

Political Economy Barriers to HIV Financing Resilience in Nigeria: Donor Dependency, Fragmented Governance, and Intermittent Leadership

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Abstract

Background: Nigeria has one of the largest HIV burdens globally, yet 70–90% of its HIV financing comes from external donors. Repeated financing shocks, including the 2009–2010 Global Fund suspension, the 2015–2016 fiscal crisis, and the 2025 PEPFAR stop-work order have exposed the country's persistent challenges to build financing resilience. This paper asks: What political economy conditions have limited Nigeria's ability to convert repeated shocks into durable HIV financing reforms?

Methods: We conducted a qualitative document analysis of 15 Nigeria-specific sources, comprising peer-reviewed articles, institutional reports, and grey literature (2005–2026). An integrated political economy framework guided the directed content analysis: Sparkes et al.'s

actor analysis provided the political economy lens, while Blanchet et al.'s resilience typology (absorptive, adaptive, transformative) provided the conceptualisation of resilience capacities

Findings: Donor funding enabled major service expansions but entrenched three structural vulnerabilities: financial dependence (persistent failure to meet Abuja 15% budget target), institutional fragmentation (parallel coordinating bodies with overlapping mandates), and human resource distortion (internal brain drain). Bureaucratic resistance to decentralisation and erratic domestic budget release constrained implementation. Political leadership was episodic, failing to sustain attention across administrations. Adaptive resilience was evident, including Lagos State's HIV social health insurance integration (90% PLHIV enrolment), but absorptive resilience remained severely limited, and transformative capacity has not been achieved at scale. Key populations face criminalisation and receive disproportionately little funding.

Impact: For policymakers, strengthening domestic budget execution matters more than designing new adaptive strategies. For donors, parallel financing structures undermine long-term sustainability. For other Low and Middle-Income Countries (LMICs), the framework offers a diagnostic tool to assess resilience capacities before donor transitions occur.

Conclusion: Resilience capacities are politically produced outcomes, not merely technical properties. Without structural reforms addressing bureaucratic incentives, electoral cycles, and parallel donor-funded institutions, future shocks will continue to provoke reactive fixes rather than systemic change.

Keywords

HIV/AIDS, donor dependency, HIV financing resilience, political economy, Nigeria

Background

Over the past three decades, the global response to the AIDS epidemic has been one of the most sustained public health investments ever undertaken. PEPFAR, Global Fund and the World Bank have collectively enabled the scale-up of antiretroviral therapy (ART) that has transformed HIV from a lethal disease to a manageable chronic disease [1-3]. This donor-driven endeavor has been most crucial in Sub-Saharan Africa (SSA), which hosts approximately two-thirds of all persons living with HIV [4]. But the

same dependency on external financing that has made these improvements feasible has also produced systemic weaknesses. Donor funding in Nigeria provides for 70-90 percent of HIV expenditure [5, 6], **however**, this dependence is not only a question of a lack of resources, it combines with fragmented governance, intermittent political leadership and insufficient domestic ownership to impair financial resilience [7]. This dependence was revealed through a succession of shocks: the global financial crisis of 2008–2009, the budgetary crisis of 2015–2016 and the 2025 PEPFAR stop-work [8, 9]. But **resolution of** each of these crises has **been** reactive rather than fundamental transformation [9]

The 2025 PEPFAR stop-work order is the most recent, and dramatic instance of this frailty. In January 2025, the US government halted PEPFAR activities, which greatly affected vital HIV services in Nigeria, such as antiretroviral shortages, decreased viral load testing, and the cessation of prevention services [10]. This was an intense and unexpected shock to financing, which showed the system's inadequate capacity to absorb shocks and its near-total dependency on external funding.

This acute shock is layered on top of a longer-term structural shift: external funders are increasingly moving away from donor-led initiatives toward country ownership, requiring low- and middle-income nations to assume increased financial and programmatic responsibility [11]. Nigeria is a particularly instructive case study: it carries the largest HIV burden in West Africa; receives among the highest volumes of external funding; but has consistently poor domestic budget execution and complex federal governance [12, 13]. This combination makes Nigeria a critical test case for whether donor transitions can succeed in complex, resource-constrained settings. The stakes are high: recent modelling suggests that chronic budget gaps might cause millions of new infections and hundreds of thousands of AIDS-related deaths in SSA and other LMICs [14, 15]. These converging pressures—repeated acute shocks, a slow but inexorable donor shift, and dire projected consequences—raise the core puzzle motivating our paper: What political economy circumstances have constrained Nigeria's capacity to translate recurrent financial shocks into sustainable HIV financing reforms? The country has faced a number of financing shocks, including the suspension of Global Fund grants of about \$200 million in 2009–2010, the 2015–2016 fiscal crisis that delayed counterpart funding for more than six months, and the ongoing gradual decline in donor funding as Nigeria is reclassified as a lower-middle-income country [8, 16]. Each of these crisis has compromised ART supply chains and program continuation[9]. A common observation throughout these occurrences, and a core hypothesis of this paper, is that responses have been in the direction of transient fixes rather than structural improvements. This research explores if and why this pattern emerges and considers the political economic arrangements that can explain it.

An integrated political economy method, using frameworks from Sparkes, Bump [17]., and Blanchet, Nam [18]. to review the literature and grey literature, answers this question. The central proposition of this paper's integrated framework is that resilience capacities are political outcomes. The paper makes two contributions: First, it provides a detailed stakeholder mapping of the broken HIV finance architecture in Nigeria, highlighting the interests and influence of major actors at the federal and state levels. Second, and more significantly, it shows that absorptive, adaptive and transformative resilience

capacities are not solely technical traits, but politically created outcomes determined by the configuration of people, institutions and power.

Theoretical Framework

This paper is guided by an integrated framework combining two complementary bodies of literature: political economy analysis for health financing and health system resilience.

Political Economy Analysis for Health Financing

Sparkes, Bump [17] developed their political economy analysis (PEA) approach to address the political challenges related to health financing reform. They argue that health financing reforms, unlike many other health policies, directly affect resource allocation, create specific benefactors and opponents, and so provoke considerable political conflict. Understanding the success or failure of reforms requires a careful analysis of the participants, their interests and influence, the institutions that mediate their interactions, and the techniques they employ.

The paradigm by Sparkes, Bump [17] is based on the earlier work of Campos and Reich [19], who identified six categories of political factors that affect health policy implementation. The entities comprise: interest groups (organized collectives such as professional associations or private sector lobbies), bureaucrats (career civil servants tasked with policy implementation and technical advisory), budget actors (officials within Ministries of Finance, treasuries, and appropriation committees overseeing fiscal allocation), leaders (political executives with formal decision-making authority), beneficiaries (populations intended to benefit from policy, including organized patient groups and civil society), and donors (external funders affecting incentives across all other categories). Sparkes, Bump [17] preserve these categories while creating a central coordinating element known as the reform team.

The reform team is a crucial innovation inside the Sparkes, Bump [17] framework. A reform team is a group of reformers, usually located inside the Ministry of Health, a specialized agency, or a research institution, who work assiduously to advance financial reform. Reform teams are known for their technical and health funding knowledge, combined with the political insight to deal with complicated groups of stakeholders. A reform team is only as good as its ability to: (a) figure out what different stakeholders want and how they can help; (b) work with other groups that are willing to help; (c) fight back against or lessen opposition; (d) find and take advantage of opportunities; and (e) change its plans when the political climate changes.

