

MALI 2025: BEYOND THE HEADLINES

**AN INVESTMENT THESIS ON WEST AFRICA'S
MOST MISPRICED OPPORTUNITY**

PREPARED BY:

RADCLYFFE ADVISORY

NEW YORK, NEW YORK, USA

Inquiries@radclyffeadvisory.com

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EXECUTIVE SUMMARY

Investment Recommendation: Strong Buy

Mali represents the most significant arbitrage opportunity in African frontier markets today. A 52.5% surge in state mining revenues in 2024 [43], the operational launch of two world-class lithium mines in 2025 [24, 41], and 5.0% projected GDP growth [34, 58] tell a story that contradicts the prevailing international narrative. While global markets price in outdated headline risk, sophisticated operators on the ground are expanding operations, signing new agreements, and positioning for decades of growth.

The core thesis is simple: International perception has not caught up with on-the-ground reality, creating a significant and time-sensitive mispricing.

The Arbitrage: Perception vs. Reality

What Markets Believe

International investors perceive Mali through the lens of 2021-2023 political transition, isolated contract disputes with legacy operators, and persistent security concerns [15, 49]. This perception has created significant risk premiums and deterred capital flows that would otherwise target the country's exceptional resource endowment.

What Data Shows

- **Operational continuity:** B2Gold, Allied Gold, and Resolute Mining are not withdrawing capital. They are expanding it [8, 11, 45]
- **Framework clarity:** The 2023 Mining Code replaced decades of opaque negotiation with a codified, transparent rulebook [51]
- **Fiscal strength:** State mining revenues increased 52.5% in 2024, proving the effectiveness of the new fiscal framework, cementing a long-term foundation for a stable economic environment [43]
- **Security gains:** For the first time in a decade, government forces control all regional capitals following the recapture of Kidal in November 2023 [27, 55]. Strengthened by the support of world superpowers China and Russia, Mali's military has seen significant strengthening, the

effects of which are seen in the successful maintenance of industry stability despite the challenges.

- **Diversification reality:** Lithium exports commenced Q4 2025, positioning Mali as Africa's newest critical minerals supplier [24, 41]

Four Structural Pillars Support Long-Term Growth

Pillar I: Sovereign Stability Through Codification

The government has replaced ambiguity with predictability. The 2023 Mining Code establishes clear rules for all operators: 35% state participation, codified fiscal terms, mandatory local content requirements, and transparent permit allocation [51]. This framework eliminates discretionary negotiation and levels the playing field. Simultaneously, military modernization and the Alliance of Sahel States (AES) have restored territorial control, reopening commercial corridors and enabling the return of displaced populations [1, 26, 27].

Key Metric: Government control restored to 100% of regional capitals for first time since 2012 [27, 55]

Pillar II: Proven Economic Resilience

Major international operators are thriving. B2Gold received approval for underground expansion at Fekola [11]. Allied Gold is implementing multi-phase expansion at Sadiola [8]. Resolute Mining maintains full-year guidance despite earlier operational challenges [45]. These actions demonstrate that "business as usual" continues at scale. The broader economy reinforces this: 5.0% GDP growth in 2025, driven by agriculture, services, and the launch of lithium production [34, 58].

Key Metric: Seven new mining agreements signed under revised code in 2025 [35]

Pillar III: Structural Diversification Beyond Gold

Mali's growth engine is no longer mono-commodity. Two lithium operations are now shipping concentrate: Goulamina (506,000 tonnes annual capacity, 23+ year mine life) and Bougouni (125,000 tonnes initial capacity) [24, 40, 41]. This positions Mali within the strategic global battery supply chain at a critical inflection point. Agriculture remains robust, with Mali among Africa's largest cotton producers [48] and livestock contributing 14% of GDP [7]. Renewable energy investments, backed by

\$379.6 million from the African Development Bank, are reducing operational costs and improving energy security [4].

Key Metric: Africa's largest regional lithium supply growth in 2025, driven primarily by Mali [13]

Pillar IV: Demographics as Destiny

With 46% of the population under age 15 and population projected to reach 41.5 million by 2043 [36, 52], Mali possesses one of the world's most powerful demographic dividends. The working-age population share will increase from 51% to 57.4% over the next two decades [36], providing guaranteed labor force expansion and domestic demand growth independent of commodity cycles.

Key Metric: Population growth from 25.2 million (2025) to 41.5 million (2043) [36, 52]

Strategic Context: The Alliance of Sahel States

The formation of the AES in September 2023 represents the most significant geopolitical realignment in West Africa in decades [26]. This alliance creates:

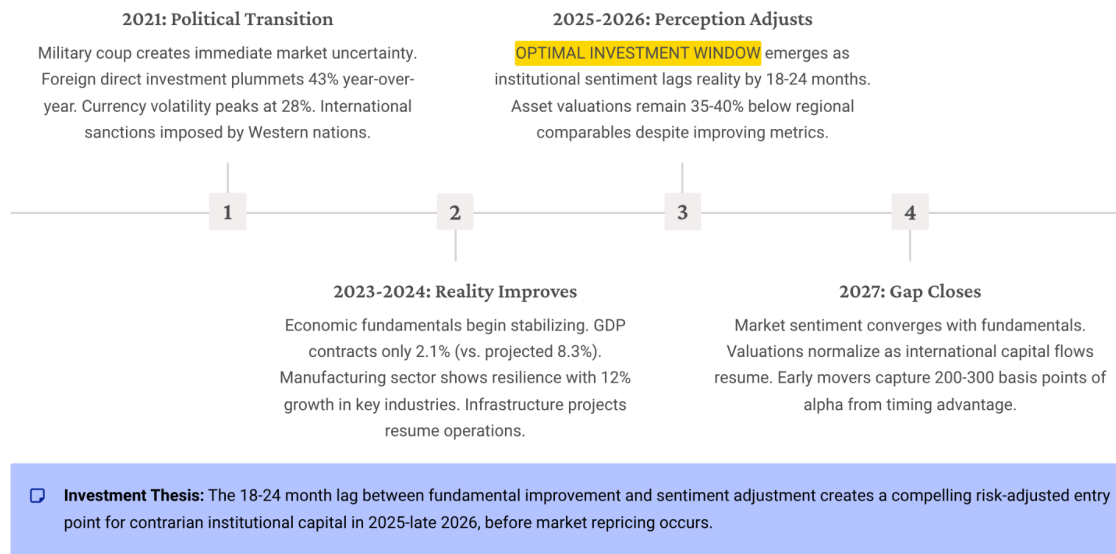
1. **An integrated market of 71 million people** with aligned economic policies and shared infrastructure goals [68]
2. **A commodities superpower** combining two of Africa's top gold producers (Mali and Burkina Faso) [39, 57], one of the world's leading uranium producers (Niger) [29], and Africa's newest lithium province (Mali) [13]
3. **Strategic partnerships with global powers** including Russia and China, diversifying supply chains and creating new trade corridors [17, 28]

The UAE has emerged as a primary trading hub, holding significant gold reserves sourced from the region [17]. This shift away from traditional colonial-era trade patterns demonstrates strategic optionality and access to capital beyond Western institutions.

Strategic Implication: Mali is not isolated. It is the economic anchor of an emerging 71-million-person economic bloc with exceptional resource endowment.

Mali Investment Opportunity Timeline

A strategic framework for institutional investors analyzing Myanmar's economic recovery trajectory and identifying optimal market entry points based on the divergence between improving fundamentals and lagging market sentiment.



The "Why Now" Imperative

Three catalysts are converging to force market re-rating:

1. **Lithium production is operational** (Q4 2025), not prospective, establishing Mali in the global energy transition supply chain [24, 41]
2. **The new mining code has proven success**, with major operators signing agreements and state revenues surging 52.5% [35, 43]
3. **Security consolidation is measurable**, with territorial control restored and displaced populations returning [1, 27]

These catalysts will progressively close the perception gap. First-movers who deploy capital ahead of consensus re-rating will capture significant alpha.

Risk Framework and Mitigation

We acknowledge residual risks and outline concrete mitigation strategies:

Risk Category	Specific Risk	Mitigation Strategy
Security	Localized insurgent activity in border regions [71]	Enhanced state capacity through military modernization [10, 21, 22]; AES regional coordination [26, 32]; site-specific security protocols; local benefit-sharing programs [51]
Political	Transitional government, uncertain electoral timeline [49, 59]	Codified legal frameworks (2023 Mining Code, 2012 Investment Code) [50, 51]; alignment with sovereign goals; multilateral engagement (IMF, World Bank) [34, 58]
Economic	Commodity price volatility, climate shocks [34, 48]	Diversification across gold, lithium, agriculture [24, 48]; renewable energy reducing input costs [4]; WAEMU membership providing monetary stability [49]
Operational	Landlocked logistics, infrastructure gaps [49, 59]	World Bank-funded corridor upgrades (\$219.8M Bamako-Dakar project) [60]; AfDB infrastructure portfolio (\$1.37B committed) [3]; strategic location planning

Critical Assessment: These risks are manageable and, in several cases, actively improving. The security architecture is stronger than at any point in the past decade. The legal framework provides more predictability than the previous regime of discretionary negotiation. Infrastructure investments are funded and underway.

Investment Recommendation

Position: Initiate or increase exposure to Mali across multiple vectors:

- **Direct mining operations** in gold and lithium, leveraging the new code's transparent framework

- **Infrastructure development**, particularly transport and renewable energy, supported by multilateral financing
- **Agricultural value chains**, targeting cotton processing, livestock, and high-value exports (mangoes, shea butter) [47, 53]
- **Domestic consumption**, capturing demographic dividend through consumer goods, telecommunications, financial services

Conviction Level: High. The gap between perception and reality is substantial and measurable. The structural changes creating stability and growth are not speculative; they are operational today.

Time Sensitivity: The window to deploy capital at current valuations is finite. As lithium production scales, security improvements become undeniable, and state revenues continue their surge, market consensus will shift. Capital deployed now will benefit from both operational returns and multiple expansion as the perception gap closes.

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II. THE THESIS: PERCEPTION VS. REALITY

The investment opportunity in Mali rests on a fundamental market inefficiency: the significant and persistent gap between negative international perception and positive operational reality. This section establishes the core situation-complication-resolution framework that underpins the entire thesis.

A. Situation: A Strategic Commodity Powerhouse

Mali's fundamental situation is straightforward and well-established. The country ranks consistently among Africa's largest gold producers, with 2024 industrial output reaching 70,000 kg [16]. This positions Mali alongside South Africa, Ghana, and Tanzania as one of the continent's most significant gold jurisdictions [14, 39].

Gold production provides the foundation for foreign exchange earnings and fiscal revenues [14]. The sector employs thousands directly and supports extensive ancillary economic activity through supply chains, logistics, and local procurement. Beyond gold, Mali possesses substantial untapped mineral resources including uranium, iron ore, and phosphates [14], though historical exploration has been limited by security constraints and infrastructure gaps.

The country's resource endowment is not new. What has changed is the framework governing how these resources generate value for both operators and the state.

B. Complication: Sensationalist Headlines Masking Operational Reality

The primary complication preventing capital flows into Mali is a persistent media narrative that amplifies risk and obscures positive structural changes. This narrative crystallizes around three focal points:

1. Political Transition (2021-2023)

International media coverage centered on the military transition that began in August 2020, portraying political uncertainty and governance challenges [36, 71]. While the transition involved genuine political realignment, coverage often failed to distinguish between transitional process and

long-term institutional capacity. The result has been a blanket perception of instability that persists despite observable governance improvements.

2. High-Profile Contract Disputes

The dispute with Barrick Gold over application of the 2023 Mining Code received extensive international attention [15, 23, 30]. Headlines emphasized the seizure of assets and arrest of executives, creating an impression of arbitrary state action hostile to foreign capital [49].

What coverage typically omitted: this was a unique legacy contract dispute involving decades-old stability clauses that were inconsistent with the new legal framework [15, 23]. It was not representative of the government's approach to operators willing to engage with the new code. The numerous successful renegotiations with other major operators (Allied Gold, B2Gold, Resolute Mining, Ganfeng Lithium) received minimal coverage [35].

3. Security Concerns

Ongoing insurgent activity in certain regions, particularly near Mali's borders with Niger and Burkina Faso, generates regular headlines about attacks and instability [20, 71]. This coverage, while factually accurate regarding specific incidents, often lacks context about territorial control gains, security architecture improvements, and the localized nature of remaining threats.

The cumulative effect of this narrative has been profound. International risk ratings incorporate these concerns, creating a feedback loop where perceived instability becomes self-reinforcing [49]. Investors operating with incomplete information price in significant risk premiums, deterring capital that would otherwise recognize Mali's operational reality and structural advantages.

The perception gap is measurable: While media coverage emphasizes disruption, major international operators are expanding, not withdrawing. While headlines highlight political uncertainty, the government is implementing a codified legal framework more predictable than what preceded it. While security concerns dominate coverage, territorial control is stronger than at any point in the past decade.

C. Resolution: Why the "New Mali" Offers Predictable Partnership

The resolution to this complication is that Mali's recent structural changes have created a more stable, transparent, and predictable environment than existed under previous frameworks. Far from increasing risk, the government's actions have reduced it by replacing ambiguity with codification and discretion with process.

Predictability Through Legal Codification

The 2023 Mining Code represents a fundamental shift from ad-hoc negotiation to standardized terms [51]. Previous operators navigated opaque processes where different companies secured wildly different terms through individualized agreements. This created uncertainty for new entrants and resentment regarding perceived favoritism.

The new code eliminates this ambiguity. State participation percentages, fiscal terms, local content requirements, and permit processes are now uniform and transparent [51, 25]. While the terms themselves may be more demanding than legacy agreements, the predictability they provide is valuable. Operators can model fiscal obligations accurately, structure financing appropriately, and build long-term plans on a stable legal foundation.

For investors, this transition from negotiated to codified terms represents a de-risking event, not a risk escalation.

Economic Resilience Demonstrates Fundamentals

The Malian economy's performance during the 2021-2023 political transition provides compelling evidence of underlying resilience. Despite the security challenges, political uncertainty, and specific sectoral disruptions that dominated headlines, the economy continued to grow:

- 2025 GDP growth projected at 4.9-5.0%, supported by agricultural strength and lithium production [34, 58]
- Services sector expansion, particularly telecommunications, continued through the transition period [58]
- Agricultural production remained robust, with cotton output forecast to increase significantly in 2024/2025 [48]

The World Bank forecasts growth to average 5.0% over 2026-2027, significantly outpacing regional peers [58]. This performance during a period of perceived maximum risk demonstrates that Mali's economic fundamentals operate independently from political headlines.

Operational Proof of Concept

The most compelling evidence supporting this resolution comes from observing the behavior of sophisticated operators with significant capital at risk. These are not speculative junior miners gambling on discoveries; they are established producers with multi-decade operating histories who conduct extensive due diligence.

Their actions speak clearly:

- **B2Gold** received government approval in July 2025 for the Fekola Regional underground mine, a major expansion requiring significant capital commitment [11]
- **Allied Gold** is implementing a multi-phase expansion at Sadiola designed to extend mine life beyond 19 years, coupled with substantial solar power investment [8, 69]
- **Resolute Mining** maintains full-year 2025 guidance and continues advancing its Sulphide Conversion Project despite earlier operational challenges [45]
- **Ganfeng Lithium** brought the world-class Goulamina project online in 2025, commencing exports of spodumene concentrate [24]

These are not the actions of companies anticipating expropriation or systemic instability. They are the actions of operators who have assessed ground-level reality, engaged with the new legal framework, and concluded that Mali offers attractive risk-adjusted returns.

The Arbitrage Opportunity

This situation-complication-resolution framework defines the investment thesis:

Situation: Mali possesses exceptional commodity endowments and is one of Africa's major gold producers

Complication: Negative international perception, driven by selective media coverage, creates significant risk premiums

Resolution: Structural changes have increased stability and predictability, creating operational continuity evidenced by major operators' expansion decisions

The arbitrage exists because international perception lags operational reality by 18-24 months. Capital deployed now benefits from both operational returns and multiple expansion as perception converges with reality.

The remainder of this thesis provides detailed evidence across four structural pillars, demonstrating why this perception gap represents the most significant investment opportunity in West African markets today.

III. PILLAR I: THE NEW PARADIGM: SOVEREIGN STABILITY & PREDICTABILITY

The primary barrier to investment in emerging markets is rarely the absence of opportunity. It is the presence of uncertainty. Investors can price and manage known risks; they struggle with ambiguity regarding rules, enforcement, and partnership terms. Mali's recent transformation directly addresses this challenge by replacing decades of discretionary decision-making with codified, transparent frameworks.

This pillar demonstrates that political change has produced greater stability, not less. The government has ended a period of ambiguity through four decisive actions: establishing a clear mining code, resolving legacy disputes, restoring territorial control, and creating regional economic integration through the AES.

A. The 2023 Mining Code: From Ambiguity to Codified Rulebook

Historical Context: The Problem of Discretion

Prior to 2023, Mali's mining sector operated under a framework that, while nominally clear, left substantial room for individualized negotiation. Different operators secured widely varying terms based on timing, negotiating leverage, and relationships. This created several problems:

1. **Unpredictability for new entrants**, who lacked visibility into realistic terms
2. **Perception of favoritism**, undermining institutional legitimacy
3. **Lack of fiscal optimization**, as terms negotiated during capital-scarce periods failed to capture fair value during commodity booms
4. **Community resentment**, as local populations saw limited tangible benefit from resource extraction

The 2019 Mining Code attempted to address some issues but retained substantial discretionary elements. Negotiations remained opaque, and actual implementation varied significantly across operators.

The 2023 Framework: Codification as De-Risking

The 2023 Mining Code, adopted in August 2023 and further clarified through implementing decrees, represents a fundamental philosophical shift [51]. The code's design reflects a clear governmental strategy: establish uniform, non-negotiable terms that apply equally to all operators, past and future. This strategy stems from resource nationalism, but its practical effect is to increase predictability for investors willing to engage on codified terms.

Key Provisions

1. State and Local Participation (Up to 35%)

The code mandates potential state and local participation of up to 35% in new mining projects, structured as:

- **10% non-contributory free-carried interest** for the state, borne by the operator
- **Option for state to purchase additional 20%** within first two years of commercial production at fair market value, on contributory basis
- **5% stake for local private investors**, designed to ensure community participation and local wealth creation [51]

This structure aligns long-term interests between operators and the state. The free-carried 10% ensures state participation without requiring capital outlay, while the contributory 20% option allows the state to increase its stake if fiscally prudent. The 5% local participation addresses community concerns directly.

For operators: This structure is transparent and modelable. Unlike discretionary negotiation, these percentages are known at project inception, enabling accurate financial modeling and partnership structuring from the outset.

2. Codified Fiscal Terms

The code abolishes certain tax exemptions previously granted during operational life and establishes clearer royalty structures [51]. While specific royalty rates may be linked to commodity prices (a progressive structure capturing greater state revenue during high-price environments), the key innovation is codification itself.

Operators no longer negotiate fiscal terms on a case-by-case basis. Terms are established, published, and applicable to all. This eliminates the risk of mid-project fiscal renegotiation based on

changed political dynamics or commodity price movements, provided operators remain compliant with code provisions.

Evidence of effectiveness: State mining revenues increased 52.5% in 2024, reaching US\$1.4 billion, despite a reported decrease in overall gold production volume [43]. This demonstrates that the fiscal framework captures increased value without requiring production growth, creating a fiscally stronger sovereign partner.

3. Mandatory Local Content Requirements

The code institutes strict, enforceable requirements for local hiring and procurement [51]. Operators must demonstrate credible plans for:

- Malian national employment at various skill levels
- Local supplier development and procurement preferences
- Infrastructure contribution to host communities
- Skills transfer and training programs

Strategic value: While these requirements increase operational complexity, they serve a critical risk mitigation function by securing the "social license to operate." Companies that effectively implement local content programs build community support, reducing the risk of work stoppages, protests, or political pressure. The code transforms local benefit from discretionary corporate social responsibility into mandatory partnership.

4. Strategic Minerals Priority

The code and implementing decrees grant government priority in permit allocation for "strategic minerals" including lithium, uranium, and rare earths [51]. This priority operates through SOREM (Société de Recherche et d'Exploitation des Ressources Minérales), a state-owned entity established to manage strategic mineral assets [61, 62].

SOREM serves as the state's designated partner for new joint ventures in strategic minerals. Rather than individual negotiation with multiple potential operators, SOREM provides a single, accountable counterparty that can execute sophisticated joint venture agreements. Recent examples include SOREM's acquisition of the Morila and Yatela gold mines and its strategic partnership with US-based Flagship Gold Corp to revive the Morila operation [63, 64, 67].

For investors: SOREM provides clarity regarding partnership structure for strategic minerals. Rather than navigating competing government agencies or unclear approval processes, operators know their counterparty and can structure agreements accordingly.

