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The Impact of China in the Perspectives of Structural Transformation of Africa

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This article examines China's contribution to structural transformation strategies in Africa. Moving beyond dominant narratives centred on dependency and geopolitical rivalry, it analyses how Chinese finance, investment, and infrastructure interact with African development trajectories. The article argues that China has expanded opportunities for structural transformation by supporting infrastructure development, industrial investment, and greater policy space. However, these opportunities are mediated by domestic political economy: their developmental effects depend on state capacity, institutional coordination, and coherent industrial strategies. While China has contributed to reopening transformation-oriented development paths, persistent structural constraints (particularly debt vulnerabilities and extractive dependence) continue to limit their outcomes. China's role is therefore best understood as enabling, rather than determining, structural transformation.

Keywords: structural transformation, China-Africa relations, development finance, industrial policy, debt sustainability, political economy

O impacto da China nas perspetivas da transformação estrutural em África

Este artigo analisa o contributo da China nas estratégias de transformação estrutural em África. Para além das narrativas dominantes centradas na dependência e na rivalidade geopolítica, examina a forma como o financiamento, o investimento e as infraestruturas chinesas interagem com as trajetórias de desenvolvimento africanas. Argumenta-se que a China tem ampliado as oportunidades de transformação estrutural através do apoio ao desenvolvimento de infraestruturas, ao investimento industrial e ao alargamento do espaço de política. Contudo, estas oportunidades são mediadas pela economia política interna: os seus efeitos em termos de desenvolvimento dependem da capacidade do Estado, da coordenação institucional e da existência de estratégias industriais coerentes. Embora a China tenha contribuído para reabrir vias de desenvolvimento orientadas para a transformação, persistem constrangimentos estruturais (em particular a vulnerabilidade da dívida e a dependência das indústrias extrativas) que continuam a limitar os seus resultados. O papel da China é, assim, mais bem compreendido como facilitador, e não como determinante, da transformação estrutural.

Palavras-chave: transformação estrutural, relações China-África, financiamento para o desenvolvimento, política industrial, sustentabilidade da dívida, economia política

China, Africa, and the challenge of structural transformation

Over the past two decades, China's presence in Africa has expanded rapidly through trade, foreign direct investment, development finance, infrastructure construction, and a growing web of diplomatic and technical cooperation. This expansion has become central to debates on Africa's place in the contemporary world economy. Yet much of the discussion remains trapped in two dominant framings. One presents China as a new external power reproducing dependency through extractivism, indebtedness, and asymmetrical commercial relations (Brautigam, 2020; Mawdsley, 2008). The other reads the relationship mainly through geopolitics, as part of a broader struggle for influence between China, the United States, and Europe in an increasingly multipolar international order (Carmody & Owusu, 2007). Both perspectives capture part of the picture, but both also risk missing a more central question: what does China's economic engagement mean for Africa's long-standing challenge of structural transformation?

That question is relevant. African economies have historically occupied a peripheral position in the world economy, characterised by commodity dependence, weak industrial bases, recurrent external constraints, and vulnerability to shifts in global demand, prices, and finance (Amin, 1976; Kvangraven et al., 2021). From a structuralist perspective, development cannot be reduced to GDP growth, poverty alleviation, or institutional reform in the abstract. It involves a transformation of productive structures through diversification, industrial upgrading, technological learning, massive job creation, and the expansion of domestic capabilities (Andreoni & Chang, 2017; Hirschman, 1958). Measured against that benchmark, Africa's post-independence development trajectory has been deeply disappointing. Early industrial ambitions in the 1960s and 1970s were disrupted in the following two decades by external debt crises, structural adjustment, deindustrialisation, and renewed dependence on primary exports. The result was the absence of significant growth, widespread poverty and the persistence of incomplete and fragile forms of transformation.

It is in this context that China's rise matters. Unlike the development orthodoxy associated with the era of structural adjustment programmes, China's engagement in Africa has been strongly linked to economic infrastructure building, industrial zones, manufacturing investment, and variegated forms of finance free of the governance and liberalisation conditionalities traditionally associated with Bretton Woods institutions, namely the IMF and the World Bank. This has encouraged the view that China represents an important channel of South-South cooperation and support for transformation-oriented development strategies (Brautigam, 2019; Lin, 2018; Oya, 2025). China's own experience of rapid structural change has also provided a powerful reference point for African policymakers seeking alternatives to market-centred development paradigms.

Still, there is no reason to romanticise this relationship. Chinese engagement also unfolds through debt-financed projects, uneven investment patterns, and a growing presence in extractive sectors.[1] These dynamics may support productive transformation in some contexts, but in others they may reproduce external dependence, shallow growth, or enclave forms of accumulation.[2] The point is not to replace one caricature with another. Narratives of "debt-trap diplomacy" or Chinese "control" over African resources are analytically weak and empirically overstated, but the tensions associated with debt sustainability, weak domestic linkages, and limited institutional capacity are real and cannot be brushed aside. To repurpose these binary positions, the article asks whether China's economic engagement with Africa has contributed to the re-emergence of structural transformation strategies on the continent. To what extent, through which channels, and what limitations and tensions accompany this contribution?

I argue that China has contributed, in significant but uneven ways, to reopening development strategies centred on infrastructure, industrial policy, and productive transformation. It has done so not by offering a ready-made model, but by expanding financing options that have allowed for the widening of the policy space in many cases, and reinforcing the legitimacy of more activist development approaches (Wade, 2003).[3] At the same time, these possibilities remain constrained by the structural vulnerabilities that continue to shape African development trajectories, particularly in relation to debt and commodity dependence. The sections that follow examine these issues by first revisiting the place of structural transformation in African development thinking: analysing the main channels and actors of Chinese engagement; the African domestic institutional setting; the tensions posed by debt dynamics; and finally the risk of shallow growth linked to natural resources extraction.

