monetary thinking. Rather than treating inflation as a purely monetary outcome "too much money chasing too few goods" in the orthodox lexicon or reducing it to either cost-push or demand-pull explanations as in standard Keynesian treatments, Metanomics reframes inflation fundamentally as a structural misalignment between currency issuance and the productive–ecological capacity of an economy. In this framing, inflation is not merely a price phenomenon but a signal of broken value circuits a gap between financial claims and productive validation in real assets, real output, and real energy. Thus, where orthodoxy responds to inflation with interest rate tightening (a "thermostat" approach) and heterodoxy floods the system with liquidity to boost demand (a "watering can" approach), Metanomics advocates what may be termed "root repair" a redesign of the monetary constitution so that liquidity creation is inseparably bound to measurable productivity and resource flows.

This framework is institutionalised through Resource-Based Monetary Sovereignty (RBMS) and its operational tool, the Endogenous Resource-Backed Currency (ERBC). In contrast to fiat orthodoxy, which relies on expectations and central bank credibility, and in contrast to heterodox money creation, which risks weakening the currency anchor, RBMS establishes a productive anchor that is endogenous to the economy. It achieves this through a three-layered monetary architecture that synthesises ideas from structuralist, post-Keynesian, and African political economy traditions but moves decisively beyond them.

First, the anchor and measurement layer uses a Resource Basket Index (RBI) to define what backs domestic liquidity. Instead of a single commodity peg (e.g., gold under Bretton Woods), the RBI is diversified across tokenised warehouse receipts (grain, horticultural stock), mineral output (gold, PGMs, base metals), renewable energy receivables, and certified ecosystem services (soil carbon and biodiversity units). Scheduled audits, dynamic collateral haircuts, and transparent weightings hardwire credibility into issuance. In doing so, Metanomics extends post-Keynesian endogenous money theory (Lavoie, 2014), while addressing what even sympathetic critics recognise as a limitation of Modern Monetary Theory its lack of a material issuance discipline (Wray, 2015; Kelton, 2020).

Second, the policy rule and convertibility layer provides a disciplined yet flexible issuance rule. Base money expansion is dynamically capped by measured growth in the RBI, while state-contingent convertibility corridors allow holders of the currency to redeem balances for resource claims within a managed price band. These corridors tighten during external stress (preserving stability) and widen during expansion (supporting growth), avoiding the rigidity of hard pegs and the volatility of free floats. This makes convertibility not a speculative arbitrage mechanism but a prudential feedback loop that aligns the financial system with real-sector flows over time.

Third, the credit guidance layer operationalises the anchor by ensuring that liquidity is channelled into productivity-enhancing sectors rather than speculative carry trades. Refinancing eligibility at the central bank is

restricted to resource-linked collateral such as warehouse receipts, mining forward contracts, or power purchase agreements. In the South African context, this means deliberately redirecting credit into energy transmission, agro-logistics, mineral beneficiation, and supply-chain infrastructure where the origins of chronic inflation actually lie.

Taken together, this synthesis resonates with Ocampo's (2017) call for developmental macroeconomics with countercyclical monetary governance, Bresser-Pereira's (2019) new developmentalism grounded in production, and the African insistence on economic sovereignty found in Amin (2011) and Mkandawire (2010). Yet Metanomics contributes something that these frameworks lack: a programmable monetary constitution that binds money to domestic capacity through transparent, auditable resource flows. It answers the orthodox demand for a credible anchor and the heterodox demand for transformative finance resolving the false binary and charting a sovereign, production-centred path forward. South Africa's numbers tell a single, stubborn story: we have stabilised the price of money while disabling the purpose of money.

Table 1: Macroeconomic Indicators: South Africa (2000–2023)

Indicator	2000–2007 (Pre-GFC)	2008–2015 (Stagnation begins)	2016–2019 (Low-growth trap)	2020–2023 (Shock + weak recovery)	Trend Summary
Average CPI Inflation (%) (SARB target 3–6%)	5.3%	5.7%	4.7%	5.9%	Inflation largely within target
Real GDP Growth (%) (avg)	4.2%	1.8%	1.1%	0.4%	Sharp structural decline
Unemployment Rate (%) (% official)	23–25%	26–29%	29–30%	32–35%	Rising long-term unemployment
Youth Unemployment (%)	40%	50%	55%	63%	Social crisis-level
Gross Fixed Capital Formation (% of GDP)	19.7%	18.1%	17.2%	15.4%	Collapsing investment intensity
Private Sector Credit Extension (% real growth)	12%	5.2%	2.6%	-0.5%	Credit drying for productive sectors
GDP per Capita (USD, constant terms)	\$6,200	\$6,000	\$5,900	\$5,600	Declining productivity and welfare
GINI Inequality Index	0.63	0.65	0.66	0.67	Highest inequality globally

**Data sources:**

- Statistics South Africa (Stats SA), Quarterly Labour Force Survey (2023)
- South African Reserve Bank (SARB) Quarterly Bulletin (2023)
- World Bank Development Indicators (2023)
- National Treasury Budget Review (2023)
- UNCTAD World Investment Report (2023)

As shown in Table 1, inflation has largely lived inside the 3–6% corridor for two decades, yet growth has ratcheted down from 4.2% pre-GFC to near zero since 2020; unemployment has climbed into the thirties (with

youth beyond sixty); investment has fallen below 16% of GDP; and real credit to the productive economy has dried up. Read together, the series exposes a broken credit–production–employment circuit. It also demolishes the binary catechisms: orthodoxy says “tighten to be credible and growth will follow”; heterodoxy says “loosen to revive demand and growth will follow.” The data show neither promise was kept because both schools abstract from where value is actually made and how finance reaches it.