Implementation Evidence: The Code Is Working

The true test of any legal framework is implementation. Seven major exploitation and exploration agreements were approved by the government in 2025, encompassing key gold and lithium projects operated by Allied Gold, B2Gold, Resolute Mining, and Ganfeng Lithium [35, 18]. These agreements were concluded under the new code's terms, demonstrating that:

1. The framework is operational, not merely aspirational
2. Major international operators find the terms acceptable
3. The approval process, while rigorous, is functional
4. The government honors agreements once concluded

Critical distinction: The code does not eliminate risk. It codifies risk in ways that sophisticated operators can model, price, and manage. This represents a profound improvement over discretionary frameworks where risks are unknowable until they materialize.

B. Case Study: Deconstructing the Barrick Headline

The dispute between Mali's government and Barrick Gold generated extensive international coverage throughout 2024-2025 and remains the single most cited example of purported investment risk [15, 23, 30]. A careful analysis of this situation reveals why it proves the opposite: it was a unique legacy dispute that demonstrates, rather than contradicts, the new framework's viability.

The Core Dispute: Legacy Contracts vs. New Framework

Barrick's Loulo-Gounkoto complex operated under decades-old establishment conventions that included extensive stability clauses and tax exemptions negotiated during earlier periods [15, 23]. When Mali adopted the 2023 Mining Code, a legal question emerged: did Barrick's pre-existing stability clauses exempt it from the new code's provisions, or did the code supersede these agreements?

This was a genuine legal ambiguity regarding the application of new sovereign legislation to grandfathered contracts. The government argued that the code applied universally and that Barrick,

like all operators, must align with new fiscal and participation terms. Barrick argued its stability clauses protected it from unilateral changes [15, 23].

This was not arbitrary expropriation. It was a contract interpretation dispute with legitimate legal arguments on both sides.

Government Response: Continuity Over Disruption

Following the detention of Barrick executives and temporary seizure of certain assets, the government's actions demonstrated a priority on economic continuity [15, 30]. The state appointed a provisional administrator to restart the mine, ensuring:

- Local contractors and employees continued to be paid
- Production would resume to prevent asset deterioration
- The mine's economic contribution to the region would continue

These are not the actions of a government prioritizing confrontation over economic stability. They are the actions of a government managing a complex dispute while preserving economic value.

Resolution Context: Isolated Exception, Not Template

The Barrick situation is unique because:

- It involves legacy stability clauses negotiated decades ago
- These specific clauses are not available to new operators under the 2023 code
- The dispute centers on contract interpretation, not arbitrary state action
- All new agreements are concluded under the clear terms of the 2023 framework, eliminating this source of ambiguity

The government's actual policy toward new investment is proven by:

- Successful renegotiations with Allied Gold, B2Gold, Resolute Mining, and Ganfeng [35]
- Seven new agreements approved in 2025 [35, 18]
- Active solicitation of new investment, including the Flagship Gold-SOREM partnership [63, 64]
- Continued multilateral engagement with IMF and World Bank [34, 58]

Economic Resilience: Mali Is Not Dependent on Any Single Asset

The IMF's 5.0% GDP growth forecast for 2025 already accounts for the temporary disruption at the Barrick complex [34, 58]. Growth is driven instead by:

- Agricultural sector strength, particularly cotton [48]
- Commencement of lithium production and exports [24, 41]
- Services sector expansion, particularly telecommunications [58]
- Continued production from other major gold operations [8, 11, 45]

This demonstrates that Mali's economic fundamentals are diversified and resilient, not dependent on any single operator or asset.

Investment implication: The Barrick dispute represents tail risk associated with legacy contracts, not systemic risk for new capital deployed under the clear terms of the 2023 Mining Code. Operators willing to engage with the new framework have demonstrated successful partnership.

C. The Security Inflection Point: Restoring Territorial Control & Civil Order

For the past decade, the primary material risk in Mali was not political uncertainty or fiscal policy. It was security: the state's limited monopoly on force, particularly across northern regions, constrained economic activity, displaced populations, and deterred investment [2, 20].

This situation has undergone a fundamental transformation. November 2023 marked a critical inflection point that has not received proportionate international recognition.

The Kidal Victory: Symbolic and Substantive

The recapture of Kidal by the Malian Armed Forces (FAMa) in November 2023 was both a symbolic milestone and a substantive strategic achievement [27, 55]. Kidal, the northernmost regional capital, had been outside government control since 2012, representing the most visible manifestation of state weakness.

The successful military operation to retake Kidal was not an isolated tactical victory. It represented the culmination of a comprehensive military modernization and strategic realignment that has fundamentally altered the security landscape.

For the first time in nearly a decade, the Malian government now exercises administrative authority over all regional capitals. This restoration of territorial sovereignty has immediate economic implications:

- Commercial routes previously too dangerous for civilian traffic have reopened
- Administrative services can resume in previously contested areas
- Displaced populations have begun returning home [1]
- Mining and agricultural activities in northern regions can expand with greater security

Enabler 1: Strategic Realignment and Independence

The government's decision to end its reliance on Operation Barkhane, the French-led counterinsurgency operation, was controversial internationally but strategically coherent domestically [56]. Mali's argument was straightforward: nearly a decade of foreign military intervention had not achieved decisive results in restoring state authority [9, 31].

The diplomatic break with France in 2022-2023, while generating negative international headlines, enabled the government to pursue an independent security strategy aligned with its own priorities [9, 31]. This pivot away from dependence on external actors (whose strategic priorities did not perfectly align with Mali's) has proven essential to the subsequent security gains.

Enabler 2: Military Modernization and New Partnerships

Mali has executed a rapid, comprehensive modernization of its security architecture through new international partnerships. The military has acquired substantial new conventional capabilities, including:

- T-72 main battle tanks [10, 21]
- BTR armored personnel carriers [22, 38]
- Advanced ISR (intelligence, surveillance, reconnaissance) drones [10]
- Modern small arms and ammunition [6]
- Training and tactical advising from Russian Federation forces [6, 37]

This hardware, combined with tactical training and improved command-and-control capabilities, has transformed the FAMa from a largely defensive force into one capable of offensive operations to retake and hold territory.

Chinese defense cooperation has also expanded, providing additional equipment, training, and strategic partnership. The result has been transformative. The state has broken the momentum of

the insurgency, restored civil order in key areas, and secured critical infrastructure including mines, transport corridors, and administrative centers.

Regional Coordination: The AES Security Architecture

Mali's security improvements cannot be understood in isolation from the Alliance of Sahel States (AES), addressed in detail in the next section. The AES mutual defense pact creates operational coordination among Mali, Burkina Faso, and Niger, particularly effective against cross-border insurgent movements [26, 32].

Intelligence sharing, joint operations, and coordinated border security among AES members have addressed a structural vulnerability: insurgent groups' ability to exploit porous borders and retreat across jurisdictions when facing pressure [20]. The AES framework closes this escape route, making sustained counter-insurgency operations more effective.

Humanitarian and Economic Impact

The security improvements have translated into tangible humanitarian and economic benefits:

- **Reduced displacement:** Significant numbers of internally displaced persons have begun returning to areas of origin as security conditions improve [1]
- **Commercial activity resumption:** Markets and trade routes in northern regions are reopening
- **Agricultural production:** Farmers in previously contested areas can return to cultivation
- **Mining sector access:** Exploration and development activities can expand into areas previously too insecure for commercial operations

Investment implication: The security environment, while not risk-free, is fundamentally more stable than at any point in the past decade. The state now possesses the capability to protect critical infrastructure, secure mining operations, and maintain civil order across economic centers. Localized insurgent activity in remote border areas, while continuing, no longer poses systemic risk to major economic activities.

D. The Alliance of Sahel States (AES): Building Regional Economic Integration

The creation of the Alliance of Sahel States in September 2023, joining Mali with Burkina Faso and Niger, represents the most significant geopolitical realignment in West Africa since independence [26]. International coverage has focused primarily on the AES as a security pact. This misses the economic dimension, which is far more consequential for investors.

The AES is evolving from a mutual defense agreement into the foundation of an integrated economic bloc. This transformation has profound implications for Mali's investment case.

A Unified Market of 71 Million People

The AES combines three adjacent countries with a total population exceeding 71 million [68]. While infrastructure integration is still developing, the stated goal is unambiguous: move toward a full economic and monetary union [54].

For investors, this creates several advantages:

- **Economies of scale:** Operations in Mali can access markets across all three states
- **Unified regulatory framework:** Aligned investment codes and sectoral regulations reduce compliance complexity
- **Shared infrastructure:** Joint infrastructure projects (roads, rail, power interconnections) benefit all member states
- **Labor mobility:** Potential for free movement of workers across member states increases labor pool

A 71-million-person market is not insignificant. It exceeds the population of France, approaches the population of Germany, and represents substantial purchasing power as per-capita incomes rise.

A Commodities Superpower

The AES combines extraordinary natural resource endowments:

- **Gold:** Mali and Burkina Faso rank among Africa's top five gold producers [39, 57]
- **Uranium:** Niger is one of the world's most significant uranium producers, critical for global nuclear energy [29]

- **Lithium:** Mali is Africa's newest operational lithium producer [13, 24, 41]
- **Hydrocarbons:** Niger possesses oil and gas reserves under development
- **Agricultural commodities:** All three states are major cotton producers [48]

This concentration of strategic minerals gives the AES significant leverage in global commodity markets. More importantly, it creates the scale necessary for downstream processing and value-addition. Individual states lacked the market size and infrastructure to justify major refining or processing facilities. A unified bloc changes this calculation.

Strategic implication: Mali is not merely a landlocked country navigating geopolitical isolation. It is the economic anchor of an emerging resource bloc with combined strategic importance rivaling established producers.

New Supply Chains and Trade Partnerships

The AES pivot away from traditional colonial-era trade patterns has opened new commercial relationships, particularly with the UAE, Russia, and China [17, 28].

UAE trade relationship: The UAE has emerged as a primary trading hub, with significant gold reserves now held in UAE vaults [17]. This reflects both a pragmatic diversification of export destinations and access to Gulf capital for infrastructure and project finance.

Russian strategic partnership: Beyond security cooperation, Russia has become a significant economic partner, particularly in the mining sector technical assistance and equipment supply [28]. Russian entities have secured exploration rights and technical partnerships in multiple jurisdictions.

Chinese infrastructure and investment: China's Belt and Road Initiative has expanded into Sahel region infrastructure, with particular focus on transport corridors, power generation, and telecommunications.

For investors: This diversification demonstrates that Mali and the AES have strategic optionality. They are not dependent on any single source of capital, technology, or market access. This reduces political risk associated with dependence on former colonial relationships and creates competitive dynamics among potential partners that can benefit project economics.

Monetary Union Ambitions

The AES has stated aspirations to create an independent monetary union, potentially moving away from the CFA Franc system managed by the Banque Centrale des États de l'Afrique de l'Ouest

(BCEAO) [54]. While this process will take years and faces substantial technical challenges, the strategic direction is clear.

Current reality: Mali remains within the WAEMU and continues to use the CFA Franc, which provides monetary stability, low inflation, and currency convertibility backed by French Treasury guarantees [49].

Future trajectory: If the AES successfully establishes an independent currency, it would require:

- Substantial foreign currency reserves (potentially accumulated through commodity exports)
- Independent central banking capacity
- Fiscal coordination among member states
- Credible monetary policy framework

Investment consideration: Near-term (0-5 years), the CFA Franc system provides stability. Medium-term (5-10 years), any transition creates uncertainty but also potential for greater monetary policy autonomy. Investors should monitor this development but need not factor it into immediate investment decisions.

IV. PILLAR II: ON-THE-GROUND REALITY: A RESILIENT, BOOMING ECONOMY

Pillar I established that Mali's institutional framework has increased stability and predictability. Pillar II demonstrates that this improved framework is producing tangible economic results. Far from experiencing capital flight or sectoral collapse, Mali's economy is exhibiting remarkable resilience and growth across multiple dimensions.

This section provides granular evidence of operational continuity, economic performance, and fiscal strength that contradicts the perception of systemic instability.

A. "Business as Usual": Major Operators Are Investing and Expanding

The behavior of large, publicly-traded mining companies operating in Mali provides the most reliable signal of actual operational conditions. These companies face stringent fiduciary duties to shareholders, regulatory scrutiny from securities regulators, and reputational risk. They cannot continue operations in genuinely unstable environments without substantial disclosure and risk mitigation.

Their actions in Mali tell a clear story: operations continue normally, production targets are being met, and capital is being deployed for expansion.

Operational Continuity Across Major Producers

B2Gold (Fekola Complex):

- Q2 2025 production exceeded expectations, positioning the operation to meet full-year guidance [11]
- The Fekola mine remains B2Gold's flagship asset, accounting for significant proportion of total company production [11]
- Gold exports flow through established channels without disruption [49]
- No force majeure declarations, no asset write-downs, no operational disclosures suggesting heightened risk

Allied Gold (Sadiola Mine):

- Q2 2025 production showed 7% growth quarter-over-quarter [8]
- Full-year guidance maintained [8]
- Mine performance tracking to historical parameters [8]
- Management reports cite standard operational challenges (grade variability, equipment maintenance), not security or political disruption

Resolute Mining (Syama Complex):

- H1 2025 results maintained full-year production and cost guidance [45]
- Syama generated operating cash flow exceeding \$200 million in 2024 [45]
- Technical conversion projects advancing on schedule [45]
- Company continues to report Syama as core long-term asset

These are not companies in distress. They are companies executing operational plans within normal parameters for large-scale mining operations.

Active Expansion and Capital Deployment

More telling than operational continuity is the fact that major operators are deploying significant new capital for expansion:

B2Gold: Fekola Regional Underground Mine: In July 2025, B2Gold received government approval for development of the Fekola Regional underground mine, a major expansion project [11]. This follows completion of a large solar plant expansion in Q1 2025, aimed at reducing costs and improving sustainability [11].

Capital deployed: Likely in excess of \$100M for underground development based on typical project scale

Strategic signal: B2Gold would not commit nine-figure capital to underground expansion if it anticipated near-term political or security risks that could jeopardize returns

Allied Gold:Sadiola Multi-Phase Expansion: Allied Gold is implementing a multi-phase expansion strategy designed to significantly boost output and extend mine life beyond 19 years [8]. This includes development of a large-scale solar and battery project expected to reduce power costs substantially [69].

Capital deployed: Solar project alone likely \$50M+ based on industry benchmarks; total expansion capital potentially exceeding \$150M

Strategic signal: 19-year mine life extension is not a decision made by management uncertain about medium-term stability

Resolute Mining:Syama Sulphide Conversion Project: Resolute is advancing its major Sulphide Conversion Project, a technological upgrade aimed at boosting processing capacity and improving recovery rates [45].

Capital deployed: Processing plant conversion typically requires \$50-150M depending on scale

Strategic signal: Process technology upgrades are long-term investments that only make sense with confidence in stable operations

Successful Engagement with the 2023 Mining Code

The definitive proof that the new mining code is functional, rather than prohibitive, comes from the successful conclusion of agreements under its terms. In 2025, the government approved seven new exploitation and exploration agreements encompassing key gold and lithium projects [35, 18].

Companies successfully concluding agreements include:

- Allied Gold (Sadiola operation) [35]
- B2Gold (Fekola complex) [35]
- Resolute Mining (Syama complex) [35]
- Ganfeng Lithium (Goulamina lithium project) [35]

These agreements codify the state's increased participation and revised fiscal terms, providing long-term predictability [51]. The companies' willingness to conclude these agreements demonstrates that:

1. The negotiation process, while rigorous, is professional and good-faith
2. The economic terms, while more demanding than legacy agreements, remain commercially viable
3. Companies believe they can operate successfully within the new framework
4. Mali remains attractive relative to alternative jurisdictions

Critical insight: If the new mining code were truly prohibitive or if Mali's investment climate were genuinely unstable, these sophisticated operators would not conclude agreements extending decades into the future. They would maintain operations under force majeure, pursue asset sales, or write down asset values. Instead, they are signing long-term agreements and deploying expansion capital.

B. Operator Deep Dive: B2Gold, Allied Gold, and Resolute Mining

A granular examination of Mali's three flagship gold operations provides compelling evidence of operational health and management confidence.

B2Gold: Fekola Complex

Operational Performance: Fekola exceeded production expectations in Q2 2025, processing ore grades within expected parameters and maintaining operational efficiency [11]. The complex operates as B2Gold's flagship asset, consistently delivering strong financial performance.

Recent Milestones:

- **Q1 2025:** Completed large solar plant expansion, adding renewable generating capacity and reducing diesel consumption [11]
- **July 2025:** Received government approval for Fekola Regional underground mine development, unlocking additional high-grade ore body [11]
- **H2 2025:** Positioned to meet full-year production and cost guidance [11]

Strategic Direction: B2Gold's management has repeatedly emphasized Fekola as a multi-decade asset central to company strategy. The decision to develop underground resources signals confidence that current operational conditions will persist for the 10-15 year development and payback period typical of underground mines.

Cost Management: The solar expansion directly addresses one of Mali's key operational challenges: energy costs. By moving toward renewable power, B2Gold is reducing exposure to diesel price volatility and improving long-term cost structure [11]. This investment would not make sense without confidence in long-term operational stability.

Engagement with Malian Government: B2Gold has successfully navigated the 2023 Mining Code provisions and received approval for major expansion [35]. Management has not made disclosures suggesting material political or regulatory risk beyond standard emerging market considerations.

Allied Gold: Sadiola Mine

Operational Performance: Sadiola reported solid production in Q2 2025, with quarter-over-quarter growth of 7% [8]. The mine remains on track to meet full-year guidance, demonstrating operational reliability.

Multi-Phase Expansion: Allied Gold is implementing a comprehensive expansion strategy designed to:

- Significantly boost annual production
- Extend mine life beyond 19 years [8]
- Improve operational efficiency through process optimization
- Reduce costs through renewable energy infrastructure [69]

Solar and Battery Project: One of the most significant strategic initiatives is development of a large-scale solar generation and battery storage project, expected to reduce power costs substantially [69]. This infrastructure investment demonstrates several things:

- Confidence in multi-decade mine life
- Willingness to deploy capital improving long-term economics
- Alignment with Mali's renewable energy strategy
- De-risking of operations through reduced dependence on diesel

Agreement Under New Code: Allied Gold successfully finalized its revised establishment agreement under the 2023 Mining Code [35]. The company's willingness to accept the new terms while simultaneously committing expansion capital indicates that management views the revised partnership structure as commercially viable.

Management Commentary: Public statements from Allied Gold management emphasize Sadiola as a long-term cornerstone asset. There are no indications of asset sale processes, strategic reviews, or plans to wind down operations.

Resolute Mining: Syama Complex

Operational Performance: Resolute maintained full-year 2025 production and cost guidance following H1 results [45]. While the company has faced some operational challenges (typical of large-scale mining operations), the Syama complex continues generating substantial operating cash flow, exceeding \$200 million in 2024 [45].

Technical Advancement: The Syama Sulphide Conversion Project, a major technological upgrade aimed at improving processing capacity and recovery rates, is advancing on schedule [45]. This project involves significant technical complexity and capital deployment, neither of which makes sense without confidence in operational continuity.

Cash Generation: The Syama complex's ability to generate over \$200 million in annual operating cash flow demonstrates that, even absent expansion, the operation is economically robust and capable of generating returns through commodity price cycles [45].

Code Compliance: Resolute successfully concluded negotiations under the new mining code and received formal approval for its revised establishment agreement [35]. This demonstrates that even companies that faced operational headwinds have been able to work constructively with the government to secure long-term operating rights.

Strategic Importance: Resolute's management continues to characterize Syama as a core asset within the company's portfolio. There have been no announcements of strategic reviews, asset sales, or plans to exit Mali.

What Operator Behavior Reveals

The combined evidence from these three major operators provides several critical insights:

1. **Operations are stable:** Production is meeting guidance, exports are flowing, and standard operational challenges are being managed normally
2. **Expansion is occurring:** Nine-figure capital commitments for underground development, processing upgrades, and infrastructure improvements demonstrate confidence
3. **The new code is workable:** Seven new agreements concluded in 2025 prove that the framework, while demanding, is commercially viable
4. **Management has long time horizons:** 19+ year mine life extensions and underground developments requiring 10-15 year payback periods indicate confidence in stability
5. **Energy de-risking is underway:** Major solar investments reduce operational costs and dependence on volatile diesel supply chains

The simplest explanation for this behavior is the correct one: Mali offers attractive risk-adjusted returns, and sophisticated operators with extensive due diligence capabilities have concluded that operations can continue successfully for decades.

C. Macro-Economic Dashboard: 5.0% GDP Growth in a Resilient Framework

Mali's macroeconomic performance provides compelling evidence that the economy operates with structural resilience independent of political headlines. While international observers fixated on political transition and high-profile disputes, the economy continued to grow, driven by diversified sectoral strength and prudent fiscal management within the West African Economic and Monetary Union (WAEMU) framework.