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[1] Examples include Angola, where Chinese oil-backed lending combined infrastructure finance with resource dependence (Alves, 2013); Zambia, where Chinese lending became part of a broader and increasingly complex debt structure (Swart & Biniza, 2025); and the Democratic Republic of the Congo and Guinea, where Chinese investment has become particularly prominent in copper, cobalt, and bauxite extraction (Shen & Fu, 2024; Wilhelm, 2022). These illustrative cases are examined further below.

[2] The term "shallow growth" is used here to describe episodes of economic growth that generate limited industrialisation, productive employment, and diversification, while leaving largely unchanged existing patterns of peripheral integration into the world economy. It builds on structuralist approaches that distinguish aggregate growth from changes in the productive structure of an economy (Amin, 1976; McMillan et al., 2014).

[3] In this text, by "policy space" we refer to the degree of autonomy available to states to deploy industrial, fiscal, monetary and investment policies in support of structural transformation.

Structural transformation and the challenges of African development

Clashing epistemologies of development

Since the beginning of the twenty-first century, the classical understanding of development as a process of structural transformation, rooted in the work of Hirschman (1958), has progressively regained prominence in policy discussions across Africa. This shift is particularly striking when contrasted with the preceding decades, during which development thinking and practice were largely dominated by neoliberal and technocratic approaches centred on institutional reform ("good governance"), and market liberalisation. While these agendas addressed important dimensions of development, they prioritised macroeconomic stability and micro-level interventions, often at the expense of productive capacity, industrialisation, social policies and long-term structural change (Mkandawire, 2005).

This earlier paradigm has not disappeared abruptly at all. The continued prominence of experimental and micro-empirical approaches (symbolically recognised by the awarding of the Nobel Prize in Economics to Esther Duflo, Abhijit Banerjee and Michael Kremer in 2019), illustrates the persistence of a development vision centred on targeted, localised interventions. However, alternative perspectives have progressively regained prominence. In particular, approaches that place structural transformation at the centre of development strategy (emphasising industrial policy, infrastructure, and productive restructuring) have re-emerged as relevant frameworks for understanding Africa's development challenges (Chang & Andreoni, 2021; Lopes & Kararach, 2020).[4]

This renewed interest reflects both empirical disappointments and evolving policy debates. On the one hand, the limited transformative impact of earlier policy frameworks has led to a reassessment of their scope and limitations. On the other, the experience of rapid economic transformation in parts of Asia has provided specific reference points for policymakers. The trajectories of economies such as South Korea, Taiwan and Singapore and even Japan have long served as examples of how sustained state-led strategies, combined with integration into global markets, can facilitate industrial upgrading and diversification. These experiences have increasingly been revisited in African policy debates, not as models to be replicated wholesale, but as evidence that alternative development paths remain possible (Chang, 2014; Studwell, 2026).

[4] Even the World Bank has recently acknowledged the importance of industrial policy in development strategies (World Bank, 2026).

Within this evolving landscape, China's growing presence has also contributed to reinforcing the legitimacy of transformation-oriented strategies. Beyond the provision of finance, China's own development trajectory has served as a contemporary reference point, strengthening the appeal of approaches centred on productive transformation over narrowly defined efficiency or governance objectives.

Structural transformation disrupted: the neoliberal agenda

The renewed interest in structural transformation must be understood against the backdrop of Africa's uneven and often disrupted development trajectory since independence. In the decades following independence, many African countries pursued ambitious strategies aimed at industrialisation and economic diversification. These efforts, often grounded in state-led planning, import substitution policies, and public investment, reflected a broad consensus that development required a deliberate transformation of productive structures (Chitonge & Lawrence, 2020; Mendes et al., 2014). Countries such as Ghana and Tanzania invested in state-owned enterprises and industrial projects, while others, like Algeria or Nigeria, sought to leverage resource revenues to support industrial expansion (Mkandawire, 2001).

However, these strategies unfolded under significant structural constraints. In several cases, industrialisation efforts were initiated in contexts characterised by narrow domestic markets, low levels of human capital, and insufficient infrastructure. Robertson (2022, p. xxv) suggests that parts of the continent experienced forms of "premature industrialisation" in the sense that industrial ambitions were not always matched by the underlying capabilities required to sustain competitive manufacturing sectors. The concept provides a particularly useful lens for understanding the importance of initial conditions and institutional capacity in shaping Africa's uneven industrial trajectories.

These constraints were compounded by external shocks in the 1970s and the policy shifts of the 1980s. The debt crisis and the widespread implementation of structural adjustment programmes marked a decisive rupture, redirecting development strategies toward liberalisation, privatisation, and macroeconomic stabilisation. Industrial policies were curtailed, public investment declined, and domestic industries were exposed to international competition under increasingly adverse conditions. In this context, what followed was not a gradual restructuring but, in many cases, a process of deindustrialisation at relatively low levels of income, in what has been described as "premature deindustrialisation" (Rodrik, 2016).

Empirically, this pattern is visible across a range of African economies. In Zambia, chosen as an illustrative case of resource-dependent industrialisation, manufacturing sectors contracted significantly under the combined pressures of trade liberalisation and fiscal retrenchment (Muuka, 1997). Similarly, in Kenya, segments of light manufacturing struggled to compete with imported goods, leading to stagnation in industrial employment (Siggel et al., 2002). Rather than transitioning toward higher-productivity manufacturing, many economies shifted toward services or reverted to primary commodity dependence, often without the productivity gains associated with successful structural transformation (McMillan et al., 2014).

This trajectory has been closely intertwined with persistent external vulnerability. Dependence on a narrow range of export commodities exposes many African economies to fluctuations in global prices, with direct implications for fiscal revenues and balance of payments stability. When commodity prices decline, foreign exchange earnings contract, limiting the capacity to import capital goods and intermediate inputs necessary for industrialisation. The experience of oil-dependent economies such as Angola or Nigeria illustrates how periods of rapid growth linked to favourable external conditions can be followed by sharp contractions when those conditions reverse (Soares de Oliveira, 2015; Usman, 2022).

These developments point to a pattern of interrupted or incomplete structural transformation. Early industrial ambitions, whether constrained by initial conditions or undermined by subsequent policy shifts, were followed by processes of deindustrialisation and renewed external dependence.