Sparkes, Bump [17] in their political economy analysis, position the reform team as the main coordinating factor—a group of reformers (often based in the Ministry of Health, a specialised agency, or a research institution) that works strategically to promote health financing reform. Reform teams are defined not by formal titles but by the strategic functions they perform: analysing stakeholder interests and influence; devising strategies to mobilise allies and manage opponents; identifying and exploiting political opportunities; and changing strategy as the political landscape changes Sparkes, Bump [17]. A

crisis can open a “window of opportunity” Kingdon [20], a concept we integrate from Kingdon’s Multiple Streams Framework to explain the temporal dynamics of reform. Sparkes, Bump [17] emphasize the importance of opportunity recognition but do not formally operationalize this concept within their political economy model. A window must be exploited by a reform team armed with a policy solution that is viable and a strategy that is politically astute. Within our integrated approach, Sparkes, Bump [17] provide the actor and institutional analysis, Blanchet, Nam [18] supply the resilience typology, and Kingdon [20] explains the temporal dynamics of policy windows.

Health System Resilience

Blanchet, Nam [18] established their resilience paradigm to address deficiencies in the prior research on health systems resilience. Initial definitions, including that of [21], characterized a resilient health system as one capable of “preparing for, responding to, and recovering from shocks.” This definition regards resilience as a singular, homogeneous capacity but Blanchet et al. contend that resilience is multi-faceted and that various systems—or the same system at different temporal instances—may demonstrate distinct forms of resilience. Blanchet, Nam [18] describe three resilience capacities: absorbing, adapting and transforming. These capacities are embedded in a broader architecture of governance that addresses how health systems handle knowledge, ambiguity, interdependence and legitimacy. The idea of interdependence is especially relevant to this research because it acknowledges that health systems are enmeshed in complex social and political relationships—an important insight into how Nigeria’s reliance on foreign actors affects its financial resilience. Here is a quick definition of each of the three capacities.

Absorptive capacity refers to a health system's ability to handle a shock using the resources and structures it already has, without having to make major changes. In the space of HIV financing, absorptive capacity is evidenced during a financial crisis, such as a reduction in donor funding or a fiscal deficit, when the system sustains essential operations by reallocating current budgets, utilising contingency funds, or enacting temporary efficiency strategies. Absorptive capacity is the most important type of resilience because it lets a system deal with problems without changing its basic structure [18].

Adaptive capacity is the ability of a health system to make small changes to its processes, resource distribution, or service delivery frameworks in response to a disruption without changing the basic structures of the system [18]. Adaptive competence in HIV financing is demonstrated when a crisis necessitates changes in resource mobilization or allocation, such the revision of provider payment arrangements, the modification of benefit packages, or the implementation of new efficiency measures. Adaptive capacity is a higher level of resilience than absorptive capacity since it includes learning and adapting, not just coping techniques.

Transformative capacity refers to a health system's ability to fundamentally restructure its core institutions, governance frameworks, or finance systems in response to a crisis. Transformative capacity represents the most advanced and challenging manifestation of resilience [18]. In HIV financing, it is evident that a crisis can precipitate fundamental changes such as transitioning from donor dependency to domestically funded HIV programs, developing new pooling mechanisms, or instituting new entities

for strategic procurement. Transformative capability necessitates both technical solutions and a fundamental reorganization of power and institutional frameworks.

Integrated Framework

Absorptive, adaptive, and transformative capacity are not purely technical properties that emerge automatically from planning or resource availability. While technical capacity—such as actuarial skills, supply chain expertise, and financial management—is necessary, our analysis suggests that political configurations are the primary determinants of whether such capacities are deployed. Rather, resilience capacities are produced—or fail to be produced—by the configuration of political actors, the distribution of power among them, the presence and strategy of reform teams, and the ability to seize crises as windows of opportunity [17, 18]. This integrated framework guided our document analysis, informing both the actor categories we coded for and the resilience outcomes we assessed.

Methodologies

Research Methodology

This study employed a qualitative document analysis design situated within an integrated political economy framework. The approach was retrospective and interpretive, aimed at synthesising existing evidence on HIV financing resilience in Nigeria and identifying how political and institutional configurations shape absorptive, adaptive, and transformative capacities.

The analysis was guided by a combined framework drawing on:

- Sparkes, Bump [17] political economy analysis (PEA) for health financing,
- Blanchet, Nam [18] typology of health system resilience (absorptive, adaptive, transformative), and

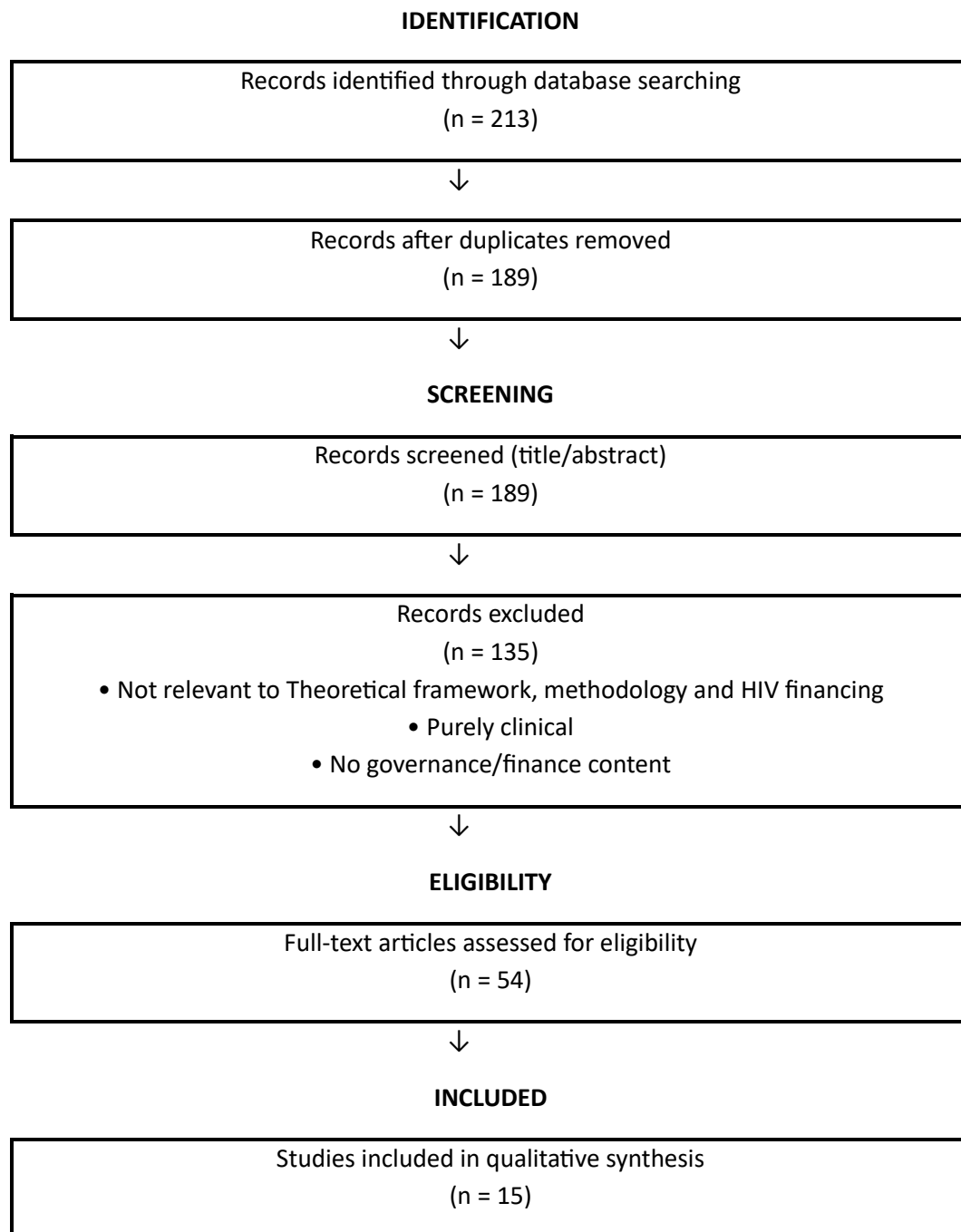
These frameworks informed the development of the codebook, including actor categories (interest groups, bureaucrats, budget actors, leaders, beneficiaries, donors), reform teams, windows of opportunity, and resilience capacities.