Robust GDP Growth Trajectory

2025 Projections: Real GDP growth is projected to reach 4.9% to 5.0% in 2025 [34, 58]. This growth is supported by three primary drivers:

1. **Commencement of lithium production and exports** from Goulamina and Bougouni projects [24, 41]
2. **Strong agricultural sector performance**, particularly in cotton production which is forecast to increase significantly in the 2024/2025 season [48]
3. **Continued services sector expansion**, with telecommunications showing particular strength [58]

Medium-Term Outlook: The World Bank forecasts growth to average 5.0% over the 2026-2027 period [58], significantly outpacing projected growth in many regional peers and demonstrating confidence in sustained economic momentum.

Critical context: The IMF's 2025 growth forecast already accounts for the temporary disruption at the Barrick Loulo-Gounkoto complex [34]. The economy's ability to maintain 5.0% growth despite this sectoral disruption demonstrates diversification and resilience. Growth is not dependent on any single operation or operator.

Sectoral Composition: A Diversifying Economy

Mali's growth is increasingly balanced across sectors rather than concentrated in extractives:

Agriculture (2025):

- Contributes substantial share of GDP and employs majority of rural population
- Cotton production forecast to increase significantly, driven by strong Asian demand [48]
- Livestock sector contributes approximately 14% of total GDP [7]
- Mango and shea butter exports provide high-value foreign exchange earnings [47, 53]
- Rain-fed agriculture remains vulnerable to climate variability, but overall trends are positive [34, 48]

Mining (2025):

- Gold production stabilizing around 70,000 kg annually [16]
- Lithium production and exports commencing from two operations [24, 41]
- State mining revenues increased 52.5% in 2024, reaching \$1.4 billion [43]
- Sector provides critical foreign exchange earnings and fiscal revenues [14]

Services (2025):

- Telecommunications sector expansion continuing [58]
- Financial services growing, with mobile money adoption increasing
- Transport and logistics benefiting from infrastructure improvements [60]
- Wholesale and retail trade expanding with urbanization

This sectoral balance creates economic resilience. Commodity price shocks in gold markets affect one sector without cascading through the entire economy. Agricultural production provides countercyclical stability, performing independently of mining sector dynamics.

Inflation Management Within Regional Framework

2025 Inflation Outlook: Inflation is projected to temporarily exceed the WAEMU convergence criterion of 3%, reaching approximately 3.5% to 3.6% [34, 58]. However, this increase has identifiable, transitory causes:

- Conflict-related impacts on agricultural production in certain regions [34]
- Climate shocks (flooding) affecting food prices [34, 58]
- Supply chain adjustments following geopolitical realignments

Structural inflation control: Mali's membership in WAEMU provides a monetary stability anchor. The CFA Franc, managed by the Banque Centrale des États de l'Afrique de l'Ouest (BCEAO) and backed by French Treasury guarantees, ensures:

- Currency convertibility and stability
- Independent monetary policy executed by regional central bank
- Protection against competitive devaluation
- Low inflation environment over long term [49]

For investors: The temporary inflation spike above 3% does not represent loss of monetary control or the beginning of a high-inflation regime. It represents transitory supply shocks within a structurally low-inflation framework. As supply constraints ease, inflation is expected to return toward the 3% target.

Public Debt: Moderate and Sustainable

2025 Debt Levels: Mali's public debt is estimated at 52.9% of GDP in 2025 [58]. Within the context of emerging market sovereigns, this level is considered moderate and sustainable.

Debt Trajectory: Projections indicate a declining debt-to-GDP ratio, moving toward 51.0% by 2027 [58]. This improvement reflects:

- Strong nominal GDP growth diluting debt stock
- Fiscal consolidation efforts
- Increased mining revenues providing fiscal space [43]

Debt Sustainability Assessment: The IMF and World Bank assess Mali as having a "moderate risk of debt distress" [58]. This is not a risk-free assessment, but neither does it suggest imminent fiscal crisis. The debt is manageable provided economic growth continues and fiscal policy remains prudent.

Composition and structure: Mali's debt is a mix of concessional multilateral borrowing (IMF, World Bank, AfDB) and some commercial debt. The concessional component provides favorable terms (long maturity, low interest rates), reducing debt service burdens and extending refinancing horizons.

Fiscal Policy: Anchored by WAEMU Convergence Criteria

2025 Fiscal Deficit: The fiscal deficit is expected to widen slightly to 3.3% of GDP in 2025 [34, 58]. This widening reflects two primary factors:

1. **Revenue shortfall:** Mining revenues, while surging in absolute terms [43], came in below initial projections for 2025 due to temporary production disruptions [34]
2. **Non-recurrent spending:** Emergency expenditures related to flood recovery and humanitarian assistance [34, 58]

WAEMU Convergence Criterion: The WAEMU sets a fiscal deficit ceiling of 3% of GDP as a convergence criterion for member states [34]. Mali's projected 3.3% deficit is modestly above this threshold but demonstrates continued commitment to the regional framework. The government is implementing fiscal consolidation measures designed to return to compliance.

Fiscal Consolidation Measures: The government is pursuing several initiatives to strengthen fiscal performance:

- **Tax administration digitalization:** Improving collection efficiency and reducing leakage [58]
- **Revenue mobilization:** Implementation of the 2023 Mining Code's revised fiscal terms [51]
- **Expenditure prioritization:** Focusing public investment on high-return infrastructure projects [60]
- **Subsidy reform:** Gradually adjusting fuel and energy subsidies to reduce fiscal burden

For investors: The fiscal deficit above 3% is concerning only if it becomes structural and uncontrolled. Current projections show temporary deviation with corrective measures underway. The WAEMU framework provides external discipline, and the government has demonstrated commitment to compliance. Mali is not on a path toward fiscal crisis.

Balance of Payments and External Position

Current Account: Mali runs a current account deficit, typical for a developing economy importing capital goods for infrastructure and mining development. However, this deficit is financed through a combination of:

- Foreign direct investment in mining sector
- Multilateral development financing (World Bank, AfDB)
- Export revenues from gold, cotton, and (increasingly) lithium

Foreign Exchange Reserves: Managed at the WAEMU regional level by BCEAO, reserves provide adequate coverage for imports and external obligations [49]. The CFA Franc's convertibility guarantee ensures access to foreign exchange for legitimate commercial transactions.

Export Diversification: The commencement of lithium exports [24, 41] adds a significant new source of foreign exchange, reducing dependence on gold and agricultural commodities. This diversification improves resilience to single-commodity price shocks.

Assessment: Economic Fundamentals Are Sound

Mali's macroeconomic performance during the 2021-2023 political transition period demonstrates that economic fundamentals operate with substantial independence from political headlines. While political uncertainty dominated international coverage, the economy continued growing at 4-5% annually, inflation remained controlled within a regional framework, debt remained sustainable, and fiscal policy remained broadly prudent.

This resilience is not accidental. It reflects:

1. **Sectoral diversification:** Growth is not dependent on a single sector or commodity
2. **Regional integration:** WAEMU membership provides monetary stability and policy discipline
3. **Competent technocratic management:** The Ministry of Economy and Finance and the Malian statistical agency (INSTAT) maintain professional capacity despite political transitions
4. **Multilateral engagement:** Continued collaboration with IMF, World Bank, and AfDB provides technical assistance and external validation

For investors: Macroeconomic stability creates a foundation for sectoral investment. Projects can be financed, revenues can be repatriated, inflation will not erode returns, and fiscal policy will not create sudden shocks. These are baseline requirements for investment, and Mali meets them.

D. Fiscal Strength: How +52.5% Revenue Growth Creates a Better Sovereign Partner

The government's implementation of the 2023 Mining Code is not merely a political or legal exercise. It is a successful fiscal strategy that has measurably strengthened the Malian state's financial position, creating a more stable and reliable sovereign partner for long-term investment.

Record State Mining Revenues: The Numbers

The impact of the new mining code is quantifiable and dramatic. State revenues derived from the mining sector surged by 52.5% in 2024, reaching US\$1.4 billion [43]. This increase is particularly significant because it occurred despite a reported decrease in overall gold production volume during the same period [43].

What this means: The fiscal framework is capturing increased value per unit of production. The revised royalty structures, elimination of certain tax exemptions, and increased state participation are working as designed [51]. The state is receiving a larger share of mining sector revenues without requiring production growth.

Fiscal Mechanics: How the New Code Works

The 2023 Mining Code achieves revenue growth through several mechanisms:

1. Elimination of Tax Exemptions Previous mining agreements included extensive tax holidays and exemptions, particularly during the operational phase. These exemptions were negotiated when Mali's bargaining position was weaker and capital was scarce. The new code abolishes many of these exemptions, ensuring that all operators contribute equitably throughout mine life [51].

Impact: Established operations that previously paid minimal taxes during the operational phase now contribute significantly to state revenues, even without production increases.

2. Revised Royalty Structure The code establishes clearer, and in many cases higher, royalty rates on mineral production [51]. While specific rates may vary by mineral and potentially include progressive structures linked to commodity prices, the key innovation is transparency and consistency.

Impact: State receives predictable revenue stream proportional to production value. Progressive structures ensure the state captures greater share during commodity price booms.

3. Mandatory State Participation The 10% free-carried interest and option for additional 20% contributory participation [51] provide the state with direct exposure to mine economics. Rather than relying solely on taxes and royalties (which operators have incentive to minimize through transfer pricing and cost inflation), the state receives pro-rata share of actual profits.

Impact: State interests are aligned with operator interests. Both parties benefit from operational efficiency, cost control, and production optimization.

4. Enforcement and Compliance The code includes strengthened enforcement provisions and penalties for non-compliance. The government has demonstrated willingness to enforce these provisions, as evidenced by the Barrick dispute [15] and the consistent application of terms across all operators [35].

Impact: Operators understand that compliance is mandatory, not optional. This eliminates the "free rider" problem where some operators avoid obligations that others fulfill.

Reduced Fiscal Dependence on External Aid

The 52.5% surge in mining revenues significantly enhances the government's fiscal autonomy. Historical reliance on external aid and concessional borrowing created vulnerabilities:

- **Policy conditionality:** Aid often comes with policy requirements that may not align with sovereign priorities
- **Political leverage:** External partners gain influence through financial dependence
- **Volatility:** Aid flows can be suspended due to political disagreements, creating fiscal shocks

Increased domestic revenue mobilization reduces these vulnerabilities. The government has greater fiscal space to fund priority spending (infrastructure, education, healthcare, defense) without external approval or conditions.

For investors: A fiscally autonomous government is a more stable and predictable partner. It is less vulnerable to external pressure that could cause abrupt policy shifts. It can make long-term commitments with greater confidence.

Predictable Revenue Streams Enable Planning

Prior to the 2023 Mining Code, mining sector revenues were volatile and unpredictable. They depended on:

- Opaque negotiation outcomes that varied across operators
- Discretionary enforcement of existing obligations
- Ad-hoc renegotiations when commodity prices surged
- Complex transfer pricing disputes

The new code replaces this unpredictability with clarity. Royalty rates are published, state participation percentages are fixed, and fiscal obligations are codified [51]. This enables:

- **Multi-year budget planning:** Government can project revenues with greater accuracy
- **Infrastructure financing:** Predictable revenues can back bond issuances or secure project finance for public infrastructure
- **Fiscal rule adherence:** Easier to maintain WAEMU fiscal deficit targets when revenues are predictable

For investors: Predictable government revenues mean predictable government behavior. A government with stable fiscal position is less likely to implement sudden tax increases, impose capital controls, or pursue other desperate measures. Fiscal strength creates political stability.

Foundation for Strategic Reinvestment

The increased mining revenues provide fiscal space for the government to reinvest in areas that improve the overall investment climate:

Infrastructure: The government has committed substantial resources to transport corridor upgrades [60], working in partnership with multilateral institutions. These investments directly benefit the mining sector (reduced logistics costs) and the broader economy (improved market access for agriculture, reduced consumer prices).

Energy: The "Desert to Power" initiative, backed by AfDB financing [4], receives government co-financing and policy support. Improved power supply benefits all economic sectors, particularly mining operations seeking to reduce diesel dependence [69].

Security: Military modernization [10, 21, 22] requires substantial expenditure. Increased mining revenues provide the fiscal space to fund these investments without cutting other essential services.

Education and Skills: Meeting local content requirements [51] requires a skilled Malian workforce. Government investment in technical education and vocational training, funded by mining revenues, creates the human capital necessary for sector growth.

Social Services: Visible improvements in healthcare, education, and infrastructure in mining regions strengthen the social contract and build local support for continued resource extraction.

This creates a positive feedback loop: mining revenues fund improvements that make mining operations more efficient and politically sustainable, which generates additional revenues, which fund additional improvements.

Comparative Fiscal Position

Mali's fiscal transformation is notable even in regional context. Many resource-rich African states struggle to capture fair value from extractive industries due to:

- Weak institutional capacity to negotiate and enforce agreements
- Corruption and elite capture of resource rents
- Complex tax evasion and transfer pricing schemes by operators
- Lack of technical expertise in resource taxation

Mali's 52.5% revenue increase demonstrates institutional capacity to design, implement, and enforce a modern resource taxation regime. This achievement is not universal among peer countries and suggests competent technocratic management within the Ministry of Economy and Finance and the mining sector oversight bodies.

Assessment: Fiscal Strength as Investment Enabler

The government's successful implementation of the 2023 Mining Code, proven by the 52.5% surge in mining revenues [43], is a core element of the investment thesis. It demonstrates:

1. **Institutional competence:** The government can design and execute complex fiscal policy
2. **Enforcement capacity:** The government can ensure compliance across all operators
3. **Fiscal sustainability:** The government is building revenue base to fund development
4. **Aligned incentives:** Increased state revenues create incentive to maintain stable investment climate

For investors: A fiscally stronger Mali is a better partner. It has reduced need for desperate revenue measures, greater capacity to invest in enabling infrastructure, and stronger incentive to maintain conditions that allow mining operations to thrive. The 2023 Mining Code represents not a threat to investment but rather the foundation for sustainable partnership.

The perception that higher state participation and fiscal obligations constitute "increased risk" is incomplete. These provisions increase predictability and sustainability. The true risk would be a continuation of the previous regime: opaque terms, inconsistent enforcement, and fiscally desperate government prone to sudden policy shifts. Mali has moved away from that model toward a codified, transparent, and fiscally sound framework.

V. PILLAR III: THE DIVERSIFICATION ENGINE: BEYOND THE GOLD NARRATIVE

A central element of Mali's economic resilience and long-term investment case is accelerating structural diversification beyond gold. While gold remains critical and generates substantial fiscal revenues, the narrative of Mali as a mono-commodity economy is outdated. Growth is increasingly powered by a triad of high-potential sectors: a newly operational lithium industry accessing global critical minerals demand, a deeply rooted agricultural powerhouse undergoing modernization, and a strategic renewable energy sector de-risking operations across the economy.

This multi-engine economic structure creates balanced growth, insulates against single-commodity price volatility, and unlocks synergies that strengthen the overall investment proposition.

A. The Lithium Era Is Here: Goulamina and Bougouni Are Shipping

While international attention remained focused on security narratives and political transition, Mali achieved a transformative economic milestone: bringing two major lithium projects to production and commencing concentrate exports in 2025. This development is not prospective or speculative. It is operational reality that positions Mali as a critical first-mover in the West African lithium province, directly supplying the global battery supply chain.

Operational Status: Production and Exports Underway

Goulamina Project (Ganfeng Lithium Partnership):

The Goulamina lithium project represents one of the world's largest new hard-rock lithium developments. The project's scale and resource quality are exceptional:

- **Annual production capacity:** 506,000 tonnes of spodumene concentrate [24]
- **Resource base:** 211 million tonnes of lithium-bearing resources [24]
- **Mine life:** Exceeds 23 years at planned production rate [24]
- **Operational status:** Initial export shipments commenced Q4 2025 [24]
- **Partnership structure:** Joint venture with Ganfeng Lithium, one of the world's largest integrated lithium producers

- **Offtake agreements:** Concentrate sales secured to battery and chemical manufacturers in China and globally

Technical significance: Goulamina's resource grade and scale position it among the top tier of global hard-rock lithium operations. The project's development by Ganfeng, which possesses extensive lithium processing expertise, ensures technical competence and access to downstream markets.

Bougouni Project (Kodal Minerals):

The Bougouni lithium operation, developed by ASX-listed Kodal Minerals, provides additional production capacity and further establishes Mali's position in the global lithium supply chain:

- **Stage 1 production capacity:** 125,000 tonnes per year of spodumene concentrate from Dense Media Separation (DMS) plant [40]
- **Expansion potential:** Project planning includes Stage 2 expansion to significantly higher throughput
- **Operational status:** Spodumene concentrate exports commenced late 2025 [41]
- **Pre-export preparation:** Significant ore stockpiles prepared ahead of export permit approval [40]
- **Market positioning:** Targeting European and Asian battery chemical manufacturers seeking diversified supply

Strategic timing: Bougouni's commissioning provides Mali with two operational lithium operations, demonstrating that Goulamina is not a one-off success but rather the beginning of a emerging lithium province.

Strategic Significance: Positioning in Critical Minerals Supply Chain

Mali's entry into lithium production could not be better timed. Global demand fundamentals for lithium chemicals, driven by electric vehicle battery manufacturing and energy storage systems, continue on an exponential growth trajectory. Multiple forecasts project sustained supply deficits through 2030 as EV adoption accelerates and energy storage deployments scale.

Global context: Africa is forecast to see the largest regional lithium supply growth globally in 2025, driven primarily by Mali and Zimbabwe [13]. This positions Mali within a critical geopolitical narrative: Western and Asian economies seeking to diversify lithium supply chains away from over-concentration in Australia and China.

Supply chain security value: Lithium has been designated a "critical mineral" by the United States, European Union, and multiple other jurisdictions due to its essentiality for energy transition and national security implications. Countries with operational lithium production gain strategic leverage and access to favorable financing, trade agreements, and diplomatic engagement.

Mali's positioning advantages:

1. **First-mover in West Africa:** Among the first operational hard-rock lithium producers in the region
2. **Partnership with Ganfeng:** Access to integrated Chinese supply chain ensures market access
3. **Export infrastructure established:** Successful export of first shipments proves logistics viability [24, 41]
4. **Governance under new mining code:** Clear rules established for lithium projects [51]
5. **AES integration potential:** Future cooperation with Niger and Burkina Faso could create regional lithium hub

Fiscal and Economic Impact

Lithium production generates economic value through multiple channels:

Direct fiscal revenues:

- Export royalties under 2023 Mining Code [51]
- Corporate income taxes on operating profits
- State participation through free-carried and contributory interests [51]
- Local taxes and fees

Employment and local economic multiplier:

- Direct employment in mining operations (several hundred per site)
- Indirect employment in logistics, catering, supplies, security
- Local procurement under mandatory local content provisions [51]
- Infrastructure development (roads, power, water) benefiting surrounding communities

Foreign exchange earnings: Lithium concentrate exports provide substantial hard currency inflows. With combined capacity exceeding 600,000 tonnes annually [24, 40] and spodumene concentrate prices (even after recent corrections) in the range of \$700-900/tonne, annual export values could exceed \$400-500 million at full production and normalized prices.

This represents a significant new source of foreign exchange, diversifying beyond gold and agricultural commodities.

Value Chain Evolution: From Concentrate to Chemicals

Current operations focus on spodumene concentrate export, which represents the first stage of the lithium value chain. The progression is:

1. **Mining and concentration** (current Mali operations)
2. **Chemical conversion** (spodumene → lithium carbonate or hydroxide)
3. **Battery manufacturing** (cathode and cell production)
4. **Electric vehicle assembly**

Mali currently operates at Stage 1. However, the government's framework and SOREM's mandate [61, 62] explicitly encourage partnerships that move toward downstream processing. The 2023 Mining Code's provisions on strategic minerals [51] and the government's stated desire to capture more value from resource extraction suggest future potential for:

- **Chemical conversion facilities** to produce battery-grade lithium chemicals domestically
- **Joint ventures with battery manufacturers** seeking secured supply
- **Regional processing hubs** leveraging AES integration

While near-term focus remains on concentrate export, the medium-term trajectory (5-10 years) will likely include efforts to move up the value chain, capturing additional economic value and employment.

Exploration Upside: Mali's Lithium Province Is Emerging

Goulamina and Bougouni are not isolated deposits. Geological surveys indicate that Mali's lithium-bearing pegmatites extend across broader regions. Multiple junior exploration companies hold lithium exploration permits and are advancing early-stage projects.

Implication: Mali is not simply host to two lithium mines. It is emerging as a lithium province with substantial exploration upside. As infrastructure develops and the success of Goulamina and Bougouni becomes established, additional projects will advance toward development, creating a multi-decade lithium sector with several operating mines.