Back to the basics: contemporary theory and practice of structural transformation in Africa

The renewed prominence of structural transformation in African policy debates reflects both the limitations of previous development strategies and a broader reconfiguration of development thinking. The declining legitimacy of policy frameworks associated with structural adjustment, together with growing scepticism toward multilateral trade regimes such as the World Trade Organization, has contributed to reopening space for alternative approaches across the developing world (Lopes & Kararach, 2020).

In this context, development has increasingly been reframed not simply as integration into global markets, but as a process of building domestic productive capabilities (structural transformation). This shift has been accompanied by renewed interest in industrial policy and in the conditions under which participation in global markets can support structural transformation. While integration into Global Value Chains (GVC) has often been presented as a pathway to industrialisation, their work emphasises that participation alone does not guarantee upgrading or employment creation. Rather, outcomes depend on the nature of insertion into global production networks and on the capacity of domestic firms and institutions to capture value and foster linkages (Gereffi et al., 2005).

At the policy level, these evolving debates are reflected in continental initiatives that place structural transformation at the centre of Africa's development strategy. The African Union's Agenda 2063 explicitly prioritises industrialisation, economic diversification, and value addition. Within this framework, the African Continental Free Trade Area (AfCFTA) is conceived not merely as a trade liberalisation initiative but as a vehicle for regional industrial development and the strengthening of intra-African value chains. Together, these initiatives reflect a more strategic and coordinated approach to development, centred on the transformation of productive structures (Bidaurratzaga et al., 2021; Colom-Jaén, 2019).

Within this evolving landscape, the growing presence of China has reinforced the relevance of structural transformation strategies. Beyond the provision of finance and infrastructure, China represents a contemporary example of rapid structural change achieved through a combination of state-led coordination, industrial policy, and integration into global markets. For African policymakers, this experience has provided both a reference point and a source of policy inspiration (Sibiri, 2025). The case of Ethiopia is illustrative in this regard, as successive governments have pursued an explicit strategy of industrialisation through large-scale infrastructure investment, the development of industrial parks, and efforts to attract export-oriented manufacturing (Cheru et al., 2019; Clapham, 2018; Oya, 2025; Studwell, 2026).

These developments point to a gradual consolidation of structural transformation as a central organising principle in both theoretical debates and policy initiatives in Africa. While significant constraints remain, the renewed focus on productive capacity, industrialisation, and economic diversification marks a departure from earlier paradigms and provides the context within which external partnerships, including China's, must be evaluated.

China and Africa's structural transformation: channels, actors, constraints, and the crucial role of the domestic institutional setting

The growing economic presence of China in Africa has generated a wide range of interpretations, often framed in terms of geopolitical competition or renewed dependency. While such perspectives capture important dimensions of the relationship, they tend to obscure the mechanisms through which external engagement interacts with domestic processes of economic change. Rather than focusing on aggregate outcomes or strategic narratives, a more analytically productive approach is to examine how China's involvement shapes the conditions under which structural transformation strategies are pursued.

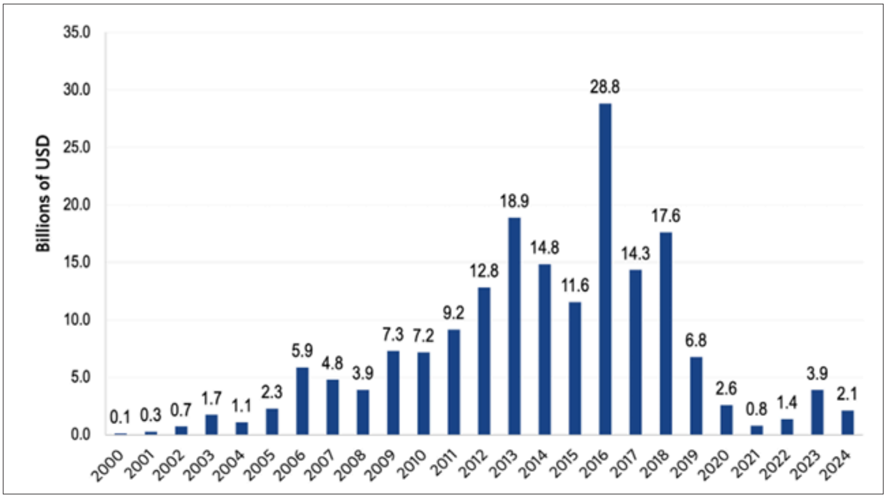
China does not operate as a unitary actor, but as a constellation of institutions and firms whose activities generate differentiated and sometimes contradictory effects. The implications of this engagement therefore depend not only on its scale, but on its composition, its sectoral orientation, and its interaction with domestic policy frameworks.

At the same time, these processes unfold within a broader set of structural constraints that continue to shape African development trajectories. External finance can enable investment and expand policy space, but it also introduces new vulnerabilities and trade-offs, particularly in relation to debt dynamics and patterns of resource extraction. The relationship between China's engagement and structural transformation must therefore be understood as conditional and context-dependent, rather than as inherently transformative or detrimental.

Channels of engagement: infrastructure, investment, and productive transformation

China's economic engagement with Africa has expanded significantly since the early 2000s (see Figure 1), but its developmental implications cannot be understood solely in terms of scale. More relevant is the configuration of this engagement across sectors, instruments, and countries. Available evidence points to two primary channels through which Chinese involvement interacts with African economies beyond trade: infrastructure financing and foreign direct investment (FDI). These are complemented by additional, less easily quantifiable mechanisms, including skills formation and technology transfer (Chen et al., 2016; Oya, 2025).