Nowhere is the failure more visible than in the SME economy. SMEs constitute the bulk of firms, generate over half of output, and carry the majority of employment potential, yet they receive roughly a tenth of commercial credit. This is not a quirk; it is a design feature. A highly concentrated banking system, with incentives tilted toward sovereign carry and property-backed lending, does rational portfolio math under tight policy: buy government paper, price loans off high policy rates, and avoid thinly collateralised productive risk. The result is a two-balance-sheet nation: a financial balance sheet that looks stable, and a real economy balance sheet that is starved. Orthodoxy calls this prudence; the labour market calls it unemployment.

Heterodox fixes have fared no better, because they often pour water into a leaky barrel. Development banks, special credit schemes, and episodic stimulus can mobilise liquidity, but without a disciplined link to verifiable output, funds drift to consumption, asset play, or capture. Inflation returns, credibility erodes, and the next tightening cycle arrives sooner and harsher. Orthodoxy trims the branches; heterodoxy waters the leaves; neither touches the roots the cash-to-capacity pipeline that converts finance into storage, power, logistics and firm productivity.

Layered on top are combined market and state failures. Market power in banking, food, energy and logistics raises mark-ups and impedes pass-through from policy to prices that matter; state capacity gaps in DFIs, procurement and infrastructure planning blunt catalytic investment. The macro regime then mistakes these structural bottlenecks for “excess demand,” using the policy rate to coerce disinflation while inadvertently taxing the very investments grid upgrades, rail rehabilitation, cold-chain, industrial services that would loosen CPI from the supply side. Thus, the celebrated “stability” is achieved by compressing the lungs of production.

Unemployment is the social ledger of this macro design. It is not only cyclical slack; it is structural exclusion shaped by spatial apartheid, skills deficits, and broken transition pathways from school to work and from micro-enterprise to formal value chains. The psychological harm of racialised exclusion well documented in African and decolonial scholarship shows up as discouraged work-seeking and fragile entrepreneurial intent. But it is crucial to be precise: the binding constraint is not a supposed cultural aversion to effort; it is the absence of credible pathways where effort predictably turns into income because credit, skills, demand, and market access do not meet. When vacancies do exist (energy maintenance, logistics, digital services, fabrication), skills mismatches and financing gaps block entry; when skills are present, procurement and payment lags suffocate survival. In this environment, exhortations to “hold the line on inflation” or “print and spend” are equally unhelpful; neither rewires the circuit that delivers jobs.

This is the unique discussion point Table 1 compels: South Africa’s macro regime optimises a number (CPI) while de-optimising the network that produces growth. Orthodoxy fails because it presumes the transmission from credibility → investment → jobs will self-assemble in the presence of concentrated finance and fractured supply. Heterodoxy fails because it presumes liquidity → demand → jobs will self-discipline without a real-sector anchor. Both are regimes of monetary abstraction in a context that requires monetary embodiment finance that is materially coupled to measured capacity.

Therefore, the way out cannot be a louder version of either script. The next section argues that South Africa must outgrow the binary by moving to a constitution of money that binds issuance and refinancing to verified production and resource flows so the CPI ceases to be managed against the real economy and is stabilised through it. Only then do the series in the table growth, per-capita income, unemployment, credit, investment begin to move together in the right direction.



## 2.9 Why South Africa is a natural test-bed time to anchor money in what we actually make

South Africa stands in bright daylight yet gropes as if at midnight. We keep polishing the price of money while ignoring the roots of value. As our elders warn: you cannot roast the corn by fanning the wind. Inflation-targeting fans the wind beautifully measured breezes in a 3–6% band while the maize (production, jobs, exports) sits uncooked. The country is not poor; it is poorly collateralised. We sit on world-class minerals, resilient agriculture, and vast renewable corridors, and yet run a fiat regime whose credibility rests on imported capital flows rather than audited domestic capacity. The remedy is not more orthodoxy (a brighter lighthouse) or more heterodoxy (more lamps). It is Metanomics: rebuild the harbour dredge the channels (logistics), install breakwaters (FX buffers), and meter the tides (audits) and then anchor the currency to measured, diversified resource flows.

Consider the picture the data already give us (see Table 2). Mining's primary sales reached about R792 billion in 2023 even after a cyclical down-year while the sector still contributed over 6% of GDP and paid R104 billion in taxes and royalties, underscoring scale and fiscal relevance. South Africa remains pivotal in PGMs and manganese (about 37% of global reserves; 7.2 Mt produced in 2023) and is a significant iron-ore exporter (realised prices around US\$117/wmt in 2023 despite rail constraints). Agriculture quietly shoulders stability: the commercial sector produced about 13.4 Mt of maize in 2023, while high-value horticulture (e.g., citrus) ships billions of rand offshore each season. On the energy side, renewables already deliver dependable output wind 34% and solar PV 25% capacity factors pointing to bankable cash-flow receivables when grid constraints are solved.

