

# HIV FIGHTER FUND