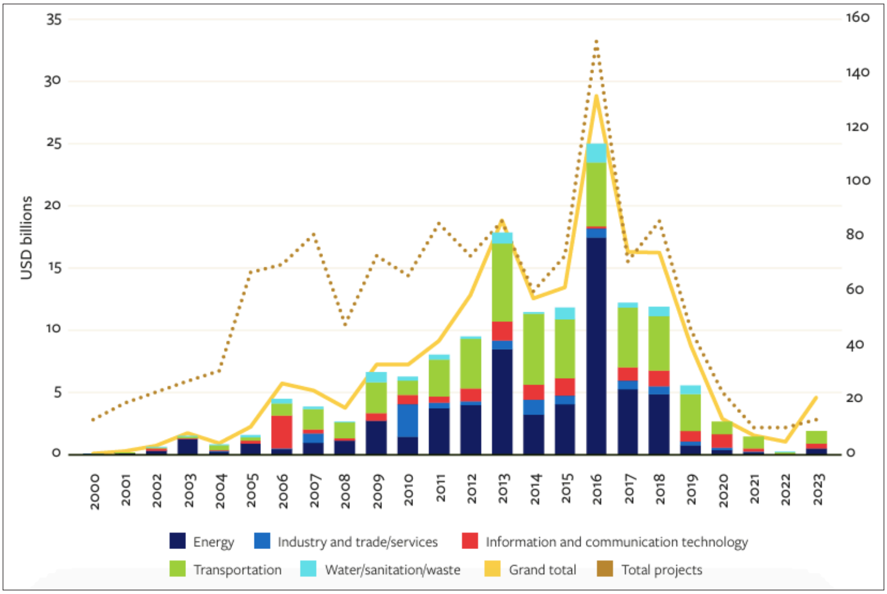
Figure 1
Chinese loan commitments to Africa, 2000-2024



Source: Yue et al. (2025)

Infrastructure constitutes the most distinctive and consequential dimension of China's engagement. Chinese finance has been heavily concentrated in sectors such as energy and transport, including power generation, transmission networks, railways, ports, and roads (see Figure 2).

Figure 2
Chinese loan commitments to Africa by sector, 2000-2023



Source: Foster et al. (2026)

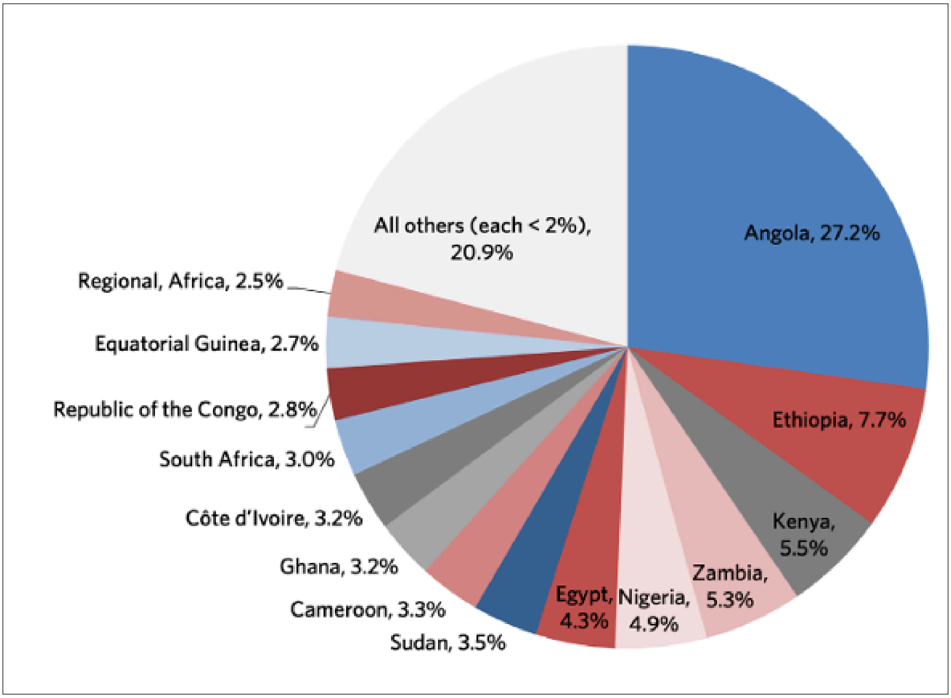
These investments address some of the most persistent bottlenecks affecting African economies, particularly in relation to connectivity, logistics, and the reliability of energy supply. From the perspective of structural transformation, such interventions are significant not because of their immediate returns, but because they alter the conditions under which productive activities can expand and diversify (Foster et al., 2026).

Alongside infrastructure, Chinese FDI has become an increasingly visible component of economic engagement. While a substantial share of investment has been directed toward extractive industries, particularly mining, there has also been a notable expansion into manufacturing activities in selected countries. Industrial zones and special economic zones have been central to these efforts, providing platforms for export-oriented production and, in some cases, fostering linkages with local economies (Brautigam & Tang, 2011). The coexistence of manufacturing and extractive investment highlights the dual character of China's economic presence, combining elements that may support diversification with others that risk reinforcing existing patterns of commodity dependence.

A remarkable feature of Chinese engagement across these channels is its orientation toward projects that are capital-intensive, long-term, and often associated with higher levels of risk. Compared to other sources of external finance, Chinese investments have tended to focus on sectors and projects that require substantial upfront costs and extended time horizons before returns materialise. This has implications for the types of activities that can be financed, particularly in contexts where alternative sources of funding are either unavailable or constrained by shorter-term profitability criteria (Brautigam, 2019).

These patterns suggest that China's economic engagement is not evenly distributed across sectors or countries, but rather exhibits clear priorities and concentrations. It is precisely these patterns (across infrastructure, investment, and complementary forms of cooperation) that shape the potential contribution of China to processes of structural transformation in Africa. The following Figure 3 provides an overview of the geographical distribution of this engagement since 2000.