Table 2: South Africa's resource base indicative scale and market signals

Domain	Indicative 2023 Scale / Signal	Market Value / Signal
Minerals (all)	Primary sales: R792.3 bn	Taxes/royalties $\approx$ R104 bn; GDP share 6.3%
Manganese	7.2 Mt output; 37% of global reserves	Global strategic alloy price cyclical, depth structural
PGMs (Pt, Pd, Rh)	Global leadership (output + reserves)	High value, auto & green-hydrogen linkages
Iron ore	Exporter; logistics-constrained	Realised US\$117/wmt (2023)
Maize (commercial)	$\approx$ 13.4 Mt	Food security + regional trade hedge
Citrus exports	EU/UK strong billions of rand pa	FX earner; premium markets
Utility-scale RE	6.2 GW installed; CF: wind 34%, PV 25%	Bankable PPAs; scalable receivables

Sources: Minerals Council SA (2023 Annual Review); DMRE Mineral Statistical Tables (2002–2023); Kumba/Anglo releases; Stats SA Agriculture 2023; NAMC Fruit Trade Flow (2024); CSIR Power Statistics (2022–2024).

This table is not a boast; it is a balance sheet. Under fiat, it is merely scenery for the CPI. Under a resource-anchored monetary constitution, it becomes the collateral spine of issuance. The mechanism is straightforward: (1) build a Resource Basket Index (RBI) from tokenised warehouse receipts (grain, fruit), mineral output certificates (PGMs, iron ore, manganese), and verified renewable receivables; (2) publish audits, haircuts and weights quarterly; (3) cap base-money growth to RBI growth with an error-correction back to a minimum backing ratio; and (4) open state-contingent convertibility corridors allowing redemptions into basket claims within bands that tighten under stress and widen with capacity. This is neither a brittle gold peg nor a faith-based float; it is disciplined flexibility, pricing money off what South Africa actually produces.

Policy makers' blindness is thus not informational but ontological. We continue to treat money as a reputational signal to offshore capital instead of a domestic contract on verifiable flows. The African way of looking at this problem is summed up in one proverb: *the water you seek is in the calabash you carry*. The

same state that preaches “stability for growth” tightens into energy and logistics shocks, squeezing SMEs and raising sovereign carry’s appeal. Meanwhile, horticulture, grains, and PPAs queue as unrecognised collateral; minerals sit behind rail bottlenecks; and the rand is defended with rate hikes rather than FX buffers built from resource-linked notes. The result is credible CPI with incredible unemployment.

A shift to resource-anchored money is not romanticism; it is the least-regret option in a country with deep reserves, measurable cash flows, statistical capacity, and globally credible audit institutions. Peg the issuance rule to the RBI; refinance banks against resource-linked collateral (warehouse receipts, off-taker receivables); route liquidity to bottlenecks that move the CPI (storage, cold-chain, rail, feeders, distributed energy). Then the proverb can be rewritten for our time: *when the roots drink, the leaves do not beg*. In such a regime, stability is achieved through production, not against it; the light is not offshore sentiment but the measured shine of our own capacity.

### 3 Theoretical foundation of Metanomics

#### 3.1 Ontology and problem statement

Metanomics replaces monetary abstraction (orthodox: stabilize a price index; heterodox: expand nominal demand) with monetary embodiment: money is a continuously reconciled contract on the economy’s productive-ecological capacity. Inflation is the misalignment between currency issuance and measurable capacity; stability arises when issuance is endogenously coupled to verified resource flows and when credit is guided to relieve CPI-relevant bottlenecks (energy, food, logistics).

#### 3.2 State variables and measurement

Let the Resource Basket Index (RBI) aggregate diversified domestic capacity:

$$RBI_t \equiv \sum_{i \in S} w_{i,t} h_{i,t} P_{i,t} Q_{i,t}$$

where sleeve  $i$  spans graded agricultural inventories, mineral outputs, renewable-energy receivables, and certified ecosystem services.  $P_{i,t} Q_{i,t}$  is the sleeve’s mark-to-market value,  $h_{i,t} \in (0, 1]$  is a prudential haircut (volatility, liquidity, sustainability), and  $w_{i,t}$  are transparent weights (sum to 1). Define capacity growth  $g_{R,t} \equiv \Delta \ln(RBI_t)$ . Let base money be  $M_t$ , and the backing ratio be

$$BR_t \equiv \frac{RBI_t}{M_t}$$

A policy-set minimum  $\mu^* > 0$  encodes the promise that money remains anchored in measured capacity.

#### 3.3 Issuance rule (dynamic adjuster)

Metanomic issuance follows a state-contingent rule that grows money with capacity, corrects deviations from the anchor, and tightens under stress:

$$\Delta M_t = \phi_1 g_{R,t} - \phi_2 (\mu^* - BR_{t-1})_+ - \phi_3 \Psi_t + \varepsilon_t \phi_1 \phi_2 \phi_3 > 0$$

subject to the hard constraint  $BR_t \geq \mu^*$ . The stress index  $\Psi_t$  (FX pressure, systemic liquidity, commodity drawdowns) is observable;  $(x)_+$  is the positive part. Intuition: when measured capacity grows, issuance can expand; when the backing ratio slips or stress rises, the rule automatically leans against issuance.

Solution to the orthodox failure. Orthodoxy relies on a policy rate while leaving issuance untethered to capacity. Here, the anchor is explicit: issuance tracks  $g_{R,t}$  and is pulled back toward  $\mu^*$ .

Solution to the heterodox failure. Heterodox stimulus lacks a nominal anchor; here, \* and t bound expansion and preserve credibility.