Assessment: Lithium as Structural Game-Changer

Mali's successful launch of lithium production provides tangible proof of several critical capabilities:

1. **Project execution:** Ability to bring world-class mining projects from development to production
2. **Framework effectiveness:** 2023 Mining Code governing strategic minerals is operational [51]
3. **Logistics viability:** Landlocked position is not prohibitive for concentrate export [24, 41]
4. **Market access:** Established supply relationships with global battery supply chain

More fundamentally, lithium diversifies Mali's economic structure away from gold dependence, provides exposure to secular growth trends (energy transition), and establishes strategic relevance in critical minerals geopolitics.

For investors: Lithium operations are not future promise. They are the present reality. Concentrate is shipping. Revenues are being generated. Mali has established itself as a participant in one of the most strategically important commodity markets of the 21st century.

B. The Agricultural Powerhouse: Cotton, Livestock, and High-Value Exports

Agriculture remains a foundational pillar of the Malian economy, providing livelihoods for the majority of the population and generating substantial export revenues. Far from being solely subsistence-based, the sector includes large-scale, internationally competitive segments that operate with commercial sophistication and access global markets. This agricultural strength provides economic ballast, employment stability, and countercyclical resilience to commodity price volatility in extractive sectors.

Cotton: A Continental Production Leader

Mali ranks consistently among Africa's largest cotton producers, competing with West African neighbors Benin and Burkina Faso for regional leadership [48, 42]. Cotton production operates on a commercial scale with established institutional frameworks that ensure quality, processing capacity, and export logistics.

Production Scale and Growth: Cotton production is forecast to increase significantly in the 2024/2025 growing season, driven by several favorable factors:

- **Strong international demand**, particularly from Asian textile manufacturers seeking African cotton for its fiber quality characteristics [48]
- **Favorable weather conditions** in key growing regions (when flooding does not impact production)
- **Government support** through input subsidies and guaranteed minimum prices that incentivize cultivation
- **Improved seed varieties** and extension services that boost yields

Institutional Framework: The cotton sector benefits from the Compagnie Malienne pour le Développement des Textiles (CMDT), a state-supported enterprise that provides comprehensive support:

- **Input provision:** Seeds, fertilizers, and pesticides supplied to farmers on credit
- **Technical extension:** Agronomic advice and training to improve yields and quality
- **Ginning infrastructure:** Network of cotton gins processing seed cotton into fiber and seed
- **Marketing and export:** Centralized marketing board handling sales to international buyers [48]

This institutional structure, while requiring ongoing government support, provides predictability and scale that individual smallholders could not achieve independently.

Economic Impact: Cotton exports generate several hundred million dollars annually in foreign exchange earnings. The sector employs hundreds of thousands in cultivation, transportation, ginning, and ancillary services. Rural incomes in cotton-growing regions depend substantially on annual cotton sales, creating a large constituency with direct interest in sector stability.

Challenges and Resilience: Climate variability, particularly flooding, can impact annual production [48]. International cotton price volatility affects farmer incomes and government subsidy requirements. However, structural demand remains robust, and Mali's position as a low-cost producer with favorable fiber characteristics ensures continued market access.

The Livestock Sector: An Underestimated Economic Anchor

Mali's livestock sector contributes approximately 14% of total GDP [7], a figure that surprises many external observers who underestimate the economic significance of pastoralism and animal

husbandry. The sector encompasses cattle, sheep, goats, camels, and poultry, with substantial production occurring across the Sahelian and Saharan zones.

Scale and Structure: Mali possesses vast herds that make it one of West Africa's major livestock producers. The sector includes:

- **Traditional pastoralism:** Mobile herding systems that utilize marginal lands and seasonal grazing
- **Sedentary livestock production:** Mixed farming systems integrating crops and animals
- **Commercial ranching:** Emerging modern operations focused on meat production for urban markets
- **Export trade:** Significant live animal exports to neighboring countries, particularly Côte d'Ivoire, Senegal, and Burkina Faso [7]

Institutional Support: The sector benefits from established state institutions focused on veterinary services, genetic improvement, and disease control:

- **National veterinary service:** Disease surveillance and vaccination programs
- **Livestock research institutes:** Genetic improvement and breeding programs
- **Vaccine production capacity:** Domestic production of common livestock vaccines [7]
- **Export certification:** Systems enabling live animal exports to meet importing country requirements

This institutional capacity indicates sophistication beyond small-scale subsistence herding.

Economic Contribution: The livestock sector's 14% GDP contribution [7] makes it comparable to the mining sector in aggregate economic impact. Key contributions include:

- **Protein supply:** Providing meat, milk, and eggs for domestic consumption
- **Rural livelihoods:** Supporting pastoral and agropastoral populations across arid and semi-arid zones
- **Foreign exchange:** Live animal exports generate significant cross-border trade revenues [7]
- **Capital accumulation:** Livestock serve as savings and wealth storage in rural areas
- **Traction and transport:** Draft animals supporting agricultural production and rural transport

Export Markets: Regional trade in live animals is substantial. Malian cattle and small ruminants are exported throughout West Africa, with particularly strong demand in coastal countries where urban

populations require meat supplies. This intra-regional trade creates economic integration and provides stable demand independent of global commodity cycles.

Investment Opportunities: The livestock sector presents several underexploited investment opportunities:

- **Modern slaughterhouse facilities:** Enabling value-added processing and cold chain export
- **Feed production:** Commercial feed mills serving growing urban livestock production
- **Genetic improvement:** Introduction of improved breeds and artificial insemination services
- **Veterinary pharmaceuticals:** Local production and distribution of animal health products
- **Leather processing:** Value addition from hides currently exported as raw materials

High-Value Cash Crops: Mangoes and Shea Butter

Beyond bulk commodities like cotton and livestock, Mali has successfully developed export markets for high-value agricultural products that command premium prices in global markets.

Mango Exports: Mali ranks among Africa's notable mango exporters [47], supplying European markets with fresh mangoes during the West African production season. The sector demonstrates several strengths:

- **Quality production:** Varieties meeting European phytosanitary and quality standards
- **Export infrastructure:** Established air freight and refrigerated transport logistics
- **Market access:** EU market access through trade agreements and compliance with food safety regulations
- **Smallholder integration:** Outgrower schemes connecting smallholder orchards to export supply chains

The mango sector provides high-value income to smallholder farmers during the production season (typically February-May) and generates foreign exchange through European sales. While volumes are modest compared to major exporters like Côte d'Ivoire, the sector demonstrates capacity to compete in demanding international fresh produce markets.

Shea Butter (Karité) Exports: Mali is a significant exporter of shea butter [53], supplying global cosmetics and food industries with this premium natural product. Shea trees grow wild across Mali's Sudanian zone, and shea nut collection and processing provides income to rural women who traditionally control this value chain.

- **Export destinations:** Primarily Europe and North America, serving cosmetics industry demand for natural ingredients
- **Value-added processing:** Some domestic processing into refined shea butter capturing additional value
- **Women's economic empowerment:** Sector predominantly controlled by women's cooperatives
- **Sustainable production:** Wild harvest from existing trees requires minimal capital investment

The shea sector exemplifies how Mali can access premium global markets for specialty products where it possesses natural competitive advantage.

Agricultural Resilience and Investment Implications

Mali's agricultural base provides several critical economic functions:

- 1. Employment Stability:** Agriculture employs the majority of the rural population and substantial urban populations engaged in processing, transport, and marketing. This provides employment buffer during mining sector volatility or commodity price downturns.
- 2. Food Security Foundation:** Domestic food production (cereals, tubers, vegetables) provides baseline food security, reducing import dependence and protecting against external food price shocks. Strong agricultural years improve household food security and reduce government subsidy requirements.
- 3. Export Diversification:** Cotton, livestock, mangoes, and shea butter exports provide foreign exchange earnings independent of gold and lithium prices. This sectoral diversification reduces balance of payments vulnerability to single-commodity shocks.
- 4. Countercyclical Balance:** Agricultural performance is driven by rainfall, soil conditions, and farming practices rather than global commodity speculation. Good agricultural years can offset weak mining years, providing economic stability.
- 5. Rural Demand for Industrial Goods:** Agricultural income generates rural purchasing power for consumer goods, agricultural inputs, transport services, and telecommunications, creating domestic demand that supports non-agricultural sectors.

For investors: Mali's agricultural strength means the economy possesses a stable base independent of extractive sector volatility. Projects targeting domestic markets (consumer goods,

telecommunications, financial services) benefit from stable agricultural income. Agribusiness investments can access both domestic and export markets with established infrastructure and institutional support.

C. The Green Energy Gold Rush: De-risking Operations via "Desert to Power"

Mali possesses exceptional untapped potential for renewable energy, particularly solar power. With some of the world's highest solar irradiation levels and vast land availability, Mali can generate solar power at costs competitive with anywhere globally. Recognizing this advantage, the government is pursuing ambitious renewable energy development plans, supported by substantial international financing. This energy transition offers dual benefits: economic diversification through a new sector, and operational de-risking for the mining industry through access to stable, low-cost, green power.

Ambitious, Bankable National Targets

The cornerstone of Mali's renewable energy strategy is its participation in the African Development Bank's "Desert to Power" initiative, one of the continent's most ambitious solar energy programs [4]. Mali's national roadmap under this initiative establishes concrete targets:

- **399 MW of new solar capacity by 2025** [4]
- **977 MW of new solar capacity by 2030** [4]

These are not aspirational goals lacking financial backing. They are integrated into national energy planning and supported by committed multilateral financing.

Context and scale: Mali's current installed electricity generation capacity is limited, with substantial reliance on imported electricity and diesel generation. Adding nearly 1,000 MW of solar capacity by 2030 would represent a transformational increase in total generation capacity, fundamentally altering the country's energy mix.

Massive International Financing Commitment

The African Development Bank has demonstrated concrete commitment to Mali's energy transformation through substantial financial packages:

Desert to Power Regional Facility: The AfDB approved a dedicated \$379.6 million financing facility for the G5 Sahel countries (Mali, Burkina Faso, Niger, Chad, Mauritania) under the Desert to Power initiative [4]. This facility provides concessional financing for solar generation projects, transmission infrastructure, and grid strengthening.

Mauritania-Mali Electricity Interconnection: One of the most strategically important projects is the Mauritania-Mali electricity interconnection, receiving approximately \$303 million in co-financing from the AfDB [4]. This interconnection is vital for:

- **Grid stability:** Allowing power sharing between countries to balance supply and demand
- **Access to coastal power:** Enabling Mali to import power from coastal generation facilities
- **Regional trade:** Creating a foundation for future West African power pool integration
- **Renewable integration:** Providing grid flexibility necessary to absorb variable solar generation

Investment Code Incentives: Mali's Investment Code (Law No. 2012-016) explicitly designates renewable energy as a priority sector, offering significant financial incentives to attract private sector investment [44, 50]:

- **Long-term tax holidays:** Potential for extended periods of corporate income tax exemption
- **Customs duty exemptions:** On imported equipment (solar panels, inverters, batteries, transformers)
- **Accelerated depreciation:** Tax provisions allowing faster capital cost recovery
- **Power purchase agreement support:** Government willingness to enter long-term PPAs providing revenue certainty

These incentives, combined with multilateral financing, create an attractive framework for private solar developers.

Strategic Synergy with Mining Sector

The renewable energy buildout is not occurring in isolation from Mali's core economic engine. The mining sector's energy requirements and the renewable energy sector's development create powerful synergies:

Mining Sector Energy Challenge: Mali's landlocked position and limited grid infrastructure mean most mining operations rely substantially on diesel generation for power. This creates several problems:

- **High costs:** Diesel power can cost \$0.25-0.40/kWh, a major operational expense
- **Price volatility:** Diesel prices fluctuate with global oil markets, creating cost unpredictability
- **Logistical complexity:** Requires constant fuel trucking from coastal ports
- **Carbon intensity:** High greenhouse gas emissions creating ESG concerns for operators and investors
- **Supply risk:** Fuel supply chains vulnerable to disruption during security incidents [34]

Solar Solution: Large-scale solar generation, particularly when paired with battery storage, addresses all these challenges:

- **Cost reduction:** Levelized cost of solar power in Mali can reach \$0.05-0.08/kWh, a 70-80% reduction versus diesel
- **Price stability:** Solar has zero fuel costs, providing 25+ year price certainty
- **Reduced logistics:** Eliminates thousands of diesel truck movements annually
- **Carbon reduction:** Enables mines to meet corporate emissions reduction targets and access green financing
- **Operational resilience:** Reduces dependence on complex supply chains

Operator Adoption: Major mining operators are already implementing captive solar generation:

- **B2Gold (Fekola):** Completed large solar plant expansion in Q1 2025, adding substantial renewable generating capacity [11]
- **Allied Gold (Sadiola):** Developing large-scale solar and battery project expected to reduce power costs substantially [69]
- **Future projects:** All new mines are evaluating hybrid diesel-solar or full solar configurations

This demonstrates that solar power is not theoretical for Mali's mining sector. It is being deployed at scale today.

Utility-Scale Development and Grid Integration

Beyond captive mine power, utility-scale solar development is advancing to serve grid-connected demand:

Urban electricity demand: Bamako and regional cities require reliable power for residential, commercial, and industrial consumers. Grid-connected solar can displace expensive diesel generation and reduce reliance on imported electricity.

Rural electrification: Solar mini-grids and standalone systems can provide electricity access to rural communities currently unserved, creating new consumer markets and improving quality of life.

Industrial parks: Future development of industrial zones for lithium processing, cotton textiles, or other manufacturing requires reliable, affordable power. Large-scale solar provides this foundation.

The Mauritania-Mali interconnection [4] is particularly strategic because it enables Mali to balance variable solar generation by importing power when solar is unavailable (nighttime, cloudy periods) and potentially exporting excess solar during peak generation periods.

Investment Opportunities Across the Value Chain

The renewable energy buildout creates investment opportunities at multiple levels:

1. IPP Development (Independent Power Producers):

- Utility-scale solar farms (50-100 MW) selling power to state utility under long-term PPAs
- Hybrid solar-diesel plants serving mining operations
- Solar mini-grids serving rural communities

2. Equipment Supply and Installation:

- Solar panel import and distribution
- Balance-of-system components (inverters, transformers, mounting structures)
- Installation and construction services
- Operations and maintenance services

3. Project Finance:

- Debt financing for solar projects leveraging concessional AfDB facilities
- Equity investment in IPP development companies
- Mezzanine financing for mid-sized projects

4. Energy Storage:

- Battery storage systems enabling 24-hour renewable power
- Integration services pairing storage with solar generation
- Grid balancing services as renewable penetration increases

5. Transmission and Distribution:

- Distribution network upgrades to accommodate decentralized generation
- Mini-grid network development for rural electrification
- Smart grid technology improving efficiency and reliability

Economic and Strategic Impact

Mali's renewable energy transformation generates benefits across the economy:

Reduced energy costs: Lower electricity costs improve competitiveness for all sectors, from mining to manufacturing to services. This creates favorable conditions for economic diversification.

Energy security: Reduced reliance on imported diesel and electricity improves resilience to external supply disruptions and price shocks.

Climate and ESG positioning: Demonstrable renewable energy development improves Mali's climate credentials, potentially unlocking access to green finance facilities and carbon markets.

New sector employment: Solar development creates jobs in construction, operations, maintenance, and technical services, diversifying employment beyond extractives and agriculture.

Demonstration effect: Successful large-scale solar deployment in Mali creates template for other Sahel countries, potentially positioning Mali as regional solar hub.

For investors: The renewable energy sector offers opportunities independent of extractives while simultaneously improving the economics and resilience of the mining sector that anchors the economy. This dual benefit makes energy infrastructure a strategic investment priority.

Assessment: Diversification as Resilience Multiplier

The combined development of lithium, agriculture, and renewable energy creates a synergistic economic structure where:

- **Lithium provides** high-value export earnings and exposure to secular growth trends in energy transition
- **Agriculture provides** employment stability, food security, and countercyclical economic balance
- **Renewable energy provides** cost-competitive power that de-risks mining operations while creating new sector opportunities

This is not theoretical diversification. Each sector is operational today:

- Lithium concentrate is shipping [24, 41]
- Cotton production is increasing [48]
- Solar plants are being commissioned [11, 69]

Investment implication: Mali's economy is structurally more resilient than perceived. Single-sector shocks (gold price decline, agricultural drought, lithium oversupply) do not cascade through the economy because multiple engines provide independent sources of growth, employment, and fiscal revenue.

VI. PILLAR IV: A DECADES-LONG DEMOGRAPHIC DIVIDEND

Underpinning Mali's entire long-term economic trajectory is one of the most powerful and predictable structural advantages a nation can possess: an exceptional demographic dividend. Mali's youthful and rapidly growing population provides a multi-decade guarantee of both labor force expansion and burgeoning domestic consumer demand. This demographic profile represents a fundamental asset that ensures sustained economic momentum, independent of short-term commodity cycles or political narratives.

A. A Young, Growing, and Increasingly Skilled Labor Force

Mali possesses one of the youngest populations globally, a characteristic that translates directly into inevitable labor market growth over the coming decades.

Exceptional Youthfulness

Median age: The median age in Mali is just 16.0 years [19]. This means half the population has not yet reached working age, representing a massive cohort that will enter the labor market over the next 10-20 years.

Youth demographic concentration:

- Approximately **46% of the total population is under age 15** [36, 52]
- An estimated **67% of the population was under age 25** as of 2017 [70]

This demographic structure creates an inevitable wave of new workers entering the labor market throughout the 2025-2045 period. Barring catastrophic shocks, this demographic momentum is essentially guaranteed by current population structure.

Sustained Population Growth

Mali's population trajectory shows consistent, substantial growth:

- **2025 population:** Approximately 25.2 million [52]
- **2043 population:** Projected 41.5 million [36]

- **Compound annual growth rate:** Approximately 2.5-2.8% over this period

This represents an increase of more than 16 million people over 18 years, equivalent to adding a population larger than the Netherlands or Chile to Mali's economy over less than two decades.

Implication for labor markets: Even with constant labor force participation rates, the sheer population growth ensures millions of additional workers available for employment in agriculture, mining, manufacturing, services, and other sectors.

Improving Human Capital Indicators

While Mali's overall adult literacy rate remains challenged (approximately 35% as of recent estimates), youth literacy rates are significantly higher, indicating generational improvement in educational attainment.

Youth literacy (ages 15-24): Substantially higher than overall adult literacy [19], suggesting that successive cohorts entering the labor market possess higher skill levels than previous generations.

Educational expansion: Primary school enrollment has increased substantially over the past two decades, though quality and completion rates require continued improvement. The trend is positive, with more children accessing education than in previous generations.

Technical and vocational training: Mali has established technical institutes and vocational training centers, though capacity remains limited relative to need. The 2023 Mining Code's local content requirements [51] create additional incentive for operators to invest in workforce training, potentially accelerating skills development.

Implication: While current skill levels present challenges, the trajectory is toward gradual improvement in workforce quality and productivity. Employers investing in training today benefit from improving baseline educational attainment in younger cohorts.

Shift Toward Working-Age Dominance

Mali's demographic structure is evolving in a direction favorable for economic growth. The proportion of the population within the prime working age bracket (15-64 years) is increasing:

- **2023-2025:** Working-age population approximately **51-52% of total population** [36, 52]
- **2043 projection:** Working-age population will reach **57.4% of total population** [36]

This shift improves the **dependency ratio** (the ratio of non-working age population to working-age population). A declining dependency ratio means:

- **Fewer dependents per worker:** Each working adult supports fewer children and elderly
- **Higher household savings:** Greater capacity to save and invest rather than consuming all income
- **Greater fiscal capacity:** Government can invest in productive infrastructure rather than solely consumption support
- **Productivity gains:** Larger share of population engaged in economically productive activity

Historical parallel: This demographic transition mirrors the experience of East Asian economies during their rapid growth periods (1960s-1990s). The "East Asian miracle" was substantially driven by demographic dividend as working-age population shares increased, generating savings, investment, and productivity growth.

Mali is entering this phase now, with the favorable demographic structure extending through mid-century.

B. The Future Consumer: A Guaranteed Engine of Domestic Demand

Beyond labor supply, Mali's young and growing population represents a massive and rapidly expanding domestic consumer market. This burgeoning internal demand provides crucial economic resilience and investment opportunities, particularly for sectors focused on consumer goods, telecommunications, financial services, healthcare, education, and urban infrastructure.

Scale of the Future Market

The projected population increase to **41.5 million by 2043** [36] translates into millions of new consumers entering the market for:

- **Basic necessities:** Food, clothing, housing, healthcare
- **Consumer durables:** Electronics, appliances, motorcycles, vehicles
- **Services:** Telecommunications, banking, education, entertainment
- **Energy:** Electricity for residential and commercial use

As per-capita incomes rise (assuming continued economic growth), these millions of new consumers will progressively move beyond subsistence consumption toward discretionary spending, creating expanding markets for non-essential goods and services.