Figure 3
Chinese loan commitments to individual African countries, 2000-2024



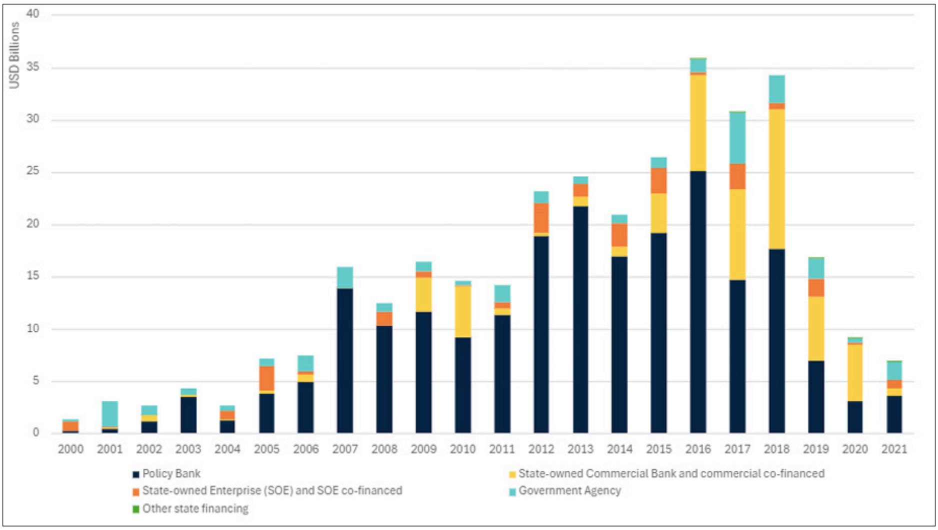
Source: Yue et al. (2025)

China as a heterogeneous development actor

The patterns observed in China's economic engagement with Africa, its concentration in infrastructure, its uneven geographical distribution, and its sectoral duality between extractive and manufacturing activities cannot be adequately understood by treating China as a unitary actor. Rather, they reflect the interaction of multiple institutions, policy frameworks, and firms operating under different incentives and constraints. Recognising this heterogeneity is essential for assessing the developmental implications of China's presence on the continent.

A first distinction concerns the role of state-linked financial institutions, particularly policy banks, notably the China Development Bank (CDB) and the Export-Import Bank of China (Eximbank), which have been central to the provision of large-scale development finance (see Figure 4). These institutions typically operate with longer time horizons and a greater tolerance for risk than most private lenders, allowing them to support projects that are often considered too capital-intensive or uncertain by conventional financial standards. Their operations combine commercial considerations with broader strategic and diplomatic objectives, resulting in financing arrangements that do not fit neatly into standard categories of development assistance or market-based lending. This hybrid character, combining commercial objectives with state-directed developmental and strategic priorities, helps explain both the scale of Chinese involvement in infrastructure and the variation in terms, conditions, and outcomes across projects (Brautigam, 2019).

Figure 4
Lending volumes in Africa by institution (2000-2021)



Source: Wu & Chen (2024)

At the same time, firms engaged in Chinese overseas investment display a wide range of behaviours that cannot be reduced to a single model. Large state-owned enterprises are often involved in infrastructure construction and resource-related activities, operating within broader frameworks of state coordination, while smaller and privately owned firms tend to be more responsive to market conditions, labour costs, and regulatory environments. Their investment decisions are more closely aligned with profit-seeking objectives, and their presence is often concentrated in manufacturing and services. Empirical evidence suggests considerable variation in labour practices, production strategies, and the extent of local linkages across sectors and countries, reflecting both firm-level characteristics and host-country conditions (Brautigam, 2019).

This diversity is further shaped by varying degrees of coordination between financial institutions, firms, and diplomatic actors. In some cases, financing, construction, and political engagement are closely aligned, producing relatively coherent project pipelines. In others, investment emerges through more decentralised processes, with firms pursuing opportunities independently and with limited central direction. The result is a pattern of engagement that combines elements of strategic orientation with significant fragmentation, leading to uneven outcomes across countries and sectors (Wu & Chen, 2024).

From the perspective of structural transformation, this heterogeneity has important implications. It suggests that the developmental effects of China's engagement cannot be inferred from aggregate indicators alone, but depend on the specific configurations of actors, sectors, and policies in each context. Infrastructure projects financed by state-linked institutions may contribute to alleviating structural bottlenecks, while manufacturing investments by firms may generate learning opportunities and employment, albeit unevenly. Conversely, extractive investments may reinforce existing patterns of dependence if not embedded within broader strategies of industrial development.

In this sense, China's role is better understood not as a coherent development model, but as a set of evolving practices that interact with domestic institutions and policy frameworks. Processes of structural transformation depend on the alignment between investment patterns and evolving productive capabilities, which in turn requires both coordination and responsiveness to market signals. External engagement can support such processes but does not determine their outcomes. Rather, it expands the range of possibilities available to African governments, while leaving open the question of how these possibilities are translated into sustained structural change (Lin, 2018).

Policy space, industrial policy, and developmental possibilities

Beyond the scale and sectoral composition of China's economic engagement, its significance lies in the way it reshapes the policy environment within which African governments operate. The relevance of Chinese finance and investment cannot be reduced to the resources they provide but must be understood in terms of the opportunities they create for the formulation and implementation of development strategies oriented toward structural transformation. A central dimension of this process concerns the notion of policy space. In the decades following the implementation of structural adjustment programmes, the scope for active industrial policy in many African countries was significantly constrained (Wade, 2003). Macroeconomic stabilisation, fiscal discipline, and trade liberalisation were prioritised, often limiting the ability of governments to pursue coordinated strategies aimed at transforming productive structures. In this context, external financing was frequently tied to policy conditionalities that reinforced these constraints, narrowing the range of available policy options (Mkandawire, 2001).

Unlike traditional development finance, Chinese lending has generally been less explicitly conditioned on governance and liberalisation reforms. This has expanded governments' policy space by allowing greater discretion in financing infrastructure and industrial projects. From the perspective of structural transformation, this shift is significant. Large-scale investments in energy, transport, and industrial zones require sustained coordination and long-term planning, often exceeding the time horizons typically associated with market-based financing. This is particularly relevant in contexts where infrastructure deficits constitute a binding constraint on industrialisation (Brautigam, 2019).