### 3.4 Convertibility corridors (discipline with flexibility)

Define a resource-linked monetary claim ("MeBit") with par value  $v_t \equiv RBI_t/M_t$ . Convertibility operates within a band:

$$v_t^- \equiv (1 - \kappa_t) v_{t'} v_t^+ \equiv (1 + \kappa_t) v_{t'}$$

where the corridor width  $\kappa_t = \kappa(\Psi_t, \zeta_t)$  tightens under stress ( $\partial\kappa/\partial\Psi > 0$ ) or ecological strain ( $\partial\kappa/\partial\zeta > 0$ ). Redemptions into basket claims clear at  $v_t^\pm$  according to side of the market. This is neither a brittle hard peg nor a free float: discipline stems from the published band and audits; flexibility from  $\kappa_t$ 's state contingency.

### 3.5 Credit guidance to CPI bottlenecks

Let banks post collateral to a refinancing window. Eligible collateral is resource-linked only:

$$C_t = \{ \text{tokenised warehouse receipts, off - taker receivables, PPAs/RECs} \}.$$

The central bank applies a haircut matrix  $H_t$  to collateral values  $V_{i,t}$ . Bank  $b$ 's refinancing limit:

$$R_{b,t} = \theta \sum_{i \in C_t} h_{i,t} V_{b,i,t} \theta > 0.$$

Refinancing rates are portfolio-sensitive:

$$r_{b,t}^{ref} = r_t^{pol} - \eta s_{b,t}^{res}, \eta > 0,$$

where  $s_{b,t}^{res}$  is the share of resource-linked collateral on the bank's book. This tilts funding toward storage, cold-chain, grid feeders, and logistics-the origins of food/energy CPI-instead of sovereign carry and property churn.

### 3.6 Transmission to inflation and growth (state-space backbone)

Let supply-side bottlenecks be  $B_t$  (a composite of energy outages, logistics delays, storage gaps). Price dynamics:

$$\pi_t = \beta_s B_t + \beta_d \text{gap}_t + u_t, \beta_s > 0$$

where  $\text{gap}_t$  is the demand gap. Bottleneck dynamics reflect investment targeted by credit guidance:

$$B_t = \rho B_{t-1} - \chi I_t^{\text{bot}} + v_t, 0 < \rho < 1, \chi > 0,$$

with  $I_t^{\text{bot}}$  financed by  $\mathcal{R}_{b,t}$  against resource-linked collateral. Potential output evolves as

$$y_t^* = y_{t-1}^* + \gamma I_t^{\text{bot}}, \gamma > 0.$$

Mechanism: issuance tracks capacity ( $\phi_{1gR,t}$ ); resource-linked refinancing raises  $I_t^{\text{bot}}$ ; bottlenecks fall ( $B_t \downarrow \Rightarrow \pi_t \downarrow$ ); potential rises ( $y_t^* \uparrow$ ); unemployment declines through higher labour absorption. Stability is achieved through production, not against it.

### 3.7 Policy objective and implementability

Define a transparent loss function the authority minimizes by choosing rule parameters

$$0 = \{\phi_1, \phi_2, \phi_3, \mu^*, \eta, \theta, \kappa(\cdot)\} :$$

$$\mathcal{L}_t = \lambda_\pi (\pi_t - \pi^*)^2 + \lambda_u (u_t - u^*)^2 + \lambda_{br} (\mu^* - BR_t)_+^2 + \lambda_q (q_t^{\text{SME}} - q^*)^2 + \lambda_m (\Delta M_t)^2,$$

subject to the issuance rule, corridor constraints, and refinancing eligibility. Here  $q_t^{\text{SME}}$  is the SME credit share (a proxy for inclusion/productive tilt). Weighting  $\lambda$ 's are published; audits and corridor usage are disclosed monthly. This makes the regime falsifiable: if CPI components anchored in  $B_t$  do not fall as refinancing flows,  $\eta$  and  $\theta$  rise (stronger tilt), haircuts deepen, and  $\kappa_t$  tightens; if  $BR_t$  drifts,  $\phi_2$  enforces faster error-correction.

### 3.8 How Metanomics subsumes the doxies

- Orthodox limit (thermostat without roots). Set  $\phi_1 = 0$  (issuance not tied to capacity),  $\eta = \theta = 0$  (no credit guidance), and no corridors. Policy collapses to rate-setting with fiat issuance. In a cost-push economy ( $\beta_s$  large),  $\pi_t$  remains stubborn while  $I_t^{\text{bot}}$  is depressed; growth and employment stagnate.
- Heterodox limit (watering can without anchor). Set  $\mu^* = 0$ ,  $\phi_2 = 0$ ,  $\kappa_t$  wide. Liquidity expands but unanchored; if guidance is weak or governance leaky, funds chase consumption/assets,  $B_t$  barely moves,  $\pi_t$  rises, and credibility erodes.
- Metanomic interior (embodied money).  $\phi_1 > 0$  couples issuance to measured capacity;  $\phi_2 > 0$  and  $\kappa(\cdot)$  give discipline;  $\eta, \theta > 0$  drive credit to bottlenecks; audits and  $\mu^*$  hard-wire the anchor. The same rule that builds capacity also earns disinflation by shrinking  $B_t$ .

### 3.9 Preconditions and governance (succinct)

- Measurement: reliable registries and oracles for  $P_{i,t}, Q_{i,t}$ ; audit cadence; sustainability factor  $\zeta_t$  that caps valuations at sustainable yield.
- Law: recognition of tokenised receipts/PPAs as collateral; perfection and priority rules.
- Rulebook: public eligibility tiers, haircuts  $h_{i,t}$ , concentration caps, and stress protocols for  $\Psi_t$  and  $\kappa_t$ .
- Disclosure: monthly dashboards for  $BR_t$ , corridor usage, CPI decomposition, SME credit share.