Document Retrieval and Selection

Documents were identified by systematic searches of PubMed, Google Scholar and institutional repositories (WHO, World Bank, UNAIDS, PEPFAR, Global Fund, NACA, Federal Ministry of Health). The search was conducted in May 2026 and included the following phrases with Boolean operators: (“HIV financing” OR “HIV/AIDS funding”) AND (“Nigeria” OR “Nigerian”) AND (“political economy” OR “governance” OR “donor transition” OR “sustainability” OR “resilience”). Further specific search was conducted for the following concepts: “health financing reform Nigeria” “domestic resource mobilisation HIV” and “key populations Nigeria HIV”. Searches were confined to English-language publications from 2005 to 2026. Titles and abstracts were evaluated for relevance to HIV finance, governance or political economy. Documents were included if they referred to resilience capacities, governance frameworks or donor transitions or finance processes. The initial screening identified 47 documents that fulfilled the

overall inclusion criteria. The PRISMA 2020 flow diagram (Table 1) is used here primarily to report on document retrieval and screening and not in a systematic or scoping review manner.

Table 1. PRISMA flow diagram of study selection



Eligibility Criteria

A two-stage screening procedure was used to distinguish globally relevant literature from evidence directly applicable to the Nigerian context. Because the search strategy included “Nigeria” as a keyword, the initial search returned both Nigeria-specific studies and global publications that referenced Nigeria only tangentially. In addition, other documents essential for developing the conceptual framework, though not captured by the keyword search, were identified through targeted manual searching and added to the global pool.

In the first stage, documents were included if they: (a) addressed HIV financing, sustainability, governance, donor transition, or the political economy of the HIV response; (b) were written in English; and (c) were published between 2005 and 2026. The starting year of 2005 was chosen to capture the period following the establishment of PEPFAR (2003) and the Global Fund (2002), allowing sufficient time for these initiatives to mature and for their governance and financing effects to be documented and analysed. The endpoint of 2026 was selected to capture the most recent evidence, including analyses of the 2025 PEPFAR stop-work order and its immediate aftermath. For 2026 publications, we included only those available as full-text preprints or grey literature reports from reputable institutional sources (e.g., UNAIDS, WHO) or peer-reviewed journals with early online release; forthcoming papers with no accessible full text were excluded. Two of the 15 documents in the final coding corpus were 2026 publications: Sokunbi, Umar [22], a peer-reviewed scoping review, and one grey literature report from a reputable institutional source. All other 2026 references cited in this manuscript are used for contextual budget and policy information only and were not included in the formal coding corpus. The keyword-identified publications, together with manually added sources that informed the conceptual framework, yielded 47 documents that shaped the broader framing of the study.

In the second stage, documents were assessed against stricter contextual criteria requiring a substantive focus on Nigeria’s HIV financing landscape. From the initial pool, 15 Nigeria-specific papers met these criteria and were selected for systematic coding and analysis. These papers examined resilience capacities, financing mechanisms, political leadership, donor dependency, and governance fragmentation within Nigeria.

This two-tiered approach ensured that the conceptual framework was grounded in the wider global literature, while the empirical analysis drew exclusively on Nigeria-specific evidence.

Data Extraction

For each document included, data was extracted on:

- authorship and year,
- document type,
- financing and governance themes,
- actor interests and power dynamics,
- evidence of absorptive, adaptive, or transformative capacity,
- institutional arrangements and transition processes.

Data Analysis

A directed content analysis was used in the study, following the protocols described by [23]. The analysis was deductive, with the integrated political economy and resilience framework used to construct the original codebook. Codes were structured around six actor categories (interest groups, bureaucrats, budget actors, leaders, beneficiaries and donors), reform teams, policy windows and the three resilience capacities—absorptive, adaptive and transformative. All papers were transferred to NVivo 15 for systematic coding, retrieval and comparison.

The principal researcher systematically coded all 15 Nigeria-focused materials using directed content analysis [23] as informed by a deductive codebook developed from the integrated political economy and resilience framework [17, 18].

To improve coding reliability, 66% of samples ($n = 10$) underwent an AI-assisted coding verification, used as a supplementary verification tool, with all coding decisions reviewed and finalised by human researcher. The codebook (with definitions and inclusion criteria) and verbatim text extracts from each document were uploaded to DeepSeek[24], a large language model (LLM), with the following prompt structure:

“You are a research assistant coding documents for a study on the political economy of HIV financing in Nigeria. Code the following text snippets using the codebook below for: (1) actor category (interest groups, bureaucrats, budget actors, leaders, beneficiaries, donors), (2) reform team presence, (3) policy windows, and (4) resilience capacity (absorptive, adaptive, transformational)”.

For each excerpt, the LLM generated coding suggestions. These proposals were compared to the principal researcher's initial coding. Disagreements between the researcher and LLM output were resolved by recurrent review of the source material and modification of code definitions, leading to the final codes. The LLM was only used to check the coding, and all final judgements were made by the principal investigator, hence human interpretative judgement remained important to the process.

Simple percent agreement (agreements/total coding decisions) was 87% raw agreement. Because our study was interpretive and focused on the substance of themes rather than the numbers of co-occurrence [25], we utilised % agreement. This statistic is frequently used in directed content analysis as a pragmatic measure of coding consistency [23].

Key disagreements were: (1) separating absorptive from adaptive capacity—resolved by clarifying absorptive capacity as maintaining functions using existing resources without structural change, versus adaptive capacity as modifying processes in response to changing conditions; and (2) categorising beneficiary voices—resolved by coding only where documents explicitly reported community perspectives, even if indirectly.

All conflicts were resolved by iteratively revisiting source texts and refining code definitions, with an audit trail of decisions documented in a codebook. The LLM was only used for verification, and the

senior researcher made all final coding decisions, ensuring that the human interpretive judgement remained at the center of the process. Limitations of AI-assisted coding were addressed by the primary researcher's personal understanding of the context of HIV in Nigeria driving interpretive conclusions.”.

Rigour and Saturation

The document corpus was selected, and thematic saturation was iteratively checked during the coding process. Saturation was achieved when no new codes or concepts were produced with further texts, but rather established patterns were consolidated. Thematic saturation was attained with document thirteen, and documents fourteen and fifteen confirmed, rather than extended, the thematic pattern.

It is important to point out that this claim of saturation applies to the selected corpus of 15 Nigeria-specific publications, and not the full universe of literature on HIV financing in Nigeria. Saturation in document analysis does not suggest that all feasible sources have been exhausted, but rather that the thematic organization within the purposively selected sample is sufficiently stable to sustain the synthesis provided here. This conservative reading reflects the fundamental limits of document-based research, where the availability of sources, publishing bias and the selectivity of institutional archives unavoidably restrict any claim to exhaustiveness.

All interpretations were based on verbatim excerpts of the papers included in the study in order that the findings could be connected to the source material rather than to preconceived preconceptions. The use of a theoretically driven coding scheme further improved analytic consistency by giving explicit, a priori categories. To guard against potential confirmation bias, the principal investigator maintained analytic memos throughout the coding process to record developing interpretations, questions, and potential alternative explanations. We intentionally sought and classified negative situations – when the papers did not fit the projected pattern. All modifications to the code definitions were logged in an audit trail of the codebook, including the date and rationale for the change, thus ensuring openness in the interpretative decisions made.

To further reduce bias, systematic checking of the lead researcher's coding was done using the AI-assisted technique outlined above. This procedure was a major test of interpretative consistency and forced us to question our assumptions, keeping us in the content of the papers rather than in our own preconceptions. The lead researcher's substantial professional experience in the implementation of HIV interventions in Nigeria was useful in interpreting the context but also presented a potential danger of confirmation bias. The process of verification supported by AI provided the opportunity to discover cases where previous professional expectations could have affected coding. All differences were resolved through iterative processes of reviewing and refining definitions of codes as part of the audit trail. The combination of contextual knowledge and methodical verification contributed to the analytical rigour of the study.