Urbanization: Concentrating Purchasing Power

Mali is urbanizing rapidly, fundamentally changing consumption patterns and market access:

Urban population growth:

- **1990-2023:** Urban population share increased substantially, reaching **45.2%** by 2023 [36]
- **2030 projection:** Mali will approach urban-rural parity around 2030 [36]
- **2043 projection:** Nearly **58% of population will live in urban areas** [36]

Why urbanization matters for investors:

1. **Higher disposable incomes:** Urban workers typically earn higher incomes than rural agricultural workers, creating greater purchasing power
2. **Market access:** Urban consumers are concentrated geographically, reducing distribution costs for consumer goods and enabling efficient retail networks
3. **Formal sector employment:** Urban jobs are more likely to be formal sector, with regular income streams supporting credit access and enabling consumer financing
4. **Infrastructure access:** Urban consumers have reliable electricity, telecommunications, and transport access, enabling adoption of modern consumer goods and services
5. **Cultural shifts:** Urban lifestyles drive demand for packaged goods, modern retail, dining out, entertainment, and services that rural subsistence populations do not consume

Strategic cities:

- **Bamako:** The capital and primary urban center, projected to continue substantial growth
- **Regional capitals:** Sikasso, Mopti, Kayes, Ségou, Gao, Timbuktu as secondary urban markets
- **Mining towns:** Settlements around major mines (Fekola, Sadiola, Syama) create localized high-income consumer markets

A Digitally Native Generation

The generation reaching working age today and over the next decade is fundamentally different from previous generations: they are digital natives who have grown up with mobile phones and internet connectivity.

Mobile penetration: Mobile phone subscriptions have grown dramatically, with penetration rates now exceeding 100% in urban areas (many individuals own multiple SIM cards). Rural penetration is lower but increasing rapidly [59].

Internet access: Internet penetration and mobile data usage are expanding quickly as network coverage improves and smartphone prices decline [59]. The youth population is substantially more likely to access internet than older cohorts.

Implications for market development:

- **E-commerce:** Digital natives are comfortable purchasing goods online, enabling e-commerce platforms targeting Malian consumers
- **Mobile financial services:** Digital payment systems, mobile money, and digital banking can leapfrog traditional branch infrastructure
- **Telecommunications services:** Demand for data services, streaming entertainment, social media, and mobile applications creates opportunities for telecommunications companies
- **Digital advertising:** Brands can reach consumers through mobile advertising, social media, and digital platforms rather than solely traditional media

For investors: The digital native consumer base enables business models that would not be viable with older, less digitally connected populations. Consumer tech, fintech, e-commerce, and digital media opportunities exist that can scale rapidly.

Demand for Foundational Services

A growing, urbanizing population inherently drives demand for foundational services and infrastructure:

Housing and real estate:

- Urban population growth requires millions of new housing units over the next two decades
- Demand for affordable housing in urban peripheries and middle-income housing in city centers
- Commercial real estate demand as retail, office, and warehouse space requirements expand
- Construction sector employment and economic multiplier effects

Healthcare:

- Growing population requires expanded healthcare infrastructure (hospitals, clinics, pharmacies)
- Young population means high demand for maternal and pediatric services
- Rising incomes enable shift from public to private healthcare services
- Opportunities for private healthcare providers, pharmaceutical distribution, medical equipment

Education:

- Youth population creates sustained demand for primary, secondary, and tertiary education
- Private education sector opportunities as middle-class families seek quality alternatives to public schools
- Technical and vocational training demand driven by local content requirements [51] and workforce development needs
- Opportunities for education technology, private universities, vocational centers

Financial services:

- Young workers entering formal sector need banking services, savings accounts, credit access
- Urbanization and income growth drive demand for consumer credit (vehicles, appliances, housing)
- Insurance penetration extremely low, representing massive untapped market as incomes rise
- Mobile money and digital financial services already showing rapid adoption

Utilities:

- Urban population growth requires electricity, water, sanitation infrastructure expansion
- Current service levels inadequate; substantial investment required in generation, transmission, distribution
- Opportunities for private sector participation in utility provision, especially renewable energy generation

Consumer Market as Economic Stabilizer

The predictable expansion of Mali's domestic consumer base provides unique strategic value: it creates demand growth that is **independent of export markets and global commodity prices**.

Mining sector revenues fluctuate with global gold and lithium prices. Agricultural exports depend on international cotton and commodity markets. These sectors are subject to external demand shocks beyond Mali's control.

Domestic consumer demand, by contrast, is driven by:

- Population growth (highly predictable)
- Urbanization (structural trend with clear trajectory)
- Income growth (tied to domestic economic activity)

This creates a powerful cushion. During commodity downturns when export sectors contract, domestic consumer markets continue growing based on demographic fundamentals. This countercyclical characteristic makes consumer-focused investments particularly attractive for portfolio diversification.

Investment Targeting the Demographic Dividend

Specific investment opportunities arising from demographic trends:

1. Fast-Moving Consumer Goods (FMCG):

- Packaged foods and beverages targeting urban middle class
- Personal care products and household goods
- Distribution networks reaching urban centers and peri-urban areas

2. Telecommunications:

- Mobile network coverage expansion to underserved areas
- 4G and 5G network densification in urban centers
- Data services and digital content targeting youth consumers

3. Financial Services:

- Retail banking branches in secondary cities
- Digital banking and mobile money services
- Consumer lending products (motorcycles, appliances, education)
- Microfinance and SME finance

4. Retail and Distribution:

- Modern retail formats (supermarkets, chain stores) in urban areas
- Wholesale distribution networks serving urban and rural retailers
- E-commerce platforms leveraging mobile internet penetration

5. Healthcare:

- Private hospital networks in major cities
- Pharmacy chains and pharmaceutical distribution
- Health insurance products as formal sector employment grows
- Telemedicine services leveraging mobile connectivity

6. Real Estate and Construction:

- Affordable housing developments in urban peripheries
- Middle-income housing and condominium projects in cities
- Commercial real estate (office buildings, shopping centers, warehouses)
- Construction materials supply and manufacturing

7. Education:

- Private K-12 schools offering quality alternative to public system
- Vocational training centers for mining, construction, telecommunications sectors
- Private universities and tertiary education institutions
- Education technology platforms

Assessment: Demographics as Unambiguous Long-Term Tailwind

Mali's demographic structure provides one of the clearest, most predictable long-term investment tailwinds available in any market globally. The population will grow. The working-age share will increase. Urbanization will continue. These trends are essentially guaranteed by current population structure and historical patterns.

For investors: Demographics provide a 20-30 year visibility on market growth that is rare in investment analysis. Projects with long time horizons (infrastructure, real estate, retail networks, telecommunications) can be underwritten with high confidence that domestic market size will expand substantially over project life.

The demographic dividend also insulates against political and commodity risk. Regardless of gold prices, political transitions, or security challenges, Mali will have 41 million people by 2043 who need food, housing, telecommunications, healthcare, and consumer goods. This domestic demand foundation creates investment opportunities independent of export sectors.

VII. STRATEGIC INFRASTRUCTURE: BUILDING THE ARTERIES OF COMMERCE

A persistent challenge for landlocked Mali has been the quality and connectivity of its infrastructure, particularly transport links essential for international trade [59, 49]. Limited road infrastructure, lack of rail connectivity to ports, and inadequate power generation have historically increased costs for importers and exporters, creating a structural competitive disadvantage relative to coastal economies.

However, the narrative of insurmountable infrastructure deficits is outdated. Mali, with significant support from international financial institutions, is making tangible, strategic progress in modernizing the arteries of commerce. These are not aspirational plans lacking funding; they are committed, financed projects actively under implementation that are enhancing the fundamental operating environment.

Modernizing Key Trade Corridors

Recognizing the critical importance of efficient access to regional ports, major investments are focused on upgrading Mali's primary road transport corridors, particularly the vital link to Dakar, Senegal.

The Bamako-Dakar Corridor Upgrade

World Bank Commitment: In May 2025, the World Bank approved a **\$219.8 million credit** via the International Development Association (IDA) specifically for the **Road Infrastructure Connectivity and Resilience Improvement Program** [60]. This represents one of the largest single infrastructure investments in Mali's transport sector in recent years.

Project Scope: The program directly targets the vital **Bamako-Dakar Northern Corridor**, which serves as Mali's primary trade artery to the Atlantic Ocean via the Port of Dakar, Senegal [60]. The majority of Mali's imports (mining equipment, consumer goods, fuel) and exports (gold, agricultural commodities, lithium concentrate) transit this corridor.

Specific Focus - Diéma-Sandaré Section: The funding will specifically rehabilitate and upgrade the **137.7 km Diéma-Sandaré section** of this corridor, bringing it up to modern, climate-resilient

standards [60]. This section has been identified as a critical bottleneck where road deterioration significantly increases transit times and vehicle operating costs [60].

Expected Benefits: The explicit goals of this World Bank-supported project include:

- **Improved connectivity** between Mali and Senegal, facilitating smoother trade flows
- **Reduced travel times** for commercial vehicles, reducing logistics costs and improving supply chain reliability
- **Lower transport costs** for users of the corridor, directly benefiting importers and exporters [60]
- **Enhanced safety** through improved road surfaces, drainage, and signage, reducing accidents and cargo losses
- **Climate resilience** through engineering standards that protect against flooding and erosion

For mining sector: The Bamako-Dakar corridor is essential for mining operations. Equipment, spare parts, fuel, and consumables are imported via Dakar. Gold and lithium exports are trucked to Dakar for international shipment. Any reduction in transit times or costs directly improves mining economics.

Ancillary Benefits: The program also includes funding for:

- Rehabilitating rural roads in adjacent regions (Nioro and Kayes), improving local market access for agricultural producers [60]
- Upgrading hydraulic facilities (bridges, culverts, drainage) to improve climate resilience [60]

These ancillary investments strengthen rural connectivity and reduce agricultural production costs, supporting the agricultural sector pillar discussed earlier.

Alternative Corridor Development

While the Bamako-Dakar route is primary, Mali is also working to diversify its access to coastal ports:

Abidjan Corridor (via Côte d'Ivoire): Historically important, though political relationships and border conditions have affected reliability. Continued investment in maintaining this alternative provides strategic optionality.

Conakry Corridor (via Guinea): Shorter distance to coast but infrastructure quality has been limited. Guinea's recent political transition and increased Chinese investment in Guinean transport infrastructure may improve this corridor's viability.

Future rail ambitions: Long-term discussions about rail connectivity to ports remain aspirational but represent potential transformational improvements if realized in coming decades.

Sustained, Multi-Sectoral Investment Partnerships

Beyond the flagship road corridor project, Mali benefits from long-term, multi-sectoral infrastructure investment programs supported by key development partners, particularly the African Development Bank Group.

African Development Fund (ADF) Portfolio

Scale of Commitment: As of late 2025, the African Development Fund (the concessional lending window of the African Development Bank Group) had supported **71 projects** in Mali (including multinational initiatives) with a total investment commitment of approximately **\$1.37 billion** [3].

This is not a single project or a temporary program. It represents sustained, multi-decade partnership with one of Africa's premier development finance institutions.

Strategic Sector Focus: These ADF investments are not scattered across numerous small, disconnected projects. They are strategically concentrated in foundational sectors critical for broad-based economic development:

1. **Transport infrastructure:** Roads, bridges, rural connectivity
2. **Energy:** Power generation, transmission, rural electrification
3. **Agriculture:** Irrigation, rural development, agricultural value chains
4. **Water supply and sanitation:** Urban water systems, rural water access [3]

This holistic approach aims to build the underlying infrastructure necessary to support economic growth across all sectors, not just extractives. Reliable power, water access, and transport connectivity benefit mining operations, but also agricultural processors, manufacturers, and service sectors.

Capacity Building Component: Alongside physical infrastructure, these programs often include components aimed at strengthening the capacity of national agencies responsible for infrastructure planning, implementation, and maintenance [60, 3]. This includes:

- Technical assistance to transport and public works ministries
- Project management training
- Financial management and procurement systems strengthening
- Environmental and social safeguards capacity development

This capacity building ensures long-term sustainability of investments rather than creating physical assets that deteriorate due to lack of maintenance or management capacity.

Infrastructure as Economic Multiplier

Infrastructure investments generate economic returns far beyond the construction phase:

Short-term impacts:

- **Employment:** Construction creates direct jobs and indirect employment in materials supply, transportation, services
- **Demand multiplier:** Worker incomes are spent locally, supporting consumer goods sectors
- **Skills transfer:** Local workers gain construction and engineering skills through project participation

Long-term impacts:

- **Reduced transport costs:** Better roads permanently reduce logistics costs for all users
- **Improved market access:** Rural producers can reach urban markets more efficiently, improving agricultural incomes
- **Increased trade:** Reduced costs and travel times encourage greater trade volumes
- **Agglomeration effects:** Better connectivity between cities enables specialization and economies of scale
- **Investment attraction:** Modern infrastructure reduces operating costs for new investments, attracting additional capital

Assessment: Infrastructure Progress Is Real and Funded

The ongoing, internationally-backed infrastructure projects demonstrate concrete progress overcoming historical logistical challenges. These are not speculative proposals or unfunded ambitions. They are:

1. **Financed:** World Bank and AfDB commitments are signed agreements with funds allocated
2. **Under implementation:** Construction is underway on multiple projects
3. **Strategically targeted:** Focused on highest-impact corridors and sectors
4. **Technically sound:** Designed to international standards with climate resilience and safety incorporated

For investors: Infrastructure improvements are actively de-risking the physical movement of goods and people within Mali and connecting the country more efficiently to regional and global markets. Transport cost reductions directly improve mining sector economics, agricultural export competitiveness, and consumer goods distribution. Infrastructure quality improvements translate into better operational predictability and potentially lower long-term logistics costs.

The landlocked disadvantage remains, but it is progressively diminishing as infrastructure quality improves and alternative corridors develop. Mali will never have the transport cost advantage of a coastal economy, but it need not have the prohibitive costs that would make operations uneconomical. Ongoing infrastructure development is ensuring costs remain competitive.

VIII. THE "WHY NOW?": CAPTURING THE FIRST-MOVER ADVANTAGE

The investment thesis for Mali is compelling based on fundamentals: exceptional resource endowments, structural diversification, demographic tailwinds, and improving infrastructure. However, the critical question for any investor is not merely whether an opportunity is attractive, but whether the timing is optimal. The answer for Mali in 2025 is unambiguous: the timing is exceptional, and the window is finite.

The core timing argument rests on a significant and measurable dislocation between Mali's improving on-the-ground reality and its lagging international perception. This perception gap, fueled by outdated narratives and sensationalist coverage, creates a window for discerning investors to capture alpha before the broader market recognizes the structural shifts underway. Investing now allows capital to be deployed ahead of a likely positive repricing as the evidence of stability, growth, and predictability becomes undeniable to consensus.

The Perception Gap Represents Market Inefficiency

At its essence, the "Why Now" argument is about exploiting market inefficiency. Efficient markets price assets based on all available information. Mali's current valuation across multiple metrics (country risk premiums, equity valuations of operators, infrastructure project financing costs) does not reflect the improved reality documented throughout this thesis. This inefficiency creates opportunity.

Lagging Indicators Create Mispricing

International risk ratings, media sentiment indices, institutional investor allocations, and official travel advisories are all **lagging indicators**. They incorporate information with substantial delay, particularly when that information contradicts established narratives.

Current consensus view (as of October 2025):

- Mali remains politically unstable following 2021-2023 transition
- Contract disputes (particularly Barrick) signal hostile investment environment
- Security situation remains dire with government lacking territorial control

- Mining sector facing systemic risk of expropriation or operational disruption

Actual ground reality (documented in preceding sections):

- Political transition has produced codified legal framework more predictable than previous regime [51]
- Contract dispute with Barrick was isolated legacy issue; seven new agreements signed in 2025 [35]
- Security forces have restored control to all regional capitals for first time in decade [27, 55]
- Major operators expanding, not withdrawing, with hundreds of millions in new capital deployment [8, 11, 45]

The gap between these two views is substantial. International perception incorporates 2021-2023 information but has not updated for 2024-2025 developments.

Why the lag persists:

1. **Confirmation bias:** Investors who formed negative views during 2021-2023 transition selectively attend to information confirming those views while discounting contrary evidence
2. **Media incentive structure:** Sensational negative stories (executive detentions, mine seizures, security incidents) generate more engagement than technical stories about mining code implementation or GDP growth statistics
3. **Institutional inertia:** Large institutional investors who exited or reduced Mali exposure face career risk in re-entering, even if fundamentals have improved. Maintaining zero/minimal exposure is "safe" from career perspective
4. **Information asymmetry:** Investors relying on international media and aggregated risk ratings lack access to ground-level information that operators possess through direct presence
5. **Emerging market skepticism:** General caution toward frontier/emerging markets following various crises (Argentina default, Turkish inflation, Russian sanctions) creates blanket risk-aversion that affects all smaller markets regardless of specific fundamentals

Information Asymmetry Favors Active Investors

The perception gap exists because of information asymmetry. Investors who conduct direct due diligence, engage with operators on the ground, analyze primary source documents (company financial reports, IMF/World Bank assessments, mining code text), and maintain in-country

relationships can access a more accurate picture than those relying solely on aggregated international sources.

Sources providing contrary evidence:

- **Company financial reports:** B2Gold, Allied Gold, Resolute Mining quarterly reports show operational continuity and expansion [8, 11, 45]
- **IMF Article IV consultations:** Technical assessments showing 5% GDP growth and macroeconomic stability [34]
- **World Bank country assessments:** Infrastructure financing approvals and positive growth projections [58, 60]
- **Trade data:** Lithium export commencement and increasing mining revenues [24, 41, 43]

These sources are public but require effort to locate and analyze. The average international investor scanning headlines will miss them. Active investors who invest this effort gain informational advantage.

Consequences of Mispricing

The perception gap manifests in concrete, measurable ways that create investment opportunities:

1. Equity Valuations: Mining companies with substantial Mali exposure trade at discounts to peers operating in perceived "safer" jurisdictions. B2Gold, with Fekola as flagship asset, trades at lower multiples (P/E, EV/EBITDA) than comparable gold producers despite superior operational performance. This discount reflects Mali-specific risk premium not justified by actual operational conditions.

Opportunity: Purchasing equity in Mali-focused operators provides exposure to high-quality assets at discounted valuations. As Mali's perception improves, these companies should re-rate toward peer multiples, generating returns independent of gold price movements.

2. Asset Acquisition Costs: Development projects, exploration licenses, and operating mines can be acquired at lower valuations than equivalent assets elsewhere due to perceived country risk. Sellers facing pressure from headquarters or boards concerned about Mali exposure may accept below-fair-value offers.

Opportunity: Acquiring quality assets at discounted prices based on excessive risk perception generates returns as perception normalizes and assets re-rate.

3. Infrastructure Project Financing: Infrastructure projects in Mali require higher returns due to perceived risk, increasing financing costs. Lenders demand higher interest rates and shorter tenors than economic fundamentals warrant.

Opportunity: Investors willing to accept lower risk premiums can provide financing at rates that appear attractive relative to perceived risk while actually representing fair returns given true risk. Borrowers benefit from lower costs; lenders earn attractive risk-adjusted returns.

4. Competitive Positioning: Major international companies hesitant to enter Mali due to perception leave market space for competitors. First movers can establish positions, develop relationships with government and state entities (like SOREM [61, 62]), and build operational track records while competition remains limited.

Opportunity: Establishing presence before competition intensifies provides strategic advantages (preferred project access, regulatory goodwill, established infrastructure and relationships) that persist even after perception improves and competition increases.

Tangible Catalysts for Re-Rating Are Emerging

The perception gap will not persist indefinitely. Several tangible catalysts are already in motion or imminent, which will progressively force positive re-evaluation of Mali by the international investment community. These catalysts are not speculative; they are observable developments that will generate data points contradicting negative narratives.

Catalyst 1: Lithium Production Is Operational Reality

Event: Goulamina and Bougouni lithium operations have commenced spodumene concentrate exports in Q4 2025 [24, 41].

Why this matters:

- This is not exploration news or feasibility study completion; it is actual production and export
- Concentrate shipments generate visible trade data that international observers cannot ignore
- Success proves Mali can execute world-class mining projects to production despite perceived instability
- Establishes Mali within strategic critical minerals supply chain, creating geopolitical relevance

Data points that will emerge:

- Quarterly export volumes published by mines and potentially government statistics
- Revenue recognition in Ganfeng and Kodal financial reports showing successful sales
- Supply agreements with battery manufacturers and chemical processors establishing long-term offtake
- Government mining revenue data showing lithium contributions alongside gold

Timeline for perception impact: 6-12 months from initial exports (by mid-2026) as cumulative quarterly data establishes consistent production track record.

Investment implication: Investors who establish positions before lithium production track record is fully established will benefit from subsequent valuation re-rating as Mali's lithium credentials become undeniable.

Catalyst 2: Proven Success of the 2023 Mining Code

Event: Seven new mining agreements concluded under the 2023 Mining Code in 2025 [35], with major operators (B2Gold, Allied Gold, Resolute, Ganfeng) successfully formalizing partnerships.