At the same time, the expansion of policy space is neither automatic nor uniformly beneficial. Greater autonomy in the use of external finance also entails increased responsibility in project selection, implementation skills, and integration into broader development strategies. Where institutional capacity is limited, or where projects are not embedded within coherent industrial policies, the availability of financing may lead to suboptimal outcomes, including inefficient investments or rising debt burdens.

Lastly, the existence of alternative sources of finance and investment can alter the broader bargaining environment in which African governments operate. The presence of China as a significant development partner may reduce dependence on traditional lenders and increase the scope for negotiating terms and conditions across different sources of finance. This diversification does not eliminate structural constraints, but it can provide governments with greater flexibility in aligning external resources with national development priorities.

An illustrative trajectory: industrial ambition and structural transformation in Ethiopia

The experience of Ethiopia provides a useful illustration of how China's engagement can interact with domestically driven strategies of structural transformation. Over the past two decades, Ethiopian policymakers have pursued an explicit development strategy centred on industrialisation, infrastructure expansion, and export-oriented manufacturing, drawing on elements associated with earlier Asian developmental experiences. This trajectory reflects a high degree of state agency in defining development priorities and coordinating external and domestic resources.

A central component of this strategy has been large-scale investment in economic infrastructure. Significant resources have been directed toward energy generation, transport networks, and logistics systems, with a view to reducing structural bottlenecks that have historically constrained industrial activity.

Chinese finance and construction have played a prominent role in this process, particularly in the development of railways, industrial parks, and energy projects. These investments have not been justified primarily in terms of short-term returns, but rather as enabling conditions for the expansion of manufacturing and the diversification of the productive base (Studwell, 2026).

Alongside infrastructure, the Ethiopian government has actively promoted export-oriented industrialisation through the establishment of industrial parks and the attraction of foreign direct investment in manufacturing. Chinese firms have been among the key actors in this process, contributing to the development of light manufacturing sectors such as textiles and apparel. This approach reflects an attempt to build a production base integrated into global markets while maintaining a degree of strategic direction, in line with experiences of export-oriented industrialisation where state coordination and market participation are combined (Cheru et al., 2019).

The interaction between infrastructure investment and manufacturing development has been complemented by efforts to promote technological upgrading in selected sectors. In the pharmaceutical industry, policies have aimed at encouraging local production and facilitating technology transfer through partnerships with foreign firms, like in the Kilinto Pharmaceutical Industrial Park near Addis Ababa.[5] Chinese involvement has contributed to these initiatives, both through investment and through forms of technical cooperation that support the development of domestic capabilities. Although still limited in scale, these efforts signal an attempt to move beyond assembly activities toward more complex forms of production.

The Ethiopian experience also highlights the importance of political and institutional arrangements in sustaining such strategies. The capacity of the state to coordinate investment, manage sectoral priorities, and discipline firms has been central to the implementation of industrial policy. At the same time, the pursuit of industrialisation has relied on the emergence of a developmental coalition linking state actors, foreign investors, and segments of domestic capital, aligned around export growth and structural change (Studwell, 2026).

Despite these ambitions, the Ethiopian trajectory also reveals important constraints. Industrial expansion has been accompanied by persistent foreign exchange shortages, reflecting continued dependence on imported capital goods and intermediate inputs. The sustainability of infrastructure investment has been questioned in light of rising debt levels and external imbalances, while the capac-

5 For information on the Kilinto Pharmaceutical Industrial Park and its development, see https://www.ipdc.gov.et/service/parks/12/

ity of industrial parks to generate strong linkages with the domestic economy remains uneven. These tensions point to the difficulty of sustaining transformation in contexts marked by structural external constraints and limited domestic capabilities.

The Ethiopian case thus illustrates both the possibilities and the limits of China-supported development trajectories. External engagement can facilitate the implementation of ambitious industrial strategies by providing finance, infrastructure, and investment. However, the extent to which these inputs translate into sustained structural transformation depends on domestic agency, institutional coordination, and the ability to manage the structural constraints that continue to shape development outcomes.

The institutional setting: the political economy of domestic policies

The developmental impact of Chinese finance ultimately depends less on the characteristics of Chinese lending itself than on the institutional and political context in which it is embedded. Chinese finance may expand the policy space available to African governments, but whether this space is translated into structural transformation depends on the state's capacity to formulate, coordinate and implement coherent industrial strategies. In this sense, domestic political economy remains the decisive mediating variable.

Contrasting developmental outcomes associated with Chinese engagement cannot be explained primarily by differences in Chinese behaviour. Rather, they reflect differences in domestic political settlements and state capabilities. The comparison between Ethiopia and Angola illustrates this point. Both countries became major recipients of Chinese finance, yet their development trajectories diverged markedly. In Angola, Chinese loans were largely integrated into an oil-based accumulation model with relatively weak industrial diversification. In Ethiopia, by contrast, Chinese finance was incorporated into an explicitly developmental strategy centred on infrastructure expansion, industrial parks and export-oriented manufacturing. The difference therefore lay less in the source of finance than in the domestic institutions governing its allocation and use (Oya, 2025).

Ethiopia represents perhaps the clearest example of how state capacity can shape the developmental effects of external finance. Under the EPRDF, economic transformation was not left to market forces but embedded within successive national development plans, particularly the Growth and Transformation Plans, which prioritised infrastructure, manufacturing and export diversification. Rather than responding passively to financing opportunities, the Ethiopian state actively selected projects consistent with long-term development objectives and used external finance (including Chinese loans) to implement them. Financiers generally adapted to Ethiopian state priorities rather than determining them, reflecting the government's unusually strong capacity to coordinate development planning and centralise investment decisions (Tang, 2026).