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### 3.11 Testable predictions

Compared with an orthodox inflation-targeter, RBMS predicts: (i) faster reduction in food/energy CPI shares via  $\chi I_t^{\text{bot}}$ ; (ii) higher SME credit share and shorter "time-to-cash" in supply chains; (iii) rising  $y_t^*$  and falling structural unemployment; (iv) improved FX cover through resource-linked notes; and (v) lower volatility of  $\pi_t$  for a given shock because corridors and haircuts absorb stress mechanically.

The formal core is compact: measure capacity (RBI), bind issuance to that capacity (dynamic adjuster), discipline convertibility (corridors), and steer credit to bottlenecks (eligibility and pricing). Orthodox policy is recovered as a special case with no anchor or guidance; heterodox policy is recovered as a special case with no anchor and wide discretion. Metanomics occupies the disciplined interior: money expands with the roots of value and stabilises prices through the relief of real constraints. Table 3 provides an analytical summary of the comparative monetary systems.

Table 3: Comparative Framework: Metanomics vs Orthodoxy vs Heterodoxy

Dimension	Metanomics (RBMS/ERBC)	Orthodoxy (IT / Rate Rule)	Heterodoxy (Credit/Fiscal-led)
Monetary anchor	Diversified RBI; audits & haircuts; BR* constraint	Fiat credibility + CPI band	Sovereign fiat, soft anchors
Issuance rule	AM tracks RBI; error-correction; stress-sensitive	Rate rule; base not tied to capacity	Discretionary expansion; anchor unspecified
Convertibility	State-contingent corridors (audited bands)	None (managed float)	None/soft pegs; ad hoc controls
Credit allocation	Guided refinancing vs resource-linked collateral	Market-led; sovereign carry bias	Directed credit/DFIs; capture risk
Inflation mechanism	Supply-side disinflation via bottleneck relief	Demand suppression; weak on cost-push	Demand lift; price/FX vulnerability

Metanomics, Orthodoxy, and Heterodoxy differ not just in tools but in what they believe money is. Orthodoxy treats money as a nominal yardstick to be defended by an interest-rate rule and a CPI band; it reliably delivers low and predictable prices, yet in cost-push, bottlenecked economies its transmission fails credit chases sovereign carry, investment sags, and "stability without prosperity" results. Heterodoxy, by contrast, views money as a lever for demand and inclusion; it can jump-start activity and jobs, but without a hard nominal anchor expansion leak into consumption, asset cycles, FX strain, and governance slippage producing "intermittent prosperity without stability." Metanomics reframes money as a contract on measured productive-ecological capacity: issuance is tied to a diversified Resource Basket Index, discipline comes from audited convertibility corridors and a minimum backing ratio, and credit is guided toward food/energy/logistics bottlenecks that drive CPI. In effect, Metanomics internalizes orthodoxy's need for credibility and heterodoxy's push for transformation but replaces faith and discretion with measurement and rule-bound allocation so prices are stabilized through expanded capacity rather than against it, SME finance rises by design, and the external account strengthens via resource-linked buffers.

## 4 Why Stabilisation Without Production Fails – Structural Gaps in South Africa's Monetary Regime

For two decades, South Africa has been governed by a macroeconomic framework that has delivered statistical stability but structural deterioration. Inflation targeting has subdued headline price volatility, yet it has failed to generate rising productivity, investment, employment, or inclusive growth (see Table 2). The root of the failure is not a lack of technical competence, nor is it the moral weakness often blamed on corruption or austerity. It

is architectural: money in South Africa functions as an abstract numerical instrument instead of a contract that binds currency to productive capacity. This section presents a structural analysis of the system-wide gaps that explain why stabilisation has not translated into economic development.

#### **4.1 The Disconnection Between Monetary Expansion and Productive Capacity**

At a macro level, the South African economy is characterised by a widening gap between the creation of money and the creation of value. Over the period 2008–2023, reserve money and broad money supply expanded (SARB, 2023), while real GDP growth declined from 4.2% in the early 2000s to below 1% on average in the last decade. This divergence signals a foundational breakdown in the value circuit: money circulates in speculative and consumption channels but does not return to productive investment. Classical monetary systems assume that once liquidity is injected, it will flow back into productive sectors via price signals and interest rate adjustments. In South Africa, this circular flow has fractured because monetary tools operate in a structurally distorted market landscape.

The failure is visible in the collapse of gross fixed capital formation, which has declined from 19.7% of GDP in 2008 to 15.4% in 2023 (National Treasury, 2023). Investment levels far below the 25–30% threshold required for industrial transformation indicate that the capital formation engine has stalled. Money supply moves, but production does not respond. The orthodox expectation that “price stability will attract investment” has been empirically falsified in the South African context.

#### **4.2 Credit Apartheid: The Collateral System as a Barrier to Development**

The monetary transmission mechanism fails primarily because credit allocation is structurally exclusionary. Capital does not flow according to marginal productivity or entrepreneurial potential; it flows according to historic asset ownership. The South African banking system is collateral-centric rather than cash flow-centric. Banks require asset-based security property, equipment, or listed securities to grant loans. This instantly excludes the vast majority of Black South Africans who were historically dispossessed under apartheid, and who still lack transferable assets due to skewed land and wealth distribution.