Ethical Consideration

Ethical approval was not required as the study analysed publicly available documents and did not involve human participants.

RESULTS

Document and Theme Overview

A total of 15 documents were reviewed, including peer-reviewed articles (n = 11), institutional reports (n = 2), and PhD dissertations (n = 2). The analysis employed a hybrid coding approach. A deductive codebook, derived from an actor-centred political economy framework, specified the following analytical dimensions: bureaucratic implementation capacity, political leadership, domestic budget execution, beneficiary equity, private sector engagement, reform governance, and crisis windows. These actor-focused categories guided the systematic coding of all documents. In addition, an inductive approach was used to synthesize the overview of the actor landscape, and sub-themes elaborating each deductive dimension were identified through iterative reading and constant comparison across documents. Table 2 summarises the distribution of documents by theme

Table 2. Distribution of documents by theme

Theme	Number of Documents
Donors & external actors	12
Bureaucratic capacity & implementation	10
Political leadership	10
Domestic budget & financing	7
Beneficiaries & community voice	8
Private sector & interest groups	5
Reform teams & transition governance	4
Crisis windows	2

Theme	Number of Documents
Resilience (absorptive & adaptive)	6

Overview of Actors Landscape from document Analysis

The arrangement of actors involved in HIV financing in Nigeria is dispersed. At the federal level, NASCP oversees clinical services under the Federal Ministry of Health and NACA coordinates multisectoral responses, resulting in parallel structures with overlapping mandates. The Ministry of Finance oversees the release of the domestic budget, which is frequently erratic. Seventy to ninety percent of HIV funding comes from external donors, such as the World Bank, PEPFAR, and the Global Fund, who influence governance through parallel systems and conditional payments. Although important populations continue to be disenfranchised, civil society—including PLHIV networks and the Country Coordinating Mechanism (CCM) advocates for continuity of HIV, TB, and malaria programs and the sustainability of the health gains achieved. State-level actors differ greatly: some heavily burdened states, such as Akwa Ibom, rely solely on donor NGOs, while others provide domestic funding. The resilience patterns examined below are made possible by this uneven terrain.

Political Economy Dynamics (Themes 1-8)

Theme 1: Donor and donor Dependency and Risks to Sustainability

Across 12 documents, donor funding was described as both essential to Nigeria's HIV response and a source of structural vulnerability.

Quantitative dependence

External donors account for most of the HIV financing in Nigeria. Sokunbi, Umar [22] using the most comprehensive expenditure data available, found that external assistance constitutes more than 70% of total HIV expenditure. Other studies report similar or even higher figures, ranging up to 90% when using narrower definitions of "direct funding" [26, 27]. Together, these sources confirm donor hegemony as a consistent finding.

Positive contributions

Donor investments enabled infrastructure, capacity, and coverage gains. Sokunbi, Umar [22] documented that "donor resources... have been central to scaling up ART, PMTCT, HIV testing services, and targeted interventions for KPs... strengthened laboratory networks, pharmaceutical supply chains, and health information systems" (p. 10). Respondents in an interview-based study "acknowledged that Nigeria's HIV response has been largely donor driven and that the support had contributed significantly to capacity building for the locals as well as in-country infrastructural upgrades" [28]. Chima [29]

observed that "HIV programs generally deliver services of higher quality than the rest of the system" (p. 9).

Negative unintended consequences

However, the same documents found structural harm. Olanlokun and Taiwo [30] noted that "donor investments have also reinforced parallel systems that limit national ownership" (p. 190 (12)) – a tendency that is reflected in fragmented procurement authority and diminished domestic accountability. Sokunbi, Umar [22] noted an internal "brain drain"—the transfer of competent workers from public sector facilities to better-paid donor-funded NGOs (p. 10)—which gradually depletes the human resource capability of domestic institutions. Chima and Homedes [29] concluded that "the creation of parallel coordinating structures... negatively impacts sustainability" (p. 11). They also noted that "HIV donor funding has led to the development of a parallel procurement and supply management system" (p. 10). Collectively these data demonstrate how donor supported parallel systems are effective for short term service delivery but progressively erode the institutional and economic underpinnings of domestic financial resilience.

Sustainability anxiety

The specter of donor withdrawal permeated the literature. Sokunbi, Umar [22] warned that "more than 70% of HIV expenditure... continues to be financed externally, exposing the national response to vulnerabilities associated with donor fatigue, shifting geopolitical priorities, and macroeconomic instability" (p. 11). Chima and Homedes [29] cautioned that "the achievements made... are not sustainable as the current system cannot afford to continue delivering services free of charge when donor funding ceases" (p. 9). In a qualitative study of decentralization, respondents indicated that "role players' support for any reform... may only last for as long as funding for the programme remains external [31].

Theme 2: Bureaucratic Capacity and Implementation Gaps

Bureaucratic factors were identified across 10 documents as critical determinants of policy implementation and system performance.

Capacity and implementation gaps

Multiple sources identified persistent skill and resource deficits. Itiola and Agu [28] found that "there are still capacity gaps at the national and state levels especially for programme management and quantification of HIV/AIDS products. Ogbuabor, Olwande [13] listed "weak engagement with Ministry of Finance officials" as a binding constraint (p. 1). Olanlokun and Taiwo [30] catalogued "persistent weaknesses including fragmented procurement processes, inadequate financing, regulatory gaps, insufficient workforce capacity, and infrastructure deficits continue to hinder Nigeria's ability to manage commodity systems independently" (p. 190(12)).

Institutional resistance to reform

Bureaucratic actors sometimes resisted changes that would redistribute power. In a study of decentralization, state governments' willingness to relinquish control "was conditional on their retaining oversight function, and the preservation of civil service staff appraisal processes" Mbachu, Onwujekwe [31]. The same study noted that "decentralizing... would reduce the power and control of central governments over decisions and how they are implemented, and this could explain their mixed reaction" [31]

Parallel structure problems

The proliferation of coordinating bodies created inefficiencies. Itopa [26] observed that "the establishment of NACA as a coordinating entity has provided strategic leadership... yet the parallel existence of multiple coordinating committees (National, State, Partner) creates potential for duplication and inefficiency" (p. 63 (8)). Chima and Homedes [29] noted that "there is overlap between the duties of NASCP and the NPC, and because of NACA's overreaching nature" (p. 11).

Theme 3: Political Leadership – Intermittent Commitment and Tenure Effects

Leadership factors appeared across 10 documents, revealing an intermittent pattern of political commitment.

Episodic political commitment

Positive leadership actions were documented but clustered around specific moments. President Goodluck Jonathan signed the HIV/AIDS Anti-Discrimination Act 2014 [32] and launched the President's Comprehensive Response Plan (PCRP) funded through SURE-P [28, 29]. Mbachu, Onwujekwe [31] said that "renewal of political tenure acts as a catalyst for action," implying electoral cycles create reform periods. But the same study also recorded a more cautious view: one participant said tenure security depended on loyalty to the state government, and that local government transition chairmen 'don't have any type of autonomy' – the state controlled their actions. These divergent perspectives show that the relationship between political tenure and change is not consistent but rather is shaped by the level of government and the degree of autonomy experienced by office holders.

Persistent political disengagement

However, unfavorable appraisals were more common. It is noted that "the political class may not be showing enough commitment towards donor funded programmes" [28]. This conclusion refers to a fundamental gap between political rhetoric and fiscal action. Ogbuabor, Olwande [13] reported that "HIV budget execution was also perceived to be low and inefficient due to low political commitment" (p. 6), indicating that the issue is not just about limited allocations but bad implementation, even when funds are ostensibly available. Itiola and Agu [28] also found that "lack of political will and poor leadership were highlighted as major hindrances to country ownership," emphasising the need of political players to financing outcomes. This trend has been highlighted by Olaoye [33] who observed that "over two decades since the Abuja Declaration... the country has yet to meet the benchmark of allocating 15% of

its national budget to health” (p. 55 (2)). Taken together, these data suggest that poor political leadership does not merely co-exist with donor dependence, but instead actively perpetuates it, by failing to generate the economic space and institutional incentives for a sustained domestic HIV response.