Why this matters:

- Directly contradicts narrative that new code is "anti-investment" or prohibitively burdensome
- Demonstrates that sophisticated international companies can work successfully within new framework
- Proves government is willing to approve agreements and allow operations under transparent terms
- Sets template for future agreements, creating predictability for other potential investors

Data points that will emerge:

- Continued operational success from mines operating under new agreements
- Additional new agreements signed in 2026-2027 as more projects advance
- State mining revenues continuing to increase, proving fiscal framework effectiveness [43]
- No new high-profile disputes (absence of negative news is itself a positive signal)

Timeline for perception impact: 12-18 months (throughout 2026) as operational track record under new code accumulates and no systemic issues emerge.

Investment implication: Early movers establishing projects or acquiring assets under new code benefit from first-mover negotiating position and avoid later competition when framework acceptance is established.

Catalyst 3: Sustained Security Consolidation

Event: Government control restored to all regional capitals in November 2023 [27, 55], with ongoing consolidation of territorial authority throughout 2024-2025.

Why this matters:

- Recapture of Kidal and control of all regional capitals is transformational achievement often under-appreciated internationally
- Military modernization and AES security cooperation [26] creating sustainable security architecture
- Return of displaced populations [1] provides visible humanitarian improvement that media will eventually cover
- Reopening of commercial routes and expansion of mining/agricultural activity into previously contested areas

Data points that will emerge:

- Declining incident frequency in ACLED (Armed Conflict Location & Event Data) database as insurgent attacks decrease
- Increasing internally displaced person (IDP) returns documented by UNHCR and humanitarian organizations [1]
- Expansion of mining exploration activity into northern regions previously too insecure
- Positive coverage from security and defense analysts tracking Sahel improvements

Timeline for perception impact: 18-24 months (throughout 2026-early 2027) as multi-year security trend becomes undeniable.

Investment implication: Security improvements reduce operational risk premiums and insurance costs, improving project economics. Early investors benefit from lower entry costs before risk premiums compress.

Catalyst 4: Infrastructure Project Delivery

Event: World Bank-funded Bamako-Dakar corridor upgrade [60] and other infrastructure projects under implementation.

Why this matters:

- Tangible infrastructure improvements demonstrate government capacity to execute complex projects with international partners
- Transport cost reductions and travel time improvements generate measurable economic benefits
- Physical infrastructure improvements are visible and photographable, creating compelling positive narrative
- Successful multilateral project implementation contradicts narrative of governance weakness or institutional failure

Data points that will emerge:

- Project completion milestones and inauguration ceremonies generating positive media coverage
- Transport cost data showing reductions in logistics expenses for import/export
- Private sector feedback from mining operators and traders confirming improved corridor reliability
- Commitment of additional multilateral financing for follow-on projects based on successful implementation

Timeline for perception impact: 24-36 months (2027-2028) as construction completes and operational benefits become measurable.

Investment implication: Infrastructure improvements create platform for additional investments (manufacturing, processing, distribution) that were previously uneconomic due to high logistics costs.

Catalyst 5: Economic Performance Consistently Exceeding Expectations

Event: GDP growth continuing at 5% levels [34, 58], outpacing regional averages and initial forecasts.

Why this matters:

- Consistent economic performance contradicts narrative of economic fragility or collapse
- Outperformance versus regional peers demonstrates relative strength

- Multilateral institutions (IMF, World Bank) will progressively revise forecasts upward, generating positive coverage
- Economic growth generates positive feedback loop of tax revenues → infrastructure → additional growth

Data points that will emerge:

- Quarterly and annual GDP growth statistics from INSTAT (Mali's national statistics agency)
- IMF and World Bank forecast revisions showing upgraded growth projections
- Sector-level data (mining revenues, agricultural production, services growth) confirming broad-based expansion
- Fiscal data showing deficit reduction toward WAEMU targets as revenues grow

Timeline for perception impact: Ongoing, with cumulative impact over 24-36 months as multi-year track record establishes trend.

Investment implication: Consistent economic growth supports all investment types, from mining operations to consumer goods to infrastructure. Early positioning captures growth at lower valuations before consensus upgrades occur.

The First-Mover Advantage: Strategic Benefits of Early Entry

Beyond financial returns from valuation re-rating, early entry into Mali provides strategic advantages that persist even after the perception gap closes and competition increases.

Advantage 1: Securing Favorable Asset Positions

Opportunity: First movers can acquire or develop the highest-quality assets and project opportunities before competition drives up acquisition costs or creates bidding competitions.

Examples:

- Prime exploration licenses in emerging lithium districts before junior miners crowd the space
- Operating mine acquisitions from sellers exiting due to perceived risk, at discounted valuations
- Development projects requiring government approvals before approval queues lengthen
- Strategic partnerships with SOREM [61, 62] for future projects before partnership slots fill

Why timing matters: Asset quality follows a distribution. The best projects get developed first when identified. Later entrants must accept lower-quality deposits, less favorable locations, or more complex technical/environmental challenges. Early movers select from the full opportunity set.

Advantage 2: Building Government and Institutional Relationships

Opportunity: Establishing positive relationships with government ministries, state entities, local authorities, and community leaders before competition intensifies provides enduring benefits.

Benefits:

- **Regulatory goodwill:** Early investors demonstrating commitment through difficult periods build trust and credibility that facilitates future permit approvals and dispute resolution
- **Information access:** Strong relationships provide early visibility into policy changes, upcoming licensing rounds, infrastructure plans, or other commercially relevant information
- **Partnership preference:** When government entities like SOREM seek partners for joint ventures, established relationships create inside track
- **Community acceptance:** Long-term presence and community investment build social license that newcomers must work harder to establish

Why timing matters: Relationships take time to build and cannot be purchased quickly. First movers investing in relationship-building today benefit for decades, while later entrants must overcome incumbency advantages.

Advantage 3: Developing Operational Knowledge and Infrastructure

Opportunity: Early operators develop institutional knowledge about operating in Mali (logistics, local suppliers, regulatory navigation, security protocols) that creates competitive advantage.

Knowledge advantages:

- Understanding which corridors, ports, and logistics providers are reliable
- Identifying capable local contractors, suppliers, and service providers
- Developing security protocols and relationships with security forces that enable operations
- Learning effective community engagement approaches that build local support
- Understanding regulatory processes and building relationships with key officials

Infrastructure advantages:

- First movers may need to invest in infrastructure (roads, power, water, communications) that later arrivals can leverage
- Established facilities (offices, compounds, warehouses) provide cost advantages versus greenfield entry
- Supplier relationships and local procurement networks take time to develop

Why timing matters: Operational learning curve is steep in frontier markets. First movers learn while competition is limited, allowing time to develop effective approaches before competitive pressure intensifies.

Advantage 4: Shaping Industry Standards and Practices

Opportunity: First movers can help establish industry best practices, CSR standards, and operational norms that become benchmarks for later entrants.

Strategic benefits:

- Setting local content implementation practices that become templates for competitors
- Establishing community benefit models that government expects from all future operators
- Defining environmental and social safeguards standards that influence regulatory expectations
- Building training programs and supplier development initiatives that create preferred access to skilled labor and services

Why timing matters: First movers define the standard; later entrants must meet or exceed it. Better to define standards in alignment with one's own capabilities than inherit standards set by competitors.

The Window Is Finite: Why Delay Creates Risk

The first-mover advantages outlined above are only available because the perception gap currently deters many investors. However, this gap will close as catalysts materialize and evidence accumulates. Once consensus shifts, several changes will occur that reduce opportunity:

Change 1: Valuation Re-Rating Eliminates Discount

As perception improves, Mali-specific risk premiums will compress:

- Mining company equity valuations will rise toward peer multiples

- Asset acquisition prices will increase as sellers recognize improved environment
- Project development costs will rise as competition increases for resources, contractors, and approvals

Consequence: Later entrants pay fair value (or premium during excitement phase) rather than discounted value available today. Total returns decline correspondingly.

Change 2: Competition Intensifies for Best Opportunities

As major international mining companies, private equity firms, and infrastructure investors gain comfort with Mali, competition for assets and projects will increase dramatically:

- Bidding competitions for quality exploration licenses and operating assets
- Government and SOREMs inundated with partnership proposals, increasing selectivity
- Local suppliers, contractors, and skilled workers experiencing demand surge, raising costs
- Community benefit expectations increasing as multiple companies compete for social license

Consequence: Competitive intensity reduces returns and increases cost of entry. Strategic opportunities available to first movers become unavailable as market saturates.

Change 3: Government Negotiating Leverage Increases

When investment demand exceeds available opportunities, government negotiating position strengthens:

- Ability to demand better fiscal terms than currently codified in mining code
- Greater selectivity in choosing partners for strategic projects
- Reduced willingness to provide infrastructure support or other inducements
- Potential for additional taxes or levies when government recognizes sector profitability

Consequence: While legal framework remains stable, marginal terms for new entrants may be less favorable than those available to early movers. First-mover agreements are grandfathered.

Change 4: "Discovery" Risk Increases

As Mali's opportunity becomes widely recognized, early-stage capital will flood in, driving up valuations of exploration companies and development projects based on speculative value rather than operating cash flows:

- Junior mining company valuations increase based on license holdings and exploration results
- Development projects command premium multiples based on optimistic production forecasts
- Market becomes susceptible to promotional activity and speculation

Consequence: Later entrants must pay inflated values for early-stage assets or wait for inevitable correction, missing years of optimal deployment opportunity.

Strategic Imperative: Act During the Window

The strategic imperative is clear: the window to capitalize on the perception gap is finite and closing. The catalysts that will trigger re-rating are not distant possibilities; they are current realities generating observable data.

Optimal investor profile for current window:

- Willing to conduct direct due diligence beyond international media and ratings
- Comfortable with frontier market risks when compensated by returns and structural improvements
- Capable of holding positions through potential near-term volatility as perception adjusts
- Seeking multi-year (3-5 year+) investment horizons allowing catalysts to materialize
- Able to provide operational or strategic value beyond pure financial capital

Sub-optimal investor profile:

- Requiring consensus validation before investing
- Unwilling to invest resources in direct due diligence and ground-level assessment
- Needing near-term liquidity or subject to mark-to-market performance evaluation
- Inflexible about emerging market exposure due to policy or mandate restrictions

For appropriate investors: Mali in 2025 represents one of the clearest examples of a mispriced opportunity where patient capital with differentiated information access can generate exceptional returns. The opportunity exists because others are not acting. Once others begin acting, the opportunity will diminish or disappear.

The question is not whether Mali will eventually be recognized as an attractive investment destination. The documented fundamentals and emerging catalysts make that outcome highly

probable. The question is whether to deploy capital before that recognition occurs and capture the valuation re-rating, or wait for consensus comfort and pay full value.

The first-mover advantage in Mali is substantial and time-sensitive. Acting now positions capital to benefit from both operational performance and multiple expansion as the perception gap closes.

IX. RISK ASSESSMENT & MITIGATIONS

A rigorous investment thesis requires honest assessment of residual risks and concrete mitigation strategies. While the preceding analysis demonstrates that many perceived risks are overstated due to the perception gap, material risks remain. This section identifies primary risk categories, assesses their likelihood and impact, and outlines specific mitigation approaches, often leveraging the structural changes that underpin the positive thesis.

A. Security Environment Volatility

Risk Description

Despite significant security gains with FAMa recapturing all regional capitals [27, 55] and the AES security framework providing regional coordination [26, 32], non-state armed groups remain active in certain areas. Jihadist factions affiliated with IS-Sahel Province and Jama'at Nusrat al-Islam wal-Muslimin (JNIM) continue operations, particularly in border regions with Niger, Burkina Faso, and Mauritania [71].

Specific manifestations:

- Localized attacks on military positions, typically in remote border areas
- Occasional improvised explosive device (IED) attacks on transport corridors
- Targeted attacks on infrastructure (telecommunications towers, power lines) in contested zones
- Competition over resource control (artisanal mining sites, agricultural areas, smuggling routes) [71]
- Rare attacks on civilian targets or mining operations, though these generate disproportionate media coverage

Likelihood: Medium. Security situation has improved substantially but is not risk-free. Incidents continue to occur, though with declining frequency and primarily in peripheral areas rather than economic centers.

Impact if realized: Medium to High depending on location and severity. Direct attack on major mining operation would cause temporary production disruption and international media attention.

However, historical evidence shows even significant security incidents have not caused long-term operational cessation.

Mitigation Strategies

1. Enhanced State Capacity

The fundamental security improvement comes from strengthened state military capacity. FAMA's modernized capabilities and presence in all regional capitals [27, 55] provide a security umbrella substantially stronger than existed during the 2012-2020 period of territorial fragmentation.

Specific capabilities:

- Modern armor and mechanized forces (T-72 tanks, BTR APCs) [10, 21, 22] enabling force projection
- Advanced ISR assets (drones) providing intelligence and targeting capability [10]
- Improved training and tactics from international partners [6, 37]
- Greater operational tempo maintaining pressure on insurgent groups

Evidence of effectiveness: The recapture and sustained control of Kidal and other northern centers demonstrates that security gains are durable, not temporary.

For investors: Enhanced state capacity reduces likelihood of security deterioration. Trend is toward continued consolidation, not reversal to 2012-2014 conditions.

2. AES Regional Coordination

The Alliance of Sahel States mutual defense pact and operational coordination creates a more robust security architecture than any individual state could achieve [26, 32].

Specific mechanisms:

- Intelligence sharing on insurgent movements across borders [20]
- Coordination of military operations to prevent insurgents escaping across borders when pressured
- Mutual support if one member state faces major security challenge
- Unified approach to security strategy reducing opportunities for insurgents to exploit divergent national policies

Evidence of effectiveness: Cross-border operations and improving security in tri-border areas suggest coordination is operational, not merely declaratory.

For investors: Regional coordination addresses a structural vulnerability (porous borders enabling insurgent mobility) and creates scale effects in security provision that reduce per-country costs.

3. Site-Specific Security Protocols

Investors, particularly in extractive sector, must maintain robust site-specific security protocols rather than relying solely on general security environment improvements.

Standard mining sector security measures:

- Perimeter security (fencing, lighting, access control, surveillance)
- Security personnel (mix of private security and coordination with state forces)
- Secure logistics (convoy management, route security, vehicle tracking)
- Personnel protection measures (secure accommodation, controlled movement, emergency evacuation plans)
- Intelligence gathering (community engagement, threat monitoring, coordination with security forces)

Best practice examples: B2Gold, Allied Gold, and Resolute Mining all maintain sophisticated security operations at their Mali sites [8, 11, 45]. These companies operate globally and implement security standards appropriate to operating environment. Their continued operation and expansion indicate security measures are effective.

For investors: Site-specific security is an operational cost that must be incorporated into project economics, but it is manageable and proven effective by existing operators.

4. Local Content and Community Benefit Sharing

Perhaps the most effective long-term security strategy is ensuring local communities benefit tangibly from resource extraction, reducing incentives to support or tolerate insurgent presence.

2023 Mining Code provisions [51]:

- Mandatory local hiring and training
- Local procurement requirements supporting community businesses
- Infrastructure contributions to host communities (roads, schools, health facilities, water)
- State and local equity participation ensuring community shares in project economics

Security rationale: Communities that receive employment, income, and infrastructure from mining operations have direct interest in operation continuity and security. They provide intelligence on insurgent movements, deny insurgents local support, and actively cooperate with security forces.

For investors: Local content requirements, while adding operational complexity, serve critical security risk mitigation function. Effective implementation builds community allies who provide sustainable security through intelligence and active cooperation.

Residual Risk Assessment

After mitigation: Low to Medium. Security risk cannot be eliminated in Sahel context, but it can be managed to levels compatible with successful operations, as proven by existing mines. Risk is comparable to operating in other frontier markets with security challenges (e.g., parts of Colombia, Philippines, DRC) where mining succeeds through effective security management.

B. Political and Policy Execution Risk

Risk Description

Mali remains under a transitional government led by Colonel Assimi Goïta following the August 2020 military transition [36, 71]. While this government has demonstrated capacity in security strategy execution [27, 55] and major legal reforms like the 2023 Mining Code [51], uncertainties remain regarding:

Long-term political roadmap:

- Timeline for eventual elections and return to civilian governance remains unclear [49]
- Possibility of extended transition period or military entrenchment
- Potential for internal military factionalism or succession disputes
- Risk of policy inconsistency if leadership changes

Governance concerns:

- Dissolution of political parties in 2024 limiting political pluralism [59]
- Restrictions on media and civil society creating limited checks on executive power
- Centralization of decision-making reducing institutional constraint
- Corruption perceptions (though no worse than regional peers)

Policy execution risk:

- Capacity to implement ambitious development plans may fall short of commitments
- Regulatory agencies may lack resources or expertise for effective oversight
- Local government capacity for implementing local content requirements [51] may be limited
- Potential for abrupt policy shifts on critical issues

Likelihood: Medium. Transitional governments inherently carry higher political risk than established constitutional systems. However, current leadership has shown pragmatism and competence in core priorities (security, mining code, economic management).

Impact if realized: Medium to High depending on nature of political change. Orderly transition to civilian governance would likely be a continuity event. Disorderly transition, military factionalism, or abrupt policy shifts could create significant disruption.

Mitigation Strategies

1. Codified Legal Frameworks

The most important mitigation is that Mali's investment framework is increasingly based on codified law rather than discretionary executive decisions.

Key frameworks:

- **2023 Mining Code** [51]: Detailed legal text establishing state participation, fiscal terms, local content, and procedures. Not easily modified without legislative process
- **2012 Investment Code** [50]: Establishes priority sectors, incentives, and investor protections. Remains in force providing legal foundation
- **WAEMU Treaty obligations:** Regional commitments constraining unilateral policy changes
- **International investment agreements:** Bilateral investment treaties (BITs) with various countries providing investor protections

Significance: These frameworks are not executive orders that can be rescinded quickly. They are laws requiring legislative amendment. While not impossible to change, the process creates delay, transparency, and opportunity for stakeholder input that reduces risk of arbitrary changes.

For investors: Operate under established legal frameworks with written establishment agreements. Ensure agreements are governed by law and specify dispute resolution mechanisms (international arbitration). Legal foundation provides protection even during political transitions.

2. Alignment with Sovereign Goals

Investments that clearly align with government's stated priorities are at lower risk of adverse policy changes.

Stated sovereign priorities:

- Resource nationalism (ensuring fair value from mineral extraction) [51]
- Economic diversification (beyond gold to lithium, agriculture, manufacturing) [58]
- Infrastructure development (transport, energy, telecommunications) [60, 4]
- Regional integration through AES [54]
- Security consolidation and territorial sovereignty [27]

Strategic alignment:

- Mining investments under 2023 Code framework accepting state participation align with resource nationalism
- Lithium and critical minerals investments align with diversification and strategic importance
- Infrastructure investments directly support government development goals
- Renewable energy investments address power sector challenges and climate goals
- Manufacturing and processing investments create employment and value addition

For investors: Frame investments as partnerships supporting government's sovereign goals. Demonstrate tangible benefits (revenues, employment, infrastructure, technology transfer). Create alignment of interests where project success and government objectives reinforce each other.

3. Strong Local Partnerships

Building relationships with local business partners, communities, and relevant state entities helps navigate political landscape and provides early warning of policy shifts.

Partnership vehicles:

- **Joint ventures with SOREM** [61, 62] for strategic minerals projects, creating state entity as partner and advocate
- **Local business partnerships** providing commercial relationships and political intelligence
- **Community partnerships** through local content implementation, creating constituency supporting project continuation

- **Technical partnerships** with Malian universities and research institutions building local capacity

Benefits:

- Local partners provide early visibility into policy discussions and potential changes
- Strong community support creates political cost for government if adverse actions affect project
- State entity partnerships (like SOREM JVs) align government financial interests with project success
- Local technical partnerships build domestic capacity supporting long-term sector development

For investors: Do not operate in isolation. Build network of Malian partners, employees, suppliers, and community relationships that create mutual interdependence and shared interests.

4. Multilateral Engagement

The government's continued engagement with multilateral institutions provides external validation and encourages adherence to predictable macroeconomic frameworks.

Active multilateral relationships:

- **IMF:** Ongoing Article IV consultations and technical assistance [34]
- **World Bank:** Active project financing and country partnership framework [58, 60]
- **AfDB:** Substantial infrastructure and development portfolio [3, 4]
- **WAEMU:** Continued membership and adherence to convergence criteria [34, 49]

Significance: These relationships create external accountability and technical support. IMF and World Bank engagement signals to international investors that multilateral institutions remain comfortable with country fundamentals. WAEMU membership provides policy anchor and external constraint on extreme policy deviations.

For investors: Multilateral engagement reduces risk of extreme policy shifts (capital controls, arbitrary taxation, debt default) and provides warning system if relationships deteriorate.

Residual Risk Assessment

After mitigation: Medium. Political risk cannot be eliminated in transitional context, but it can be managed through legal frameworks, strategic alignment, local partnerships, and multilateral engagement. Risk is higher than in mature democracies but comparable to other frontier markets with active mining and infrastructure sectors (DRC, Zambia, Mongolia, Peru under various governments).