This capacity rested on a highly centralised political structure characterised by long planning horizons, disciplined bureaucratic coordination and centralised rent management, as in some Asian developmental states like South Korea, Taiwan or Japan (Amsden, 2001; Wade, 2018). These institutional features reduced the fragmentation commonly associated with externally financed investment and enabled the government to channel both Chinese and Western finance towards nationally defined priorities rather than short-term political objectives. Importantly, this does not imply an absence of authoritarian practices or political patronage. Rather, it suggests that developmental outcomes were facilitated by a political settlement capable of subordinating narrower distributive interests to broader industrial objectives, at least during the Meles Zenawi period. This interpretation also helps explain why similar Chinese financing has generated far more limited structural transformation elsewhere. Where state institutions are weaker, planning horizons shorter, or political coalitions more fragmented, external finance is more likely to reinforce existing patterns of resource dependence than to support industrial upgrading. Chinese finance may therefore increase policy space, but it cannot substitute for domestic institutional capacity or coherent development strategies.

Between investment and vulnerability: China and the dynamics of African debt

After the late 1990s and early 2000s multilateral debt relief initiatives, the expansion of development finance in Africa, including that associated with China, has revived longstanding debates on the role of debt in economic transformation. While external borrowing can support investment in infrastructure and productive capacity, it also introduces macroeconomic constraints that may limit the sustainability of development strategies. Understanding this tension requires distinguishing between different conceptual approaches to debt, as well as situating contemporary dynamics within broader structural features of the international financial system.

From a developmental perspective, debt can be understood as a mechanism to finance long-term investments that would otherwise be unattainable given domestic resource constraints. Infrastructure projects in energy, transport, and industry typically involve high upfront costs and extended gestation periods, making external finance a necessary component of structural transformation strategies, especially in developing countries. In this view, the sustainability of debt depends not only on current fiscal indicators, but on the capacity of financed investments to generate future growth, productivity gains (structural change) and export revenues (UNCTAD, 2019).

This contrasts with more orthodox approaches to debt sustainability, which tend to emphasise short to medium-term indicators such as debt-to-GDP ratios, fiscal balances, and external liquidity. These metrics often fail to capture the developmental role of long-term investment and may lead to an underestimation of the potential benefits of infrastructure-led growth. In practice, this can generate a bias against precisely those types of projects that are most relevant for structural transformation, particularly in low-income contexts where infrastructure deficits remain acute.

China's role in African debt dynamics must be assessed within this broader framework. Chinese lending has become a significant component of external finance in several African countries, particularly in relation to infrastructure projects. However, the characterisation of this engagement as a form of "debt-trap diplomacy" has been widely challenged in the empirical literature. Detailed analyses of lending practices suggest that Chinese finance is neither predatory nor designed to generate unsustainable debt burdens (Brautigam, 2020; Brautigam et al., 2022; Jones & Hameiri, 2020). Rather, it reflects a combination of commercial, strategic, and developmental considerations, with considerable variation across countries and projects.

Critical perspectives have also emphasised that the focus on China risks obscuring the broader structure of African debt. Much of the increase in external indebtedness in recent years has been driven by borrowing from international capital markets, often at higher interest rates and with shorter maturities than concessional loans. As argued in recent work, the financialisation of development finance has exposed African economies to greater volatility and increased vulnerability to shifts in global liquidity conditions (Kvangraven et al., 2020). In this context, Chinese lending, which is frequently tied to infrastructure investment and characterised by longer maturities, represents only one component of a more complex debt landscape.

At the same time, the expansion of external borrowing has taken place within a global financial system structured by hierarchy and asymmetry. African countries typically borrow in foreign currencies, particularly in US dollars, exposing them to exchange rate risk and limiting their capacity to manage debt through monetary instruments. This structural constraint is compounded by dependence on commodity exports, which generates procyclical revenue streams and amplifies exposure to global price fluctuations. As a result, even debt contracted for developmental purposes can become difficult to service when external conditions deteriorate.

Zambia provides an instructive example because its recent debt crisis encapsulates many of the structural features discussed in this section, including infrastructure-led borrowing, commodity dependence, and the challenges of coordinating increasingly diverse creditor groups. Following a period of significant borrowing to finance infrastructure investment, Zambia faced mounting debt service pressures in the context of declining commodity prices and tightening global financial conditions. While Chinese creditors played an important role, the country's debt difficulties cannot be attributed to a single source. Instead, they reflect the interaction of multiple forms of borrowing, external shocks, and structural vulnerabilities. The subsequent debt restructuring process that started in 2025 has further highlighted the complexity of coordinating among diverse creditors, including bilateral lenders, multilateral institutions, and private bondholders (Wu & Chen, 2024).

China's approach to debt management has evolved within this context. Contrary to narratives of strategic asset seizure, Chinese authorities have generally shown a willingness to renegotiate and reschedule debt obligations, often on a case-by-case basis. Recent developments in countries such as Kenya suggest a pragmatic approach to managing repayment pressures, although the terms and transparency of such arrangements remain subject to debate. These practices indicate that Chinese lending is embedded within broader processes of debt governance, rather than operating as an external or exceptional mechanism (Acker et al., 2020; Miao & Pandey, 2026; Swart & Biniza, 2025).

The key issue, therefore, is not whether Chinese finance is inherently beneficial or detrimental, but how it interacts with the structural constraints that shape African development trajectories. External borrowing can support investment in infrastructure and industry, thereby contributing to the conditions for structural transformation. At the same time, it introduces vulnerabilities linked to currency mismatches, exposure to global financial cycles, and the volatility of export revenues. These tensions are not specific to China but are characteristic of development finance in a hierarchically organised global economy.

Extractive industries and the risk of shallow transformation

The role of extractive industries in African development has long been analysed through the lens of enclave economies and structural dependence. Classical structuralist perspectives emphasised how resource extraction, when weakly integrated into the domestic economy, tends to generate limited spillovers in terms of employment, technological upgrading, and industrial diversification (Amin, 1976; Hirschman, 1958; Singer, 1950). In such contexts, production is oriented toward external markets, with few backward and forward linkages, reinforcing patterns of peripheral integration into the global economy. These dynamics, highlighted in early analyses of enclave economies like in Hirschman (1958), remain central to understanding contemporary resource-based development trajectories.