Political party dynamics

Implementation was influenced by partisan factors. *Mbachu, Onwujekwe [31]* discovered that the goals of political parties differ and are highly impacted by the personal interest of who is in government (p. 287(6)), and this creates a very unpredictable situation for HIV financing. The same study found that “party affiliations may very well influence the way in which decentralisation plays out, such that states and LGAs that are affiliated to the ruling party... may be favored” *Mbachu, Onwujekwe [31]*. However, the authors do not provide concrete examples to support this hypothesis. This partisan favouritism may have concrete implications for resilience financing: linking resource allocation and implementation support to political affiliation rather than epidemiological need leads to delays in funding, fragmented budget execution, and diminished ability to plan effectively in states with weaker political connections. In addition, these political distortions are not just a matter of domestic governance. They also increase donor dependence as external actors increasingly bypass unreliable state processes to secure service delivery, thus entrenching the parallel structures that weaken national ownership.

Leadership as a constraint on reform

Weak strategic direction was identified as a systemic limitation. Chima and Homedes [29] described “poor policy direction, strategic planning and coordination, and regulation of externally financed HIV programs by the government... poses a great limitation.” The same authors noted that “the coordinating infrastructure for HIV foreign aid is chaotic and not integrated with the health system” [29]

Theme 4: Domestic Budget and Financing Constraints

Budget-related findings from 7 documents clustered around inadequacy, unpredictability, and political vulnerability.

Inadequate domestic financing

Multiple sources identified insufficient domestic resources as a primary barrier. Itiola and Agu [28] found that “inadequate domestic funding appears to be the biggest challenge hampering country ownership” and that “with adequate fund allocation, most of the other challenges can be effectively tackled.” Ogbuabor, Olwande [13] noted that “government budgets neither matched the needed services nor reflected the burden of disease” (p. 6). Chima Chima and Homedes [29] concluded that “domestic allocations for HIV program delivery have generally been abysmal.”

Unpredictable fund release

Even when budgets increased, implementation faltered. Ogbuabor, Olwande [13] found that “in instances when the budget was increased, most participants noted that the release of the funds was unpredictable” (p. 3). The same analysis noted that “state and local government funding was particularly low. Between 2016 and 2021, about 67% of the Government of Nigeria’s allocation to NACA was spent” [13] .

Low-budget execution linked to politics

Political factors directly affected budget performance. Ogbuabor, Olwande [13] noted that "HIV budget execution was also perceived to be low and inefficient due to low political commitment" (p.6), and that "that 0.5%–1.0% of federal allocation to states was earmarked for the state-level HIV response however, participants explained, "implementation of the earmarked fund was stalled because of a change in the government in 2019 and because the funds were not deducted at the source" (p.6).

Theme 5: Beneficiaries and Community Voice – Equity Gaps and Structural Barriers

Eight documents presented the perspectives of beneficiaries and civil society, illustrating how gaps in inequity and legal environments influence HIV outcomes.

Structural barriers faced by key populations

An important beneficiary narrative was offered by Sokunbi, Umar [22], who highlighted that "equity gaps persisted for key populations due to stigma, criminalisation, and limited targeted funding" (p. 10). The same review also highlighted that "even with donor commitments to prioritise MSM, sex workers and other marginalised groups, a small proportion of HIV funding is directed specifically towards these populations" [22] and "structural barriers, including criminalisation, stigma, discrimination and security concerns, continue to restrict access to services" [22]. These inequities in equality are not only a failure of delivery service; they also impact political incentives. Stigmatisation and criminalisation of critical communities undermine their political influence, lessening politicians' incentives to invest domestic resources in HIV initiatives for marginalised groups. This dynamic strengthens donor dependence by filling the financial vacuum with external players and fosters a vicious loop of beneficiary injustice and poor political commitment reinforcing one another.

Legal environment blocks access

The Same Sex Marriage Prohibition Act (SSMPA) was one policy vector identified as causing damage to resilience for LGBTQ+ populations. Joseph, Joseph [32] claims that the Act "has allegedly led to an increase in attacks against the Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ)" population. Sokunbi, Umar [22] concluded that interventions continue to be fragile and heavily dependent on external funding streams without supportive legal and policy environments (p. 11).

Vulnerability of beneficiaries to financial problems

There was no hope of financing through out-of-pocket payments. Itiola and Agu [28] found that "out-of-pocket payment by HIV patients may not be a viable option... because of the poor economic status of HIV positive clients." Chang, Hijazi [34] observed that "donor funding for HIV has helped to limit out-of-pocket spending... integration can also play an important role in protecting PLHIV from increasing out-of-pocket costs" (p. 7).

Fears over the transition of civil society

Civil society representatives expressed specific concerns around transitions of services. Itopa [26] noted that “Civil Society Representatives... raised concerns about service continuity during transition periods with particular emphasis on maintaining quality standards and coverage levels for marginalised populations.”

Theme 6: Private Sector Engagement – Nascent and Uneven

Five documents addressed private sector and interest group roles, revealing a gap between rhetoric and reality.

Private sector as potential (not yet realized)

Itiola and Agu [28] noted that "private sector is involved in Nigeria's HIV response and can be a possible source of financing... even though government funding might just be sufficient". Ndoh [35] listed "public private partnerships" as a recommended policy direction (p. 21).

Private sector reality check

But in fact, private financing was still very limited. Ogbuabor, Olwande [13] noted that “private-sector financing for HIV is low, ad hoc, and tokenistic” (p. 6). The same assessment observed that “philanthropic individuals could improve funding,” although the conditional “could” shows this remains aspirational Ogbuabor, Olwande [13]. One paper ascribed this to the absence of a clear legislative framework for private sector engagement in health financing [22], while another remarked that donor funding “crowds out” local private investment by fostering a notion that HIV is externally supported [13]. Apart from these limited remarks, there was no examination of the hurdles to private sector engagement in the documents, suggesting that this is an underexplored dimension in the literature.

Pharmaceutical market dependency

The private pharmaceutical market created supply chain vulnerability. Olaoye [33] observed that "the Nigerian pharmaceutical market relies heavily on imports, with over 70% of medications imported into the country" (p. 56(3)). The same document noted that "the value of imported medications rose by 68% in the third quarter of 2023 compared to the same period in 2022" [33].

Theme 7: Reform Teams and Transition Governance

Four of the publications mentioned reform teams, but our study shows that Nigeria does not have the unified reform team described by Sparkes, Bump [17]. Rather, reform functions are dispersed across a number of players with limited coordination. Ekele, Boniface [27] described structured transition governance – ‘a transition team was formed, comprising representatives from the host governments, the donor agency (USAID), the outgoing implementing partner (FHI 360) and the incoming implementing partner (ECEWS)’ (p. 10) – but this was a project-specific, temporary arrangement, not a sustained reform team.

Ndoh [35] acknowledged the need of ‘a political champion for a cause’ (p. 20). However, our analysis found no evidence of a persistent political champion for HIV finance reform over many administrations. Joseph et al. (2020) called for stronger community-level organisations however they are advocacy networks rather than strategically orientated reform teams.

The absence of a coherent reform team might explain why Nigeria has not been able to seize windows of crises for transformative change. Without a group that can spot opportunities, rally allies, and pivot strategy across political cycles, even acute shocks – such as the 2025 PEPFAR stop-work order – lead to reactive, short-term responses rather than fundamental reform.

Theme 8: Crisis Windows as Policy Change Opportunities

Two documents explicitly addressed crisis moments as windows for policy change.

Anticipated crisis

Olanlokun and Taiwo [30] framed donor transition as an impending crisis requiring action, noting "the urgent need for Nigeria to enhance domestic financing and governance capacity to ensure long-term commodity stability" (p. 180 (2)).