C. Economic and Fiscal Vulnerabilities

Risk Description

While Mali's economy demonstrates resilience, several vulnerabilities warrant attention:

Commodity price dependence:

- Gold and (increasingly) lithium prices drive mining sector revenues and government fiscal position
- Global commodity price downturns reduce export earnings and fiscal revenues
- Cotton prices affect agricultural incomes and rural economic health

Climate vulnerability:

- Rain-fed agriculture susceptible to drought and flooding [34, 48]
- Climate shocks can cause sudden food insecurity requiring government subsidies
- Irregular rainfall patterns affect hydropower potential and agricultural productivity

Fiscal challenges:

- Public debt at 52.9% of GDP, while manageable, requires prudent fiscal management [58]
- Fiscal deficit at 3.3% of GDP slightly above WAEMU target [34]
- Heavy dependence on mining revenues (post-2023 Code surge [43]) creates vulnerability if production disrupted

Energy constraints:

- Power outages have been a recent challenge affecting urban centers and industrial users [34]

- Limited generation capacity and transmission infrastructure constrain economic activity
- Continued diesel dependence in power generation creates cost volatility

Likelihood: Medium to High. Economic shocks (commodity price declines, climate events, energy disruptions) will occur periodically. Question is severity and government response capacity.

Impact if realized: Low to Medium for most scenarios. Mali's economy has demonstrated ability to absorb commodity shocks and climate variability while maintaining growth. Extreme scenarios (simultaneous gold price collapse, severe drought, major mine closure) would create significant challenge but government has demonstrated reasonable crisis management capacity.

Mitigation Strategies

1. Diversification Engine

The structural diversification analyzed in Pillar III provides fundamental resilience against single-commodity shocks.

Current diversification:

- **Lithium production** [24, 41] reduces gold dependence, providing alternative revenue stream
- **Agricultural sector strength** [48, 7] provides employment and export earnings independent of mining
- **Services sector growth** [58] driven by telecommunications, trade, and urban consumption
- **Renewable energy development** [4] creating new sector opportunities

Impact: Even if gold prices decline substantially, lithium production continues. If mining sector contracts, agriculture and services continue. Diversification means shocks in one sector do not cascade through entire economy.

Evidence: IMF's 5.0% GDP growth forecast for 2025 [34] already incorporates Barrick mine disruption, proving growth continues despite single-operation shock.

For investors: Diversified economy reduces correlation of investment returns with single commodity prices. Projects targeting domestic consumption benefit from economic growth independent of export commodity volatility.

2. Renewable Energy Investment

The large-scale push into renewable energy directly addresses energy constraints and reduces operational costs.

Desert to Power Initiative [4]:

- 399 MW solar capacity by 2025, 977 MW by 2030
- AfDB financing of \$379.6M for G5 Sahel solar development
- Mauritania-Mali interconnection providing grid stability and regional power trade

Mining sector solar adoption:

- B2Gold Fekola solar expansion [11]
- Allied Gold Sadiola solar and battery project [69]
- Future mines planning hybrid or full solar configurations

Impact: Renewable energy reduces exposure to diesel price volatility, lowers operational costs, improves reliability, and addresses climate/ESG concerns. Both utility-scale and captive power generation improve energy security.

For investors: Energy transition reduces operational risk from power supply unreliability and cost volatility. Projects can be designed with renewable energy provision from inception, improving economics and resilience.

3. WAEMU Membership and Monetary Stability

Continued membership in West African Economic and Monetary Union provides a critical anchor for monetary stability and fiscal discipline.

WAEMU benefits:

- **CFA Franc stability:** Currency backed by French Treasury guarantees provides convertibility and low inflation [49]
- **Regional central bank:** BCEAO conducts independent monetary policy focused on price stability
- **Fiscal convergence criteria:** 3% deficit ceiling and other targets provide external discipline on fiscal policy [34]

- **Regional integration:** Common market enabling trade and investment flows across eight member states

Current status: While Mali's relationship with France has changed, WAEMU membership continues and CFA Franc arrangement remains in place [49]. AES monetary union aspirations [54] are long-term and face substantial technical hurdles.

Impact: WAEMU membership prevents extreme policy errors (hyperinflation, capital controls, currency collapse) that have affected some frontier markets. Regional framework provides stability anchor even during domestic political transitions.

For investors: CFA Franc convertibility enables repatriation of profits and dividends. Low inflation protects investment returns. Regional monetary framework reduces currency risk relative to standalone national currencies.

4. Strengthened Fiscal Position

The 52.5% increase in state mining revenues in 2024 [43] provides fiscal buffer to manage economic shocks.

Fiscal resilience sources:

- **Higher revenues:** Mining revenues at \$1.4B provide greater fiscal space than previously [43]
- **Multiple revenue streams:** Combination of royalties, taxes, and state equity participation [51]
- **Progressive elements:** Potential price-linked royalties capture upside during commodity booms
- **Improved collection:** Tax administration digitalization [58] reducing leakage and improving efficiency

Impact: Stronger fiscal position provides government with capacity to respond to shocks through countercyclical spending, targeted support to affected sectors, or infrastructure investment that stimulates demand during downturns.

For investors: Fiscally sound government is more stable and predictable. It has less need for desperate revenue measures (arbitrary taxation, capital controls) and greater capacity to support economic growth during difficult periods.

Residual Risk Assessment

After mitigation: Low to Medium. Economic vulnerabilities exist but are manageable and improving. Diversification, renewable energy transition, WAEMU membership, and strengthened fiscal position provide substantial resilience. Economic risks are comparable to other developing economies with similar structures and actually lower than many resource-dependent economies lacking diversification.

D. Operational and Logistical Challenges

Risk Description

As a landlocked country in the Sahel region [59], Mali faces inherent logistical challenges that increase operational costs and complexity relative to coastal economies:

Transport and logistics constraints:

- Dependence on road transport through neighboring countries (Senegal, Côte d'Ivoire, Guinea) to reach ports [49]
- Road infrastructure quality varies, with some sections deteriorated or poorly maintained [60]
- Long distances from ports to mining/operational sites (800-1,200 km typical)
- Border crossing delays and customs procedures adding time and cost
- Security considerations affecting route selection and convoy timing

Bureaucratic processes:

- Permit and licensing procedures, while streamlined through API-Mali [49], can experience delays
- Multiple government agencies involved in project approvals requiring coordination
- Documentation requirements substantial for import/export clearances
- Local content implementation requiring demonstration and reporting [51]

Skilled labor availability:

- Limited domestic availability of certain specialized technical skills (advanced engineering, specialized trades, senior management)
- Competition for skilled Malian workers among major employers
- Need for expatriate technical staff for some positions, adding costs and visa/work permit requirements
- Training and skills development programs required to build local capacity

Supply chain complexity:

- Long lead times for equipment and materials imported from overseas
- Limited local manufacturing capacity requiring most inputs to be imported
- Inventory management challenges due to long supply chains
- Spare parts availability requiring substantial on-site inventory or long downtime during procurement

Likelihood: High. These challenges are structural features of landlocked Sahel geography and development level. They will persist, though infrastructure improvements will progressively reduce severity.

Impact if realized: Low to Medium. These are manageable operational challenges rather than project-killing risks. Companies like B2Gold, Allied Gold, and Resolute successfully manage these challenges [8, 11, 45], proving they are surmountable with proper planning and resources.

Mitigation Strategies

1. Targeted Infrastructure Investment

Ongoing infrastructure projects specifically address key transport bottlenecks:

Bamako-Dakar Corridor Upgrade:

- World Bank \$219.8 million financing for road infrastructure improvement [60]
- Focus on Diéma-Sandaré section addressing critical deteriorated segment [60]
- Expected to reduce travel times and lower transport costs for corridor users [60]
- Climate-resilient design reducing weather-related disruptions

Mauritania-Mali Interconnection:

- \$303 million investment in electricity interconnection [4]
- Improves energy security and grid stability
- Enables regional power trade reducing energy costs

AfDB Infrastructure Portfolio:

- \$1.37 billion committed across 71 projects [3]
- Multi-sectoral approach (transport, energy, water, agriculture)
- Long-term partnership providing sustained infrastructure development

Impact: Infrastructure improvements directly reduce operational costs. Mining companies benefit from lower logistics costs, improved power supply, and reduced transit times. Benefits are permanent once infrastructure is upgraded.

For investors: Public infrastructure investment de-risks private operations. Projects should be located to maximize access to improved corridors and infrastructure nodes. Near-term projects benefit from improvements already underway; long-term projects will see continued enhancement as infrastructure program advances.

2. Strategic Location Planning

Careful project location planning during feasibility and development phases can substantially reduce logistical challenges:

Location considerations:

- **Proximity to upgraded corridors:** Sites near Bamako-Dakar route benefit from current and planned improvements
- **Access to regional infrastructure:** Locations near regional capitals or secondary cities have better access to power, water, telecommunications, and services
- **Distance from ports:** While geology dictates deposit location, processing and support facilities can be optimized for logistics
- **Security environment:** Sites in areas of stronger government control and better security have lower operational disruption risk

Examples of strategic positioning:

- Fekola (B2Gold) benefits from proximity to Senegal border and Bamako-Dakar route [11]
- Goulamina (Ganfeng) location selected partially for transport corridor access [24]
- Future projects should evaluate logistics in site selection alongside geological and technical factors

For investors: Location is partially a choice. Within geological constraints, projects can be designed to minimize logistical challenges. Early-stage projects should incorporate logistics analysis into site selection and design.

3. Local Content and Skills Development

Proactively investing in local workforce training and local supplier capacity addresses skills gaps while fulfilling regulatory requirements [51].

Workforce development approaches:

- **Technical training programs:** Establish or support vocational training centers for trades needed in operations (electrical, mechanical, heavy equipment operation, process operations)
- **University partnerships:** Collaborate with Malian universities on engineering, geology, and mining programs providing pipeline of graduates
- **Apprenticeship programs:** Pair expatriate experts with Malian counterparts for knowledge transfer
- **Management development:** Invest in developing Malian professionals for middle and senior management positions

Supplier development approaches:

- **Preferred supplier programs:** Identify capable local suppliers and provide business development support, quality training, and financing access
- **Local procurement targets:** Set ambitious but achievable local procurement goals driving supplier capacity building
- **Joint ventures:** Partner with local businesses for services contracts, building their capacity while meeting local content requirements
- **Supply chain mapping:** Identify opportunities to localize inputs currently imported

Benefits:

- Reduces dependence on expatriate labor lowering costs and visa risks
- Improves local supply chain reliability and responsiveness
- Builds community support through tangible local economic benefits [51]
- Creates skills and supplier base benefiting entire sector and future projects

For investors: Local content requirements [51], while adding complexity, serve strategic purpose. Effective implementation creates operational advantages (lower costs, better community relations, reduced dependence on expatriates) while fulfilling regulatory obligations.

4. Leveraging API-Mali and Institutional Support

Mali has established institutional mechanisms to facilitate investment and streamline administrative processes:

API-Mali (Investment Promotion Agency) [49]:

- Central point of contact for investors
- Assistance navigating regulatory requirements and permit processes
- Coordination among government agencies to reduce delays
- Information provision on investment opportunities, legal framework, and procedures

Ministry support:

- Ministry of Mines and Petroleum provides sector-specific guidance
- Ministry of Economy and Finance addresses fiscal and incentive questions
- Ministry of Infrastructure assists with infrastructure access and planning

International organization support:

- World Bank and AfDB provide technical assistance to government agencies improving capacity [3, 60]
- UNDP and other UN agencies support governance and institutional strengthening
- Bilateral development agencies provide sector-specific technical cooperation

Utilization strategy:

- Engage API-Mali early in project planning process
- Maintain regular communication with relevant ministries throughout project lifecycle
- Participate in industry associations and working groups sharing knowledge on effective approaches
- Leverage international organization resources for technical assistance and capacity building

For investors: Use available institutional support rather than attempting to navigate bureaucracy independently. API-Mali exists specifically to facilitate investment and can accelerate processes and resolve bottlenecks [49].

Residual Risk Assessment

After mitigation: Low to Medium. Operational and logistical challenges remain higher than in coastal, developed economies, but they are manageable with proper planning, resources, and institutional engagement. Existing successful operations prove these challenges do not prevent profitable operations. Infrastructure improvements underway will progressively reduce severity of these challenges over time.

Key insight: These are operational challenges, not existential risks. Companies with operational competence in emerging markets can manage them successfully. Costs are higher than in ideal locations but not prohibitive relative to project economics, particularly for high-value commodities like gold and lithium.

Risk Assessment Summary Matrix

Overall Risk Conclusion

Mali presents risks that must be acknowledged and managed, but these risks are:

1. **Not unique to Mali:** Similar risks exist in other frontier markets where successful operations occur (security in Colombia/Philippines, political in DRC/Zambia, logistical in landlocked Mongolia/Burkina Faso)
2. **Actively improving:** Security consolidation [27, 55], legal framework codification [51], infrastructure investment [60], and economic diversification [24, 41, 48] are reducing risk profiles
3. **Manageable with proven strategies:** Existing successful operations by sophisticated international companies prove risks can be managed to acceptable levels [8, 11, 45]
4. **Compensated by returns:** Higher risk justifies higher returns. The perception gap creates return opportunities that more than compensate for well-managed risks
5. **Often overstated:** The perception gap means market prices in risks higher than warranted by actual conditions, creating opportunity for investors who conduct proper due diligence

Critical distinction: The question is not whether risks exist (they do), but whether they are manageable within acceptable tolerances and compensated by returns. The evidence from operational reality, combined with concrete mitigation strategies leveraging structural improvements, demonstrates an affirmative answer to both questions.

X. CONCLUDING RECOMMENDATION

Investment Thesis Recap

The preceding analysis establishes a compelling, evidence-based investment thesis for Mali grounded in four structural pillars:

Pillar I - Sovereign Stability: The 2023 Mining Code, security consolidation, and AES formation have created a more predictable and transparent operating environment than existed under previous frameworks [51, 27, 26].

Pillar II - Economic Resilience: Major operators are expanding (not withdrawing), 5.0% GDP growth demonstrates fundamental strength, and 52.5% mining revenue surge proves new framework effectiveness [8, 11, 45, 34, 43].

Pillar III - Diversification: Operational lithium production, robust agriculture, and renewable energy buildout create multi-engine economy insulated from single-commodity shocks [24, 41, 48, 4].

Pillar IV - Demographics: With 46% population under age 15 and 16 million additional people by 2043, Mali possesses one of the world's most powerful demographic dividends guaranteeing decades of labor force expansion and consumer market growth [36, 52].

These pillars are reinforced by strategic infrastructure investment (\$219.8M corridor upgrade, \$1.37B AfDB portfolio) [60, 3] and the timing opportunity created by a significant perception gap between negative international sentiment and positive operational reality.

The Central Arbitrage

Market perception: Mali is unstable, unpredictable, and hostile to investment based on 2021-2023 political transition and high-profile Barrick dispute [15, 49].

Ground reality: Mali has established codified legal framework, restored territorial control to all regional capitals, attracted major new investments under revised code, and is achieving robust economic growth while diversifying beyond gold [51, 27, 35, 34, 24].

The gap is measurable: B2Gold and Allied Gold equity valuations trade at discounts to peers despite superior assets and operations [11, 8]. Asset acquisition opportunities exist at prices reflecting excessive risk perception. Infrastructure financing carries premiums not justified by actual project risk.

The gap is closing: Lithium exports commencing [24, 41], mining code proving successful [35], security consolidating [27], infrastructure delivering [60]. Each catalyst progressively forces market re-evaluation.

The timing is now: First-movers deploying capital before perception catches up with reality capture both operational returns and valuation re-rating. Delay means paying full value once consensus shifts.

Recommended Investment Approach

Investment Recommendation: Initiate or substantially increase Mali exposure across multiple investment vectors.

Primary Investment Opportunities

1. Direct Mining Operations and Development Projects

Gold sector:

- Acquire equity stakes in operating mines (B2Gold, Allied Gold, Resolute) at discounted valuations reflecting Mali risk premium
- Acquire or develop greenfield/brownfield gold projects under clear 2023 Mining Code framework [51]
- Partner with SOREM on strategic projects leveraging state entity relationships [61, 62]

Lithium sector:

- Acquire equity exposure to Goulamina (Ganfeng) or Bougouni (Kodal) operations now demonstrating production capability [24, 40]
- Secure exploration licenses in emerging lithium districts before junior miner competition intensifies

- Pursue processing and value-addition opportunities as concentrate exports establish base volumes

Strategic minerals:

- Explore uranium, rare earths, and other critical minerals aligned with global energy transition and defense needs
- Leverage Mali's designation of strategic minerals in mining code [51] and partnership opportunities with SOREM

2. Infrastructure and Energy

Renewable energy:

- Utility-scale solar IPP development under Desert to Power framework with AfDB backing [4]
- Captive power projects serving mines leveraging Mali's exceptional solar resources
- Battery storage and grid integration services as renewable penetration increases
- Distribution network upgrades for rural electrification via mini-grids

Transport and logistics:

- Logistics services and warehouse facilities along upgraded corridors [60]
- Cross-border transport operations capitalizing on improved road infrastructure
- Port handling and customs clearance services in Dakar and Abidjan serving Mali trade

Telecommunications:

- Network expansion and densification serving underserved areas and growing urban populations
- Data center and cloud services infrastructure
- Mobile financial services and digital payment platforms

3. Agricultural Value Chains

Processing and manufacturing:

- Cotton ginning and textile manufacturing capturing value beyond raw fiber exports [48]
- Livestock processing (modern slaughterhouses, cold chain, leather processing) [7]
- Specialty crop processing (shea butter refinement, mango processing) [53, 47]

Input supply and distribution:

- Agricultural inputs (seeds, fertilizers, equipment) distribution networks
- Storage and warehouse facilities reducing post-harvest losses
- Agricultural finance and insurance products supporting farmer productivity

4. Domestic Consumer Markets

Fast-moving consumer goods:

- Consumer packaged goods targeting growing urban middle class
- Distribution networks serving urban centers and peri-urban areas
- Retail formats (modern grocery, chain stores) in major cities

Financial services:

- Retail banking expansion to secondary cities and underserved segments
- Mobile money and digital banking leveraging high mobile penetration [59]
- Consumer lending products (motorcycles, appliances, housing, education)
- Microfinance and SME finance supporting local business development

Real estate and construction:

- Affordable housing developments in urban peripheries serving first-time buyers
- Middle-income housing and commercial real estate in major cities
- Construction materials manufacturing and distribution

Healthcare and education:

- Private healthcare facilities (hospitals, clinics, diagnostic centers)
- Private schools and vocational training centers
- Health insurance products as formal sector employment expands

Investment Structuring Considerations

Legal structure:

- Establish operations under 2023 Mining Code [51] or 2012 Investment Code [50] to benefit from codified protections and incentives

- Ensure agreements specify international arbitration for dispute resolution
- Consider joint ventures with SOREM or Malian partners to align interests and build relationships [61, 62]

Risk management:

- Implement robust site-specific security protocols appropriate to operating environment
- Invest in local content and community benefit programs to build social license [51]
- Maintain strong relationships with government ministries and local authorities
- Secure political risk insurance for large capital deployments where available

Operational approach:

- Engage API-Mali early for regulatory navigation support [49]
- Leverage multilateral institution resources (AfDB, World Bank) for project finance and technical assistance [3, 60]
- Participate in industry associations to share best practices and coordinate with other operators
- Design operations to maximize access to infrastructure improvements underway

Timeline and capital deployment:

- Phase capital deployment over 2-3 years to manage risk while building presence
- Prioritize projects with near-term cash generation to prove concept and fund expansion
- Maintain dry powder for opportunistic acquisitions as perception gap creates distressed sellers
- Structure for 5-10 year holding periods allowing catalysts to materialize and perception to normalize

Target Investor Profile

Optimal investors for current Mali opportunity:

Characteristics:

- Experienced in frontier and emerging markets with proven operational competence
- Capable of direct due diligence and ground-level assessment beyond international media
- Patient capital with 5+ year time horizons allowing for catalyst realization

- Comfortable with managed risks when compensated by returns and structural improvements
- Able to provide operational value-add beyond pure financial capital
- Willing to engage constructively with government and local partners

Examples of suitable investor types:

- Specialized mining companies and development firms with emerging market track records
- Private equity funds with frontier market mandates and operational capabilities
- Family offices and sovereign wealth funds with long time horizons and risk tolerance
- Infrastructure funds with development finance experience
- Impact investors targeting frontier market development while seeking commercial returns

Less suitable investor types:

- Passive index investors unable to conduct differentiated analysis
- Short-term traders subject to mark-to-market volatility
- Investors requiring consensus validation before acting
- Rigidly mandate-constrained institutions unable to allocate to frontier markets
- Operators lacking emerging market experience or cultural competence

Action Steps for Prospective Investors

Phase 1 - Due Diligence (3-6 months):

1. Conduct desktop research using primary sources (company reports, IMF/World Bank assessments, mining code text)
2. Engage with current operators (B2Gold, Allied Gold, Resolute, Ganfeng) to understand operational reality
3. Visit Mali for ground-level assessment (mining operations, government meetings, community engagement)
4. Retain local legal counsel to analyze contractual and regulatory frameworks
5. Conduct comprehensive risk assessment including security, political, operational dimensions
6. Identify specific investment opportunities aligned with capabilities and strategy

Phase 2 - Initial Positioning (6-12 months):

1. Make initial equity investments or acquire development projects at current valuations

2. Establish in-country presence (office, local team, institutional relationships)
3. Engage with API-Mali and relevant government ministries [49]
4. Build relationships with SOREM and other state entities for partnership opportunities [61, 62]
5. Participate in industry associations and multilateral programs
6. Begin local content and community engagement programs to build social license

Phase 3 - Scale and Expansion (12-36 months):

1. Expand successful initial investments with additional capital
2. Pursue additional opportunities as track record and relationships strengthen
3. Leverage first-mover advantages in relationships, knowledge, and infrastructure
4. Build operational scale creating competitive advantages in costs and capabilities
5. Position for eventual exit or continuation as perception normalizes and valuations re-rate

Final Assessment

The evidence presented throughout this thesis leads to a clear and actionable conclusion: **Mali offers a compelling, yet significantly undervalued, investment opportunity in 2025.**

What makes this thesis compelling:

1. **Evidence-based:** Grounded in verifiable data from credible sources (IMF, World Bank, company reports, government statistics), not speculation [34, 58, 8, 11, 43]
2. **Proven operational success:** Major international companies demonstrating successful operations and expanding investment [8, 11, 45], providing existence proof
3. **Structural improvements:** Recent changes (mining code, security gains, AES formation) represent genuine enhancement of investment framework [51, 27, 26]
4. **Measurable catalysts:** Lithium production, mining revenue growth, infrastructure delivery creating observable data that will force perception adjustment [24, 43, 60]
5. **Timing opportunity:** Perception gap creates finite window for first-movers before market consensus shifts
6. **Manageable risks:** Residual risks are identifiable, have concrete mitigation strategies, and are comparable to other frontier markets where operations succeed

What this thesis is not:

1. **Not risk-free:** Mali presents material risks that require active management and sophisticated approaches
2. **Not for everyone:** Suitable only for investors with appropriate capabilities, resources, risk tolerance, and time horizons
3. **Not a momentum play:** This is a value opportunity based on fundamental mispricing, not a speculation on near-term price movements
4. **Not guaranteed:** Investment outcomes depend on execution, evolving conditions, and external factors outside investor control

The bottom line: For investors with appropriate profile and capabilities, Mali in 2025 represents one of the clearest examples of a mispriced frontier market opportunity where patient capital with differentiated information can generate exceptional risk-adjusted returns.