Small and medium-sized enterprises (SMEs), which contribute over 52–60% of GDP and up to 70% of employment (IFC, 2020; OECD, 2022), access only 10–12% of commercial bank credit (SARB, 2023). This is not simply a market failure it is an engineered system of credit apartheid, where bankable collateral is a historical function of whiteness, formal land tenure, and entrenched asset ownership. The system substitutes heritage for creditworthiness, and thereby suppresses the productive majority of the country.

The collateral system, in its current configuration, disqualifies the future to protect the past. It is mathematically impossible for monetary policy to generate inclusive growth when finance is gated by a colonial asset test.

#### **4.3 Structural Inflation Misdiagnosed as Demand Inflation**

South Africa does not suffer from an overheating economy. It suffers from structural blockage. Yet the South African Reserve Bank (SARB) applies a demand-side instrument (interest rates) to a supply-side problem. The inflation problem is not caused by excess liquidity chasing too few goods it is caused by too few goods being produced and delivered efficiently.

A decomposition of CPI over the past decade shows that over 61% of inflation volatility is attributable to food and energy components (Stats SA, QLFS, 2023). These are bottleneck-driven price pressures arising from:

- Load-shedding and diesel reliance (energy inflation),
- Port and rail congestion (logistics inflation),
- Agricultural storage inefficiencies and market concentration (food inflation).

None of these issues are responsive to repo rate adjustments. Raising interest rates does not generate electricity. It does not unclog ports. It does not build agro-logistics storage. Instead, it suppresses productive investment, delays infrastructure recovery, and reinforces contraction. In short, South Africa faces cost-push inflation caused by scarcity, not demand-pull inflation driven by overheating. Yet monetary policy continues to treat scarcity as a liquidity problem, using a tool that worsens the underlying condition.

#### **4.4 Financialisation and the Sovereign Carry Trap**

Banks in South Africa are not development banks they are arbitrage institutions. When policymakers increase interest rates to attract foreign capital, they simultaneously raise the yield on government bonds. This creates a perverse incentive: banks can earn high, risk-free returns by lending to the state rather than to productive businesses. This phenomenon known as the sovereign carry trade has created a situation where bank balance sheets get stronger while national productivity weakens.

Private credit extension to the productive sectors fell from over 12% real growth in 2008 to negative levels in recent years (SARB Financial Stability Review, 2023). Meanwhile, government bond holdings by banks reached historic highs. The illusion of financial stability masks a dangerous truth: capital is circulating in closed loops of debt repayment instead of flowing into the real economy. The orthodox model insists that lower inflation will restore investor confidence yet paradoxically, it finances macroeconomic stagnation while subsidising the extraction of surplus by financial institutions.

#### **4.5 FX Fragility and External Dependency**

South Africa's monetary sovereignty is compromised by its import dependence and financing structure. Roughly 60% of capital inflows into South Africa are short-term portfolio investments, not long-term FDI (UNCTAD, 2023). This leaves the rand vulnerable to sudden stops capital flight triggered by global risk aversion rather than local fundamentals. Because the rand floats freely without any domestic capacity anchor, SARB defends it using interest rate hikes, which raises the cost of capital domestically and crowds out investment. This is monetary coloniality by design: South Africa must hurt itself to appear "credible" in the eyes of external bondholders.

#### **4.6 Institutional Incoherence: Policy without Architecture**

South Africa has no integrated development finance architecture. Monetary policy stabilises CPI. Fiscal policy stabilises debt. Trade policy defends liberalisation. Industrial policy tries to build sectors. These policies work against each other. Treasury refuses to finance infrastructure because of fiscal rules. SARB refuses to finance production because of mandate constraints. IDC struggles due to governance failures. SEFA is underfunded. The private sector hoards capital. The result is policy fragmentation disguised as prudence.

#### **4.7 Continental Confirmation: South Africa Is Not Alone**

This structural trap is not unique to South Africa. Nigeria has crude oil but imports fuel. Ghana exports gold and cocoa but borrows in dollars. Zambia exports copper but has no copper-backed liquidity system. Kenya has fintech innovation but cannot monetise agricultural productivity due to collateral exclusion. Across Africa, money and production do not speak to each other. Monetary systems are colonially inherited, financially extractive, and externally disciplined.

#### **4.8 Synthesis: The Failure Is Structural**

Orthodox macroeconomics promised that price stability would unlock private investment and jobs. It has not. Heterodoxy promised that stimulus would unleash growth. It did not. Both failed because both ignore the

architecture of monetary power. Any framework that treats money as a symbol without collateral reality will always produce stability without prosperity.

## **5 A Metanomic Reconfiguration of South Africa's Monetary Architecture**

South Africa stands at a monetary and developmental crossroads. Three decades after the end of apartheid, the country's macro-financial architecture continues to operate within a logic shaped by colonial extraction, speculative finance, and externally anchored monetary discipline. This inherited architecture preserves the dichotomy between a financialised core and a marginalised productive periphery, resulting in persistent unemployment, deindustrialisation, and systemic currency fragility. Monetary power is neither neutral nor merely technical; it is constitutional organising who may access liquidity, on what terms, and toward which purposes.

The Metanomic reconfiguration advanced here rejects the myth of monetary neutrality and places production not speculation at the heart of macroeconomic design. It operationalises a Resource-Based Monetary System (RBMS) through the Endogenous Resource-Backed Currency (ERBC), embeds a Resource Basket Index (RBI) as the dynamic value anchor, replaces collateral apartheid with productive collateral via a National Productive Collateral Registry (NPCR), and routes liquidity through a Production Refinancing Window (PRW) on a sovereign digital rail (G-Wallet). The goal is functional sovereignty: the capacity to finance national development without external subordination or internal exclusion.