Realized crisis with adaptive response

Itopa [26] documented how "initial disruptions resulted in increased stockouts and shipment delays, rapid implementation of multimonth dispensing policies and expansion of community distribution points demonstrated system resilience and innovation capacity" (p. 60(30)).

Resilience Outcomes

Theme 9: Resilience as an Outcome – Absorptive and Adaptive Capacities

Having established the roles of donors (70-90% external funding), bureaucrats (implementation gaps and institutional resistance), leaders (intermittent political will), budgets (inadequacy and unpredictability), beneficiaries (equity gaps), private sector (nascent engagement), reform teams (transition governance), and crisis windows (acute shocks trigger response), we now examine how these factors collectively shaped Nigeria's HIV financing and system resilience. Following the codebook's disaggregation, resilience

is reported as absorptive (maintaining functions during shock using existing resources) and adaptive (modifying structures or strategies in response to changing conditions).

Absorptive Resilience: Strained Capacity to Withstand Shocks

Absorptive resilience references were few (across 3 documents) and revealed a system struggling to maintain core functions without external support.

Conditional optimism within government

Itiola and Agu [28] documented that one respondent expressed optimism that "with proper management and accountability systems, resources available within government should be sufficient to fund HIV program." This reveals conditional absorptive optimism, the belief that existing domestic resources could work if mismanagement were addressed. The same study noted that "some states now have budget line for logistics activities especially for the support of LMCU activities" Itiola and Agu [28], indicating decentralized absorptive innovation, though the phrasing "some states" suggests limited scale.

Stockouts as absorptive failure

Conversely, a study of treatment devolution found that participants expressed "disappointment related to stockouts of HIV test kits and other essential equipment, such as syringes and needles to draw blood" Yahaya [36]. This is a direct contra-indicator of absorptive resilience.

Emergency legislative response – insufficient

Olaoye [33] documented that "Nigerian lawmakers approved an additional \$200 million to the healthcare budget to fill funding shortfalls created by the suspension of US foreign aid" (p. 55(2)). However, the author critically appraised that "while commendable, this reactive response cannot mitigate the initial shock to Nigeria's health system due to US funding cuts" Olaoye [33]. This identifies a ceiling on absorptive capacity: reactive fiscal responses are insufficient to fully absorb sudden donor withdrawal.

Adaptive Resilience: Multiple Mechanisms but Uneven Reach

Adaptive resilience was more extensively documented (across 5 documents), revealing a system that has developed diverse coping strategies.

Institutional adaptation: decentralization preference

Mbachu, Onwujekwe [31] found "substantial support for decentralization of treatment services for HIV and AIDS to primary healthcare facilities among the respondents" (p. 298(4)). This captures institutional adaptive preference—stakeholders endorsing structural reconfiguration. However, as noted in Theme 2, this support was conditional: state governments wanted to retain oversight functions, revealing adaptive tension between efficiency gains and bureaucratic self-preservation.

Technical and financial adaptation: social health insurance integration

Chang, Hijazi [34] provided the richest adaptive resilience evidence, documenting Lagos State's integration of HIV services into social health insurance (SHI) across four sequential developments:

First, "SFI developed a liability model, which estimated the total costs of treatment for HIV, broken down by payer; this analysis demonstrated that the SHI fund could absorb the projected costs of HIV services" Chang, Hijazi [34]. This represents technical adaptive capacity—actuarial modeling to demonstrate feasibility.

Second, "from 2015 to 2020, SHI implementation for HIV treatment services scaled rapidly. By 2019, 90% of PLHIV were enrolled in SHI" Chang, Hijazi [34]. This shows scaling adaptive success.

Third, "216 health facilities empaneled in the Lagos State Health Scheme; 197 of the empanelled facilities are providing and receiving reimbursements for HIV testing services (as of May 2022)" Chang, Hijazi [34]. This captures supply-side adaptive integration.

Fourth, "611,578 people enrolled in the Lagos State Health Scheme (as of May 2022), compared to baseline of 11,000 (September 2020)" Chang, Hijazi [34]. This 5,560% enrollment increase is a striking adaptive metric, though Theme 5 raised concerns about equitable reach for key populations. However, it is important to note that the SHI benefit package does not include all HIV services. HIV testing and some costs linked to treatment are covered, but the source paper [34] does not specify the amount of ART coverage in the package. This caveat is further discussed in the Discussion

Performance-based adaptation: transition expands access

Ekele, Boniface [27] found that "with the transition model implemented, the transition led to a substantial 149% increase in the number of individuals accessing HIV testing services, rising from 116,138 before the transition to 289,564 after the transition" (p. 10). This is a performance-based adaptive outcome period of transition (often a vulnerability) expanded access. Theme 7 noted that a structured transition team was in place, suggesting collaborative adaptive governance correlated with improved outcomes.

Transformative Resilience

Potential Transformative resilience—fundamental system change that alters how HIV is financed—is shown across several documents, though achievements remain partial and uneven.

Partial Transformation

The ongoing unification of Nigeria's parallel HIV supply chains into a single coordinated system represents transformative restructuring, reducing stockouts and moving from donor-fragmented to nationally coordinated procurement [28]. Lagos State integrated HIV into social health insurance, transitioning from donor-dependent to insurance-based financing, achieving 90% enrollment of people living with HIV and a 5,560% increase from 11,000 to 611,578 enrollers [34]). Chang, Hijazi [34] point out that Lagos's success was due to strong governor commitment and technical capacity, which were absent in most states.

Several developments hold transformative promises, but none has yet reached system-wide scale.

First, the convergence of Nigeria's disparate HIV supply chains into one coordinated system reduced stockouts and switched procurement from donor-fragmented to nationally coordinated procedures [28].

Second, Lagos State incorporated HIV services into its social health insurance program, switching from donor-dependent to insurance-based financing and attaining 90% enrolment of people living with HIV, with total enrolment increasing from 11,000 to 611,578 Chang, Hijazi [34]. However, this model has not been reproduced in all 36 states.

Third, domestic funding overtook donor funding in 2015 for a short period, which increased ownership and accountability Joseph, Joseph [32]. This reversal was neither stable nor reproducible in a reliable way.

Fourth, a large-scale HIV treatment program that moved from an international to a local implementing partner maintained service delivery and witnessed a 149% rise in HIV testing Ekele, Boniface [27]. A structured transition committee, comprising members of the host government, donor agency and outgoing and new partners, assisted the process.

Finally, the National Domestic Resource Mobilisation Strategy seeks to mobilise \$662 million in five years through 12 financing strategies Nwizu, Ihekanandu [12]. A roadmap for local ownership including pooled procurement, digital logistics, local pharmaceutical manufacturing and workforce development have been articulated (Olanlokun & Taiwo, 2022). The instruments remain aspirational, dependent on continued political will and faithful application. The transition of a large-scale HIV treatment program from an international to a local implementing partner maintained and improved service delivery, with a 149% increase in HIV testing [27] states contribute up to 1% of their monthly allocations from the federal government to the HIV response" (p. 10). This fiscal mechanism transforms intergovernmental transfers into dedicated HIV financing. However, implementation difficulties were noted: "getting this implemented is confronted with difficulties in the ability of the Nigerian government to provide sufficient sites for HIV test, counselling and treatment" [32]. In addition, a National Domestic Resource Mobilisation Strategy aims to mobilize \$662 million over five years through 12 financing strategies [12]. These strategies include raising the budgets of governments, integrating HIV into health insurance and increasing contributions from the commercial sector and philanthropies. A path for the transition from donor dependency to local ownership has been outlined and includes pooled procurement, digital logistics, local pharmaceutical production, and workforce development [30]. This financing of the roadmap seeks to leverage this mix of domestic public and private sources, a conscious change towards a government-led and domestically financed paradigm

[30]

DISCUSSION

This analysis provides evidence consistent with the argument that resilience capacities are shaped by political configurations. While our document analysis cannot definitively establish causation, several mechanisms—political leadership affecting budget execution, donor dependency creating fragmentation, and reform team absence leading to missed windows—suggest that political factors are important determinants of resilience outcomes. Below we interpret these findings and their implications for sustainability and national ownership.