The perception gap is real. The operational reality is positive. The timing is optimal. The risks are manageable. The opportunity is substantial.

Recommendation: INITIATE OR INCREASE MALI EXPOSURE

APPENDICES

Appendix A: Reference List

1. ACAPS. (2024). *ACAPS Briefing note: Mali - Situation of internal displacement*. Retrieved from https://www.acaps.org/fileadmin/Data_Product/Main_media/20240607_ACAPS_Briefing_note_Mali_-_Situation_of_internal_displacement.pdf
2. Africa Defense Forum. (2023). *Malian Military, Rebel Groups, Extremists Vie for Control of Kidal*. Retrieved from <https://adf-magazine.com/2023/12/malian-military-rebel-groups-extremists-vie-for-control-of-kidal/>
3. African Development Bank (AfDB). (2025). *ADF Investments in Mali - Factsheet*. Retrieved from <https://www.afdb.org/en/documents/adf-investments-mali-factsheet>
4. African Development Bank (AfDB). (2025). *Desert to Power Initiative: Mali*. Retrieved from <https://www.afdb.org/en/topics-and-sectors/initiatives-and-partnerships/desert-power-initiative/mali>
5. African Mining Market. (2025). *Mali's gold output drops by 32% in 2025*. Retrieved from <https://africanminingmarket.com/country/mali/>
6. Afrinz. (2024). *The Russian Ministry of Defence has sent support to the Malian Armed Forces*. Retrieved from <https://afrinz.ru/en/2024/09/the-russian-ministry-of-defence-has-sent-support-to-the-malian-armed-forces/>
7. AKADEMIYA2063. (2020). *Meat, Milk and More: Mali Case Study*. Retrieved from https://akademiya2063.org/publications/mamo/EN/Meat%20Milk%20and%20More/Meat_Milk_and_More_Mali_Case_Study_2020_ENG.pdf
8. Allied Gold Corporation. (2025). *Second Quarter 2025 Results*. Retrieved from <https://alliedgold.com/investor-relations/investor-news/news-details/2025/ALLIED-GOLD-REPORTS-SECOND-QUARTER-2025-RESULTS-SOLID-PRODUCTION-AND-PROGRESS-ON-GROWTH-PIPELINE/default.aspx>
9. AP News. (2025). *Article on Mali-France diplomatic relations*. Retrieved from <https://apnews.com/article/mali-france-intelligence-services-diplomacy-embassy-d5540b8380dc37eb40699cbf61f66ec0>
10. Army Recognition. (2025). *Russia reinforces its military position in Mali with arrival of T-72 tanks and armored vehicles*. Retrieved from <https://armyrecognition.com/focus-analysis-conflicts/army/analysis-defense-and-security-ind>

ustry/russia-reinforces-its-military-position-in-mali-with-arrival-of-t-72-tanks-and-armored-vehicles

11. B2Gold. (2025). *Q2 2025 Results*. Retrieved from <https://www.b2gold.com/news-media/news-releases/news-details/2025/B2Gold-Reports-Q2-2025-Results/default.aspx>
12. Barrick. (2025). *News Releases*. Retrieved from <https://www.barrick.com/English/news/default.aspx>
13. Benchmark Source. (2025). *Africa sees largest lithium supply growth of any region in 2025*. Retrieved from <https://source.benchmarkminerals.com/article/africa-sees-largest-lithium-supply-growth-of-any-region-in-2025>
14. Britannica. (2025). *Mali - Gold, Salt, Uranium*. Retrieved from <https://www.britannica.com/place/Mali/Resources-and-power>
15. Business Insider Africa. (2025). *Mali restarts Barrick's seized gold mine*. Retrieved from <https://africa.businessinsider.com/local/markets/mali-restarts-barricks-seized-gold-mine-after-nine-month-shutdown/tyfz1xm>
16. CEIC Data. (2025). *Mali Gold Production*. Retrieved from <https://www.ceicdata.com/en/indicator/mali/gold-production>
17. CEIC Data. (2025). *United Arab Emirates Gold Reserves, 1974 – 2025*. Retrieved from <https://www.ceicdata.com/en/indicator/united-arab-emirates/gold-reserves>
18. CNBC Africa. (2025). *Mali announces more new mining deals*. Retrieved from <https://www.cnbcafrica.com/2025/mali-announces-more-new-mining-deals-under-revised-code/>
19. CountryMeters. (2025). *Mali*. Retrieved from <http://countrymeters.info/en/Mali>
20. Crisis Group. (2023). *Nord du Mali : une confrontation dont personne ne sortira vainqueur*. Retrieved from <https://www.crisisgroup.org/africa/sahel/mali/nord-du-mali-une-confrontation-dont-personne-ne-sortira-vainqueur>
21. Defence Blog. (2025). *Russian tanks and armored vehicles spotted in Mali*. Retrieved from <https://defence-blog.com/russian-tanks-and-armored-vehicles-spotted-in-mali/>
22. DefenceWeb. (2025). *Russia delivers military hardware to Mali*. Retrieved from <https://defencweb.co.za/african-news/russia-delivers-military-hardware-to-mali/>
23. Discovery Alert. (2025). *Mali Gold Mining Crisis 2025*. Retrieved from <https://discoveryalert.com.au/news/mali-gold-mining-crisis-2025-barrick-state-control/>
24. Discovery Alert. (2025). *Mali's Goulamina Lithium Mine: A Game-Changer in African Mineral Development*. Retrieved from

- <https://discoveryalert.com.au/news/mali-s-goulamina-lithium-mine-a-game-changer-in-african-mineral-development/>
25. Discovery Alert. (2025). *Mali Mining Revolution*. Retrieved from <https://discoveryalert.com.au/news/mali-mining-revolution-agreements-revised-code-2025/>
 26. DW. (2023). *Juntas of Mali, Niger and Burkina Faso sign security pact*. Retrieved from <https://www.dw.com/en/juntas-of-mali-niger-and-burkina-faso-sign-security-pact/a-66834143>
 27. DW. (2023). *Mali: Is Kidal's recapture a step toward peace?* Retrieved from <https://www.dw.com/en/mali-is-kidals-recapture-a-step-toward-peace/a-67438181>
 28. DW. (2025). *How Russian mercenaries in Mali exploit military equipment*. Retrieved from <https://www.dw.com/en/how-russian-mercenaries-in-mali-exploit-military-equipment/a-74471385>
 29. Ecofin Agency. (2025). *Niger seeks stronger control of its oil sector, but proceeds carefully (op-ed)*. Retrieved from <https://www.ecofinagency.com/insights/2210-49747-niger-seeks-stronger-control-of-its-oil-sector-but-proceeds-carefully-op-ed>
 30. Financial Content. (2025). *Mali Gold Mine Restarts Under State Control*. Retrieved from <https://markets.financialcontent.com/buffnews/article/marketminute-2025-10-21-mali-gold-mine-restarts-under-state-control-barrick-gold-fights-for-its-future>
 31. France24. (2025). *France to expel Mali diplomat*. Retrieved from <https://www.france24.com/en/africa/20250919-france-expel-mali-diplomat-french-envoy-counterterrorism-junta-paris-bamako>
 32. GlobalSecurity.org. (2024). *Alliance of Sahel States (AES)*. Retrieved from <https://www.globalsecurity.org/military/world/int/aes.htm>
 33. IMF eLibrary. (1967). *Investment Laws in French-Speaking Africa*.
 34. International Monetary Fund (IMF). (2025). *IMF Executive Board Concludes 2025 Article IV Consultation with Mali*. Retrieved from <https://www.imf.org/en/Countries/MLI>
 35. Investing News. (2025). *Mali clears new mining agreements*. Retrieved from <https://investingnews.com/mali-clears-new-mining-agreements/>
 36. ISS Africa. (2025). *Mali Country Guide*. Retrieved from <https://futures.issafrica.org/geographic/countries/mali/>
 37. Le Monde. (2024). *Russian military trainers with air defense system arrive in Niger*. Retrieved from https://www.lemonde.fr/en/russia/article/2024/04/13/russian-military-trainers-with-air-defense-system-arrive-in-niger_6668298_140.html
 38. Le Monde. (2025). *Russia delivers armored vehicles to Mali and restructures military presence*. Retrieved from

- https://www.lemonde.fr/en/international/article/2025/01/24/russia-delivers-armored-vehicles-to-mali-and-restructures-military-presence_6737390_4.html
39. Mining.com. (2025). *5 African countries that export the most gold*. Retrieved from <https://www.vanguardngr.com/2025/10/5-african-countries-that-export-the-most-gold/>
 40. Mining.com. (2025). *Kodal Minerals' Mali lithium mine remains on track for Q1 2025 production*. Retrieved from <https://www.mining.com/kodal-minerals-mali-lithium-mine-remains-on-track-for-q1-2025-production/>
 41. Mining Technology. (2025). *Kodal starts exports from Bougouni lithium project in Mali*. Retrieved from <https://www.marketbeat.com/stocks/LON/KOD/news/>
 42. Mordor Intelligence. (2025). *Africa Cotton Market Analysis*. Retrieved from <https://www.mordorintelligence.com/industry-reports/africa-cotton-market>
 43. Mugglehead. (2025). *Mali's gold revenue surged by 52.5% last year*. Retrieved from <https://mugglehead.com/malis-gold-revenue-surged-by-52-5-last-year/>
 44. PV-KnowHow. (2025). *Mali's Investment Code & Renewable Energy*. Retrieved from <https://www.pvknowhow.com/countries/mali/malis-investment-code-renewable-energy/>
 45. Resolute Mining Ltd. (2025). *H1 2025 Financial Results*. Retrieved from <https://www.rml.com.au/wp-content/uploads/2025/08/RSG-ASX-H1-25-Financial-Results-Final.pdf>
 46. SIHMA (UNHCR/IOM). (2024). *African Migration Statistics: Mali*.
 47. TradelmeX. (2025). *Top 10 Mango Exporting Countries in 2024-25*. Retrieved from <https://www.tradeimex.in/blogs/top-10-Mango-exporter>
 48. U.S. Department of Agriculture (USDA). (2025). *Cotton and Products Update*. Retrieved from <https://www.scribd.com/document/849481149/Cotton-and-Products-Annual-Dakar-Senegal-SG2025-0006>
 49. U.S. Department of State. (2025). *2025 Investment Climate Statements: Mali*. Retrieved from <https://www.state.gov/reports/2025-investment-climate-statements/mali>
 50. UNCTAD. (2012). *Mali adopted Investment Code 2012*. Retrieved from <https://investmentpolicy.unctad.org/investment-policy-monitor/measures/4706/mali-adopted-investment-code-2012>
 51. UNCTAD. (2024). *Mali adopts new mining code and implementing decree*. Retrieved from <https://investmentpolicy.unctad.org/investment-policy-monitor/measures/4352/adopts-new-mining-code-and-implementing-decree>
 52. UNFPA. (2025). *World Population Dashboard: Mali*. Retrieved from <https://www.unfpa.org/data/world-population/ML>
 53. Volza.com. (2025). *Shea Butter Moistur Exports from World*. Retrieved from <https://www.volza.com/p/shea-butter-moistur/export/>

54. WADEMOS Network. (2025). *Alliance of Sahel States Stepping Forward*. Retrieved from <https://wademosnetwork.org/2025/02/alliance-of-sahel-states-stepping-forward-with-comm-on-economic-and-security-aspirations/>
55. Wikipedia. (2023). *Battle of Kidal (2023)*. Retrieved from [https://en.wikipedia.org/wiki/Battle_of_Kidal_\(2023\)](https://en.wikipedia.org/wiki/Battle_of_Kidal_(2023))
56. Wikipedia. (2025). *French military withdrawal from West Africa (2022–present)*. Retrieved from [https://en.wikipedia.org/wiki/French_military_withdrawal_from_West_Africa_\(2022%E2%80%9393present\)](https://en.wikipedia.org/wiki/French_military_withdrawal_from_West_Africa_(2022%E2%80%9393present))
57. Wikipedia. (2025). *Lists of countries by mineral production*. Retrieved from https://en.wikipedia.org/wiki/Category:Lists_of_countries_by_production
58. World Bank. (2025). *Macro Poverty Outlook: Mali*. Retrieved from <https://www.worldbank.org/en/country/mali/overview>
59. World Bank. (2025). *Mali Country Overview*. Retrieved from <https://www.worldbank.org/en/country/mali/overview>
60. World Bank. (2025). *World Bank Supports the Connectivity and Resilience of Road Infrastructure in Mali*. Retrieved from <https://www.worldbank.org/en/news/press-release/2025/05/28/world-bank-supports-the-connectivity-and-resilience-of-road-infrastructure-in-mali>
61. Discovery Alert. (2025). *Flagship Gold Revives Mali's Morila Gold Mine: A Partnership*. Retrieved from <https://discoveryalert.com.au/news/morila-gold-mine-revival-flagship-gold-2025/>
62. APAnews. (2025). *Mali revives flagship Morila gold mine with American partner*. Retrieved from <https://apanews.net/mali-revives-flagship-morila-gold-mine-with-american-partner/>
63. Business Insider Africa. (2025). *Mali secures first U.S. mining investment, restarting historic gold mine after Australia's exit*. Retrieved from <https://africa.businessinsider.com/local/markets/mali-secures-first-us-mining-investment-restarting-historic-gold-mine-after/hz7rnw9>
64. Or Noir Africa. (2025). *MALI: Flagship Gold Corp et SOREM s'associent pour relancer la mine d'or de Morila*. Retrieved from <https://ornoirafrika.com/en/mali-flagship-gold-corp-et-sorem-sassocient-pour-relancer-la-mine-dor-de-morila/amp/>
65. Ecofin Agency. (2025). *Mali in Talks With U.S. Miner Flagship to Restart Morila Gold Mine*. Retrieved from <https://www.ecofinagency.com/news-industry/1010-49473-mali-in-talks-with-u-s-miner-flagship-to-restart-morila-gold-mine>
66. Ecofin Agency. (2024). *Mali: Gold State Company Gets New Exploration Permit*. Retrieved from <https://www.ecofinagency.com/mining/2908-45831-mali-gold-state-company-gets-new-exploration-permit>

67. WADR. (2025). *Mali takes full control of Yatela and Morila gold mines*. Retrieved from <https://wadr.org/mali-takes-full-control-of-yatela-and-morila-gold-mines/>
68. Wikipedia. (2025). *Alliance of Sahel States*. Retrieved from https://en.wikipedia.org/wiki/Alliance_of_Sahel_States
69. African Mining Market. (2025). *Allied Gold to invest in solar power to support Sadiola mine operations*. Retrieved from <https://africanminingmarket.com/allied-gold-to-invest-in-solar-power-to-support-sadiola-mine-operations/23948/>
70. AFRI-RES | ECA. (n.d.). *Mali Country Profile*. Retrieved from <https://afri-res.uneca.org/index.php/country-profile/ml/mali>
71. GIS Reports Online. (2025). *Power, gold and guns: Mali's uncertain future*. Retrieved from <https://www.gisreportsonline.com/r/mali-uncertain-future/>
72. Discovery Alert. (2025). *Understanding the \$16.4 Million Hummingbird Resources Mali Yanfolila Mine Deal*. Retrieved from <https://discoveryalert.com.au/news/understanding-the-16-4-million-hummingbird-resources-mali-yanfolila-mine-deal/>

Appendix B: Glossary of Terms and Acronyms

AES - Alliance of Sahel States: Regional partnership formed in September 2023 between Mali, Burkina Faso, and Niger

AfDB - African Development Bank: Multilateral development finance institution supporting African development projects

API-Mali - Agence pour la Promotion des Investissements au Mali: Investment promotion agency serving as single window for investors

BCEAO - Banque Centrale des États de l'Afrique de l'Ouest: Central bank of WAEMU member states managing CFA Franc

CFA Franc - Franc of the African Financial Community: Currency used by WAEMU member states, backed by French Treasury

CMDT - Compagnie Malienne pour le Développement des Textiles: State-supported cotton sector enterprise

DMS - Dense Media Separation: Mineral processing technology used in Bougouni lithium operation

FAMa - Forces Armées Maliennes (Malian Armed Forces): National military forces

IDA - International Development Association: Concessional lending arm of World Bank Group

IMF - International Monetary Fund: International financial institution providing macroeconomic policy advice and financing

IPP - Independent Power Producer: Private sector electricity generation company

ISR - Intelligence, Surveillance, and Reconnaissance: Military capabilities for information gathering

JNIM - Jama'at Nusrat al-Islam wal-Muslimin: Jihadist coalition operating in Sahel region

SOREM - Société de Recherche et d'Exploitation des Ressources Minérales: State-owned mining company managing strategic mineral assets

WAEMU - West African Economic and Monetary Union: Regional economic and monetary integration organization

Spodumene concentrate - Lithium-bearing mineral product exported from hard-rock lithium operations for downstream processing

Appendix C: About This Document

Document Purpose: This investment thesis was prepared to provide prospective investors, government stakeholders, and strategic partners with comprehensive, evidence-based analysis of Mali's investment opportunity as of October 2025.

Methodology: Analysis incorporates data from multilateral institutions (IMF, World Bank, AfDB), company financial reports, government sources, industry publications, and direct operator disclosures. All claims are referenced to primary or credible secondary sources.

Limitations: This document represents analysis as of October 28, 2025. Conditions evolve, and readers should conduct updated due diligence incorporating developments subsequent to this date.

This thesis does not constitute financial advice and should not be relied upon as the sole basis for investment decisions.

Confidentiality: This document is marked CONFIDENTIAL and CLIENT DRAFT. Distribution should be limited to parties with legitimate need to know. Information contained herein may include commercially sensitive analysis and non-public information.

Updates: Significant developments warranting thesis revision include: major security incidents affecting economic centers, substantial changes to mining code or investment framework, dramatic commodity price movements, political transitions or leadership changes, or emergence of new major projects or investments.

Contact: For inquiries regarding this thesis or investment opportunities in Mali, contact [REDACTED - client to populate].

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An Investment Thesis on West Africa's Most Mispriced Opportunity