### **5.1 The Failure of Abstract Money: Why South Africa Must Anchor Issuance in Production**

The prevailing regime issues money *ex nihilo* via bank balance sheets without systematic alignment to productive capacity. In such a regime, financial flows follow power and profit rather than public purpose. Credit concentration in speculation-heavy sectors property, consumer credit, and short-term arbitrage crowds out long-horizon investment, inflates asset prices, and deepens inequality.

Metanomics resolves this dislocation by conditioning issuance on verifiable productive value current or prospective. Anchored issuance restores money's function as a claim on output, disciplines speculative cycles, and decentralises access to liquidity. In a context of structural unemployment and shallow industrial investment, anchoring issuance in production is not an ideological preference; it is a macro-prudential necessity.

### **5.2 The Resource Basket Index (RBI): Turning National Wealth into Monetary Sovereignty**

The RBI transforms South Africa's diversified endowment gold and platinum group metals, manganese, chromium, iron ore, agricultural commodities, emergent energy vectors into a dynamic value anchor. Unlike a rigid commodity peg, the RBI is flexible, diversified, and endogenously updated, mitigating single-commodity volatility.

By internalising national wealth into monetary design, the RBI enables endogenous liquidity issuance without overreliance on fickle capital flows. It reduces currency vulnerability, restores price integrity, and grounds monetary policy in the real economy's productive frontier.

### **5.3 Replacing Collateral Apartheid with Productive Collateral**

Traditional collateral rules privilege titled land and formal assets, excluding the majority who possess productive capacity but lack legally recognisable collateral. Metanomics shifts the system from ownership collateral to production collateral.

The NPCR digitises and tokenises productive assets stored grain, livestock, machinery, mining concessions, energy systems, offtake contracts converting them into bankable instruments. This deepens the collateral base, democratises credit, and realigns finance with value creation.



#### **5.4 Liquidity with Direction: A New Refinancing Window for Production**

Liquidity scarcity is not South Africa's only problem; liquidity misdirection is. The Production Refinancing Window (PRW) channels issuance into priority corridors agro-processing, distributed energy, logistics, localised manufacturing using differentiated rates, maturities, and risk pricing tied to national purpose.

Executed via programmable smart contracts on sovereign rails, PRW liquidity is auditable and self-liquidating as output materialises. When future output backs present liquidity, expansion is stabilising rather than inflationary.

#### **5.5 Ending Structural Inflation by Expanding Productive Supply**

South Africa's inflation is structurally induced driven by supply bottlenecks, logistics costs, oligopolistic mark-ups, and import pass-through. Rate hikes that suppress demand do not remedy structural constraints; they raise production costs and entrench stagflation. Metanomics addresses inflation at its source: expand domestic capacity, shorten supply chains, localise energy, and de-risk logistics. Price stability becomes a function of productive sovereignty, not austerity.

#### **5.6 Currency Defence without Self-Harm: Resource Settlement Notes (RSNs) and FX Shields**

Conventional currency defence reserve drawdowns and punitive rate hikes extracts a domestic toll. Resource Settlement Notes (RSNs) provide a non-destructive alternative: bilateral settlement instruments backed by the RBI that allow imports to be paid with claims on real resources rather than scarce foreign currency. Paired with FX Shields commodity-indexed forward guarantees RSNs delink settlement from dollar dependency and insulate the rand from speculative shocks without sacrificing domestic production.

#### **5.7 A Monetary Constitution for South Africa**

Transformation must be institutional, not discretionary. A Monetary Constitution codifies principles and guardrails: (i) issuance anchored in production; (ii) directional liquidity for public purpose; (iii) RBI-backed sovereignty; (iv) non-destructive currency defence; and (v) transparent, decentralised governance.

It aligns the central-bank mandate with productive transformation and financial inclusion while preserving stability and insulating policy from both political capture and financial oligarchy.

#### **5.8 The G-Wallet Rail and the Tokenised Productive Economy**

Technological sovereignty is the operational complement of monetary sovereignty. The G-Wallet tokenises productive assets energy credits, grain receipts, logistics capacity, municipal bonds embedding enforceable contracts and traceability. By harmonising fiat and asset-backed tokens in a single rail, G-Wallet formalises informal activity without punitive compliance and ensures liquidity reaches productive ends.

#### **5.9 A Sovereign Path to Inclusive Growth and SME Industrialisation**

SME industrialisation requires patient, purposive liquidity. RBI-backed guarantees, PRW corridors, and productive collateral unlock working capital for township manufacturing, agro-processing, and distributed energy. Inclusive growth becomes a design property of the monetary system rather than a residual outcome of trickle-down expansion.

#### **5.10 Continental Replicability: Afro-Monetary Sovereignty Beyond Borders**

The architecture is intentionally portable. Through ERBC trade routes and regional RBIs (SADC, ECOWAS, EAC), African countries can settle intra-African trade without Western monetary intermediation.

This is practical Pan-Africanism: a network of sovereign monetary nodes cooperating through resource-anchored settlement and shared productive corridors.

South Africa's stagnation reflects a failure of monetary design, not a scarcity of ideas. Metanomics restores the constitutive link between money and production, replaces extractive finance with productive finance, and grounds currency defence in real value. With institutional courage and architectural clarity, monetary emancipation can move from thesis to praxis.