Nigeria's Donor Dependence Paradox: Achievements Undermined by Structural Vulnerability

The finding that 70–90% of Nigeria's HIV financing is externally funded aligns with broader sub-Saharan African trends [37]. In Nigeria, the same donor investments that scaled up antiretroviral therapy, supply chains, and laboratory networks also produced structural vulnerabilities that now threaten sustainability. This paradox operates across three dimensions. First, financial dependence: Nigeria has consistently failed to meet the Abuja Declaration's 15% budget target [33]. Second, institutional dependence: parallel donor-funded bodies (NACA, NASCP, multiple committees) operate alongside but not within the Ministry of Health, reinforcing government tendencies to cede accountability to external partners [26, 29]. Third, human resource distortion: an internal brain drain pulls skilled workers from public sector facilities to better-paid donor-funded NGOs [22].

The difficulties of sustainability are not imaginary. Other examples of failed transitions point to the larger hazards of donors leaving when systems are not ready. Modelling studies in South Africa suggest that a disruption of PEPFAR-supported services could lead to a significant increase in HIV-related mortality and morbidity [38] – a warning for Nigeria, where donor-funded HIV services are also vulnerable to abrupt funding cuts, with no clear domestic alternatives. Conditions vary epidemiologically and institutionally, but these cases highlight the overall risk of failure in transition planning, leading to rapid and serious reversals of hard-won gains. While the epidemiological and institutional conditions differ from those of Nigeria's generalised pandemic, this example illustrates the general risk that failures in targeted programming during transition can lead to swift and severe reversals of hard achieved achievements. These cases are not perfect comparators to Nigeria, but they are potent cautionary tales of what can happen when financing changes are poorly managed, coordination is lacking, and domestic systems lack absorptive capacity. Nigeria's \$200 million emergency legislative reaction to USAID cuts, while admirable, is a one-off initiative and an order of magnitude below the anticipated \$600 million annual USAID contribution—revealing the brittleness of its absorptive resilience and highlighting the need of strategic transition preparation.

Implementation Gaps and Bureaucratic Capacity

Bureaucratic bottlenecks, erratic fund release, and weak coordination mechanisms impede Nigeria's HIV financing landscape [13, 28, 30]. The proliferation of overlapping coordinating bodies (NACA for coordination, NASCP for health sector response, plus technical working groups) produces three harms:

geographic and population coverage gaps due to misaligned donor efforts; dispersed accountability without clear ownership; and sustained vertical programming that runs HIV services parallel to primary healthcare systems, undermining long-term integration.

Bureaucratic resistance to decentralisation—where state governments supported reforms only if they retained oversight—illustrates how institutional self-preservation constrains adaptive resilience (Mbachu [31]). This finding is consistent with global evidence showing that central-level bureaucrats frequently oppose decentralisation because it threatens their control over resources, authority, and decision-making power [38]. However, the concern about retaining oversight is not purely self-serving; it also reflects a legitimate accountability dilemma. In the absence of strong sub-national financial management systems and clear inter-governmental fiduciary frameworks, transferring resources without retained oversight could expose funds to mismanagement or diversion without clear lines of responsibility. The documents reviewed, however, did not indicate that state governments proposed alternative accountability mechanisms—such as joint oversight boards, independent audits, or performance-based reporting—that would allow decentralisation to proceed without central control. This suggests that while accountability concerns are valid, they were also deployed instrumentally to preserve bureaucratic autonomy. Technical solutions alone—guidelines, training, or organisational restructuring—are therefore insufficient without addressing the underlying political economy of bureaucratic incentives and simultaneously strengthening sub-national accountability systems.

Political Leadership: Intermittent Commitment and Tenure Effects

The pattern of sporadic political commitment—episodic presidential actions (Anti-Discrimination Act, President's Comprehensive Response Plan) against a backdrop of chronic underfunding and poor coordination—reflects Shiffman and Smith [39] political priority framework. HIV has achieved high-priority moments in Nigeria but failed to sustain political attention across administrations.

The finding that "renewal of political tenure acts as a catalyst for action" [31] indicates that electoral cycles create policy windows. Practically, this means sustainability planning should anticipate and leverage these windows by aligning transition milestones with election schedules and cultivating political champions who maintain momentum between administrations [35].

Nigeria's continued failure to fulfil the Abuja 15% goal [33], indicates a lack of political priority, not an absence of resources. There is evidence for this differentiation from several lines. First, Nigeria is the greatest economy in Africa, yet its average percentage of national budget for health is just 5.75% – a share that has been below 7% for two decades [40]. This continuous under-investment, even in the face of economic growth, suggests a decision about the allocation of resources rather than a binding fiscal restriction. Second, funds designated are frequently not released. More than a fiscal constraint, the persistent under-investment in health in Nigeria, especially during periods of economic boom, is a sign of political deprioritisation and inadequate budget execution. Competing fiscal commitments and macroeconomic constraints are genuine but the size of under-execution underscores the importance of political choices. This was evidenced by the release of capital funds allocated to the health sector, where only N36 million out of the N218 billion approved for the Ministry of Health's capital budget was released in 2025 – a release rate of 0.0165%[41].. This small amount of approved expenditure is a

symptom of the systemic failure to translate budget commitments into actual spending, not a lack of resources. [42]. This means that the problem is not only the absence of allocation, but rather the absence of political will to implement what has been allocated. Third, budget priorities are in competition i.e., debt servicing (23.14%), general public services (24.2%) and economic affairs (18.4%) are higher than health [42, 43]. This is not a question of resource scarcity but one of hierarchy of political preferences. Political purpose, not wealth, dictates domestic resource mobilisation, as evidenced comparatively by South Africa, which maintains over 80% of domestic HIV finance despite economic constraints [44]. The institutional architecture for HIV governance in South Africa is different from the fragmented structure in Nigeria. The SANAC model in South Africa is an example of an institutional architecture that creates political incentives for domestic finance. The SANAC's co-chair by the Deputy President signifies political priority, while civil society involvement ensures accountability measures. This contrast supports Sparkes et al.'s emphasis on the institutional mediation of actor interests. The government rolled out the world's largest ART programme, with domestic finance rapidly growing from less than 20% of HIV expenditure in 2005 to over 80% in 2015 [45]. By 2025, South Africa was supporting more than 80% of its HIV program domestically, with an annual budget of more than R30 billion (about \$2 billion)—the largest national HIV program in the world [45]. In addition, SANAC includes civil society sectors representing persons living with HIV, important populations, women, youth and people with disabilities. Also, Kenya has transitioned from less than 20% of total HIV expenditure sourced domestically in 2005 to roughly 50% domestic finance by 2018, with the remainder coming from PEPFAR, the Global Fund, and other donors [46-48]. There are many reasons behind Kenya's progress. First, HIV retained a political salience at the highest level. President Kibaki offered high level political leadership thru the Kenya AIDS Control Council (KACC), which he personally headed, delivering a clear signal that HIV was a presidential priority [49]. This leadership led to increased financial provisions and the formation of dedicated domestic funding channels. This view is reinforced by the explicit labelling of health underfunding by experts and authorities as a "lack of priority", "poor leadership" and a "leadership gap" [45, 50]. This information enables us to describe Nigeria's financial gap as one of political priorities.

Resilience: More Absorptive and Adaptive than Transformative

Absorptive resilience remains severely limited. Budget execution is chronically weak: from 2016 to 2021, only 67% of government appropriations to NACA were spent, attributed to low political commitment [13]. The \$200 million emergency response to US aid cuts was deemed insufficient to absorb the initial shock [33]. Over 70% of HIV expenditure remains externally funded [22].