China's growing involvement in African extractive sectors must be situated within this broader structural context. Chinese firms have become major actors in the production of key commodities, particularly in oil, copper, cobalt, and bauxite. However, this expansion does not constitute a fundamentally new model of resource extraction. Rather, it operates largely within existing patterns of export-oriented production, global value chain integration, and limited domestic processing. The critical question, therefore, is not whether China is uniquely responsible for resource dependence, but whether its engagement reinforces or alters these structural dynamics.

The case of the Democratic Republic of the Congo illustrates these tensions. Chinese firms such as China Molybdenum, which controls the Tenke Fungurume mine, and joint ventures such as Sicomines have become central players in the extraction of copper and cobalt. These activities are concentrated in the southern Copperbelt (Katanga and Lualaba), a region historically characterised by enclave production. The strategic importance of cobalt, particularly for global battery supply chains, has increased the relevance of these investments, but has not fundamentally altered their structure. Production remains largely export-oriented, with limited domestic processing and weak integration into local industrial systems. While such investments generate fiscal revenues and foreign exchange, their contribution to broader processes of structural transformation remains constrained (Shen & Fu, 2024)

A similar pattern can be observed in Guinea, where Chinese involvement in bauxite extraction has expanded rapidly. Companies such as Chalco and the SMB-Winning Consortium have played a central role in increasing production and exports. Guinea has become a major supplier of bauxite to China's aluminium industry, reflecting a form of vertical integration within global production networks. However, despite the scale of these operations, domestic value addition remains limited, with most output exported in raw or minimally processed form. The result is a pattern of growth driven by commodity exports, with relatively weak linkages to the rest of the economy (Wilhelm, 2022).

In oil-producing economies such as Angola, Chinese engagement has taken a somewhat different form, combining extractive activities with infrastructure finance. The relationship between Chinese lenders and the state-owned company Sonangol has been central to this model, in which oil revenues are used to secure and repay loans for infrastructure development. This arrangement has facilitated large-scale investment in public works, but it has not significantly reduced the economy's dependence on oil exports. As in other resource-rich contexts, the challenge lies in transforming resource revenues into diversified productive capacities, a process that has proven difficult to sustain (Alves, 2013; Oya, 2025).

These examples highlight a common structural feature: the coexistence of large-scale extractive investment with limited industrial integration. While Chinese firms have in some cases invested in downstream activities or supported infrastructure development, these initiatives have not systematically generated strong backward and forward linkages. The persistence of enclave dynamics reflects not only the strategies of foreign investors, but also the constraints associated with domestic industrial capacity, regulatory frameworks, and the broader organisation of global value chains.

At the same time, it would be misleading to interpret these patterns solely in terms of external imposition. African governments retain agency in negotiating contracts, regulating investment, and designing policies aimed at increasing local content and value addition. In some cases, efforts have been made to leverage extractive industries for broader development objectives, including through infrastructure investment, fiscal policy, and industrial planning. The outcomes of Chinese engagement therefore depend, to a significant extent, on domestic policy choices and institutional capacity, as demonstrated above in the section "The institutional setting".

Nonetheless, the risks associated with resource-based growth remain substantial. The concentration of investment in extractive sectors can reinforce external dependence, expose economies to commodity price volatility, and limit the development of diversified productive structures. Even where growth rates are high, the underlying transformation of the economy may remain shallow, with limited progress in terms of industrialisation and technological upgrading. This raises the possibility that extractive expansion, including that driven by Chinese demand, may coexist with persistent structural constraints.

From the perspective of structural transformation, the key issue is therefore not the presence of Chinese investment in extractive industries per se, but the extent to which such investment is embedded within broader strategies of economic diversification. Where resource extraction is linked to infrastructure development, industrial policy, and the promotion of domestic capabilities, it may contribute to more dynamic forms of growth. Where such linkages are absent, it is more likely to reproduce patterns of enclave production and limited structural change (Morris et al., 2012).

Conclusion

This article set out to examine to what extent, and through which channels, China's economic engagement with Africa has contributed to the re-emergence of structural transformation strategies on the continent, and what limitations accompany this contribution. The analysis suggests that China's significance lies neither in reproducing a new form of dependency nor in offering a ready-made development model. Rather, its importance lies in expanding the opportunities available to African countries while operating within the structural constraints that continue to shape their development trajectories.

The article has argued that China has contributed to a revival of structural change strategies primarily through three interconnected channels: infrastructure finance, industrial investment, and the expansion of policy space. Investments in energy, transport, industrial parks and manufacturing have helped address some of the structural bottlenecks that have historically constrained industrialisation, while alternative sources of finance have enabled many governments to reconsider more active approaches to industrial policy and productive transformation.

However, these opportunities do not translate automatically into structural change. One of the central findings of this article is that the developmental effects of Chinese engagement are fundamentally mediated by domestic political economy. External finance and investment can support industrialisation only when they are embedded within coherent national development strategies, effective state institutions, and political coalitions capable of coordinating long-term productive transformation. The contrasting experiences of countries such as Ethiopia and Angola illustrate that differences in developmental outcomes are explained less by the characteristics of Chinese engagement than by the domestic institutions and policy frameworks through which it is channelled.

The analysis also shows that China's engagement remains conditioned by enduring structural vulnerabilities. Rising external indebtedness and the persistence of extractive growth continue to constrain industrialisation, reflecting broader features of Africa's integration into the global economy rather than dynamics specific to China. Debt therefore emerges as a structural constraint on development, while continued dependence on commodity exports limits the depth and sustainability of productive transformation.

Overall, the findings suggest that China has contributed to reopening the space for structural transformation in Africa but has not fundamentally altered the structural conditions under which that transformation takes place. Its role is best understood as enabling rather than determining development: it provides investment finance, and strategic alternatives, but cannot substitute for domestic institutions or coherent development strategies.

The broader implication is that debates on China-Africa relations should move beyond binary assessments of benefit or harm and instead focus on the interaction between external engagement and domestic development processes. China matters because it expands the room for manoeuvre available to African governments. Whether that opportunity is translated into sustained structural transformation ultimately depends less on China itself than on the domestic political economy through which external resources are mobilised, coordinated, and embedded in long-term development strategies.

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