## 6 Conclusion: Sovereignty, Value, and the Work of Monetary Reconstruction

This paper has argued that South Africa's long stagnation amid contained inflation is not a policy accident but the predictable outcome of a monetary architecture that stabilises a number while disabling the purpose of money. Orthodoxy secures prices through a narrow instrument and an externalised notion of credibility; heterodoxy mobilises liquidity but too often without a disciplined anchor. Both are regimes of abstraction in an economy whose binding constraints are material energy, logistics, productive density, and inclusion. Metanomics was advanced as the synthesis that relocates money inside the circuits of production and common purpose. In this frame, issuance is not an act of faith or discretion; it is a rule-bound contract on measured capacity, governed by institutions that make sovereignty operational rather than rhetorical. This conclusion distils that claim and sets out the horizon of work still to be done, in South Africa first and in the wider Global South, thereafter, as elaborated throughout the manuscript.

The core insight is straightforward but exacting: stability worth having is achieved through production, not against it. By embedding a Resource Basket Index (RBI) as a dynamic value anchor and operationalising Resource-Based Monetary Sovereignty (RBMS) through an Endogenous Resource-Backed Currency (ERBC), liquidity expands with the roots of value rather than the weather of sentiment. A National Productive Collateral Registry (NPCR) recognises yield-bearing assets grain receipts, power purchase agreements, beneficiation offtakes, municipal revenue streams as bankable claims, ending collateral apartheid without sacrificing prudence. A Production Refinancing Window (PRW) routes central liquidity, on published terms and audits, to bottleneck-relieving investments in energy, storage, logistics, and firm productivity. For the external account, Resource Settlement Notes (RSNs) and FX shields provide currency defence without self-harm, delinking trade settlement from episodic dollar scarcity and rate-hike recessions. These instruments are made legible and enforceable on a sovereign digital rail G-Wallet so that money, measurement, and law converge in programmable, auditable flows.

The philosophical wager is that monetary power is constitutional before it is technical. A Monetary Constitution is therefore not an ornament but the enabling constraint: it codifies the anchor (minimum backing ratios, audit cadence, haircuts), the rule (issuance linked to RBI growth with state-contingent error-correction), the corridor (convertibility bands that tighten under stress), and the governance (disclosure, distributed authority, and appellate review). Such a constitution is the antidote to both politicised discretion and technocratic opacity; it is the institutional memory that keeps a society faithful to the proposition that money is a civilisational instrument, not a private rent-extraction machine.

The implications for Africa and the wider Global South are immediate. The continent's apparent paradox resource richness with monetary fragility dissipates once value is collateralised domestically and circulated through transparent rules. ERBC corridors allow regional settlement that strengthens, rather than fragments, policy space; joint RBIs in SADC, ECOWAS, or the EAC can pool diversification and risk, replacing the brittle dependence of single commodity pegs with disciplined flexibility. In this reading, Pan-Africanism becomes a monetary engineering project: interoperable registries, shared audits, harmonised convertibility corridors, and cross-border refinancing of supply-chain bottlenecks that currently price inflation into basic goods. Far from autarky, Metanomics is a grammar of intelligent interdependence: trade what you can measure, settle what you can redeem, and finance what you can verify.

Yet candour requires acknowledging the hazards. A resource-anchored regime can be mispriced, captured, or misgoverned. The integrity of audits, the calibration of haircuts, the protection of digital rails, and the

insulation of rule-setting from factional politics are not peripheral tasks; they are the regime. Transition risks must be managed: legacy debt in fiat, path-dependent bank incentives, and the choreography between fiscal and monetary authorities. These risks are precisely why the constitutional layer matters. When measurement, rule, and review are public and justiciable, discretion is narrowed, and credibility ceases to be a performative plea to offshore capital; it becomes an earned property of transparent institutions.

The research agenda is therefore concrete. First, empirical validation: estimate RBI sleeves with high-frequency data (minerals, agriculture, energy receivables, logistics throughput), evaluate volatility-adjusted haircuts, and test issuance-to-capacity co-movement against inflation composition. Second, policy simulation: augment small open-economy models to include an anchored issuance rule, convertibility corridors, and resource-linked refinancing; compare impulse responses to supply and external shocks with and without the anchor. Third, governance and law: specify token-recognition statutes, perfection of security interests in digitised collateral, and appellate oversight of rule parameters. Fourth, rail security and ethics: formal proofs and red-team audits for G-Wallet smart-contract primitives; precise data governance that safeguards privacy while enabling compliance. Fifth, pilots and evaluation: time-bound, auditable corridors maize storage, distributed solar, rail slots where success is measured by time-to-cash, unit-cost reduction, SME survival, and CPI decomposition shifts.

In the end, the question this paper poses is not whether price stability matters; it is whether stability has been severed from the reasons it matters. A society stabilises prices to widen life chances, not to polish aggregates. The promise of Metanomics is not that it abolishes scarcity or politics, but that it re-couples money to the processes by which a people feed, power, move, and employ themselves so that credibility is earned at home and recognised abroad. In the language of Ma'at, order and justice are the same work; in the lesson of Sankofa, the future is a discipline of memory. If South Africa, and with it Africa and the Global South, are to exit the long parenthesis of monetary dependency, it will be by writing institutions in which liquidity is the servant of production, production the servant of dignity, and dignity the measure of prosperity.

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