Adaptive resilience shows notable but uneven achievements. The federal mandate for states to contribute up to 1% of monthly allocations to HIV [32], Lagos State's integration of HIV into social health insurance (90% PLHIV enrolment; 5,560% increase from 11,000 to 611,578 enrollees) [34], structured transition governance maintaining service continuity during donor shifts [27], and rapid multi-month dispensing scale-up (12% to 78%) during COVID-19 [26] all demonstrate adaptive capacity. Yet a paradox endures: donor support enabled these advances while simultaneously reinforcing dependency and parallel financing structures that undermine long-term sustainability.

The integration of SHI in Lagos State is a major adaptive achievement, but two limitations are worth noting. First, the benefit package does not seem to include all services related to HIV. Second, the source paper[34] does not indicate the level of coverage of ART. If ART remains donor-funded or out-of-pocket, the shift may not achieve its stated aim of reducing donor dependency. Second, the rapid enrolment of PLHIV (5,560% rise) raises issues of adverse selection: If PLHIV enroll faster than the general population, the risk pool becomes skewed to higher-cost beneficiaries, endangering the financial sustainability of the plan. This adaptive system could self-sabotage without risk equalisation and ongoing broad population enrolment.

Transformative capacity—fundamental, system-wide change—has not been achieved at scale. The consolidation of parallel supply chains reduced stockouts [28], and Lagos SHI integration is genuinely transformative but remains subnational. Domestic funding briefly surpassed donor contributions in 2015 but was not sustained [32]. What exists are well-articulated strategies (National Domestic Resource Mobilisation Strategy targeting \$662 million; roadmap for pooled procurement and local manufacturing) awaiting implementation with sustained political commitment [12, 30]

In this context, HIV integration “at scale” would be characterised by four interrelated benchmarks: (1) National replication of Lagos State’s SHI integration in all 36 states and Federal Capital Territory, ensuring that HIV services are consistently covered by health insurance irrespective of geographical location; and (2) sustained domestic budget execution, meaning not only allocation but predictable and timely release of funds. Budget, the International Budget Partnership and the World Bank have shown that Nigeria’s health capital budgets are often characterised by very poor cash-backing, with disbursements often below 10% and in some years, even zero or negligible. History of non-execution shows that it is not just appropriation but also the continuous inability to transform approved budgets to actual spending [51-53] (3) consolidation of procurement systems, moving away from the current parallel donor-funded supply chains to a unified national system, which achieves economies of scale, reduces fragmentation, and strengthens government oversight, [26]; and (4) institutionalised transition governance, with clear milestones, accountability mechanisms, and time-bound targets for donor transition, rather than the current ad hoc and reactive approach [13]. Transformative capability is partial and reversible until progress is made in all four dimensions.

Equity Gaps

Key populations (MSM, sex workers, people who inject drugs) face persistent structural barriers—criminalisation, stigma, discrimination, security concerns—and receive a disproportionately small share of HIV funding [22]. This mirrors global patterns where MSM-specific funding accounts for <1% of HIV spending in many countries [54]

Nigeria’s Same Sex Marriage Prohibition Act (SSMPA) fosters a particularly hostile legislative climate, resulting in an increase in attacks on LGBTQ+ individuals and inhibiting access to services [32]. This legal hostility also creates a wider political climate in which key populations are delegitimised as political actors, reducing their ability to demand accountability from elected officials and undermining the political incentives to devote domestic resources to services that benefit marginalised groups. Politicians face little electoral penalty for underfunding programmes for socially excluded and politically

marginalised populations. This creates a vicious circle: the legal criminalisation of populations silences political voice, which keeps domestic funding low and entrenches donor dependence (with external actors filling the gap, often through parallel systems that deepen exclusion). This results in a legal-policy paradox: while the HIV/AIDS Anti-Discrimination Act outlaws discrimination on the basis of status, the SSMPA criminalises the identities of those most affected. Without legislative and legal reforms that protect rather than criminalise critical groups, donor-funded KP-friendly services will remain vulnerable and dependent on outsiders [22]. Nigeria needs rights-based initiatives that tackle structural determinants to achieve the UNAIDS 95-95-95 targets. Beneficiary perspectives are presented indirectly through documents [22] rather than direct quotes from PLHIV or key populations. The manuscript acknowledges this as a limitation.

This analysis contributes to health financing political economy theory in three ways. First, it demonstrates that resilience capacities are not technical properties, but political outcomes shaped by actor configurations. Second, it extends Sparkes, Bump [17] by showing that in donor-dependent settings, the 'reform team' function is often performed by donors rather than domestic actors, with implications for sustainability. Third, it provides empirical grounding for Blanchet, Nam [18] typology, showing that absorptive and adaptive capacities can coexist with limited transformative capacity.

Research Limitations

This study has several limitations. First, the analysis is based on 15 documents, which may not fully represent Nigeria's diverse donor-financed HIV interventions. Second, reliance on peer-reviewed literature and donor-commissioned reports may introduce publication bias toward positive findings. Third, no primary data were collected, so the study reflects written perspectives rather than firsthand stakeholder accounts. Fourth, the evidence synthesis cannot establish causation; claims that resilience capacities are "political outcomes" remain theoretical inferences, not empirical demonstrations. Nonetheless, triangulation across multiple document types (peer-reviewed articles, grey literature, program evaluations, a PhD thesis) and convergence of findings from independent sources strengthen confidence in the main conclusions.

Conclusion

With an emphasis on donor dependence, governance ability, political leadership, and resilience results, this document analysis investigated the political economy of HIV finance in Nigeria. The results show that external donors, mainly PEPFAR and the Global Fund, have played a crucial role in increasing HIV prevention, treatment, and care services in Nigeria, resulting in quantifiable improvements in antiretroviral drug coverage, HIV testing uptake, and viral load monitoring. Additionally, especially in high-burden states like Akwa Ibom, Cross River, and Rivers, donor expenditures have improved pharmaceutical supply chains, laboratory networks, and health information systems.

These benefits have come at a price, too. Nigeria's HIV response is still largely reliant on outside funding,

with donors covering 70–90% of all HIV spending. Due to this reliance, there are now structural vulnerabilities such as workforce distortions due to internal brain drain, fragmented governance due to rival coordinating organisations, and ongoing equity gaps for important communities that are stigmatised and criminalised. Nigeria's absorptive resilience is still lacking, as shown by stockouts, erratic fund release, and reactive rather than proactive fiscal responses to donor withdrawal, even though the country has shown adaptive resilience through decentralisation, social health insurance integration, and structured transition governance.

HIV has seen periods of high political priority but has failed to maintain attention throughout administrations, according to the sporadic pattern of political commitment, where episodic presidential measures contrast with ongoing underfunding and poor coordination. Despite Nigeria's prominence as the largest economy in Africa, the country's failure to reach the Abuja 15% budget guideline indicates a political prioritisation shortfall rather than an absolute resource gap.

Nigeria's HIV financing resilience will depend not only on mobilising more domestic resources, but on changing the political and institutional incentives that currently make donor dependence, fragmented governance, and reactive crisis management persist.

DECLARATION

Ethics approval and consent to participate

Not Applicable. This study used publicly available documents and did not involve human subjects, personal data or human tissue. There was no need for ethical approval.

Consent to publish

Not applicable. This manuscript does not contain any individual person's data in any way.

Data and materials availability

The datasets produced and/or analysed during the current investigation are available in this article and its supplementary information files. No primary dataset was generated, while the document corpus and coding materials formed the basis of analysis.

Conflict of Interest

The authors state that they have no competing interests.

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Authors' contributions

GBO conceptualised and designed the study and did the document search and screening, coding, analysis, and drafting of the manuscript. NMK contributed to theoretical foundation and critical revision. GA offered contextual experience on Nigerian health financing and aided to interpretation of findings. RM supervised the research, contributed to the study design, contributed to the interpretation of findings and made critical modifications. All authors read and approved the final version of the manuscript.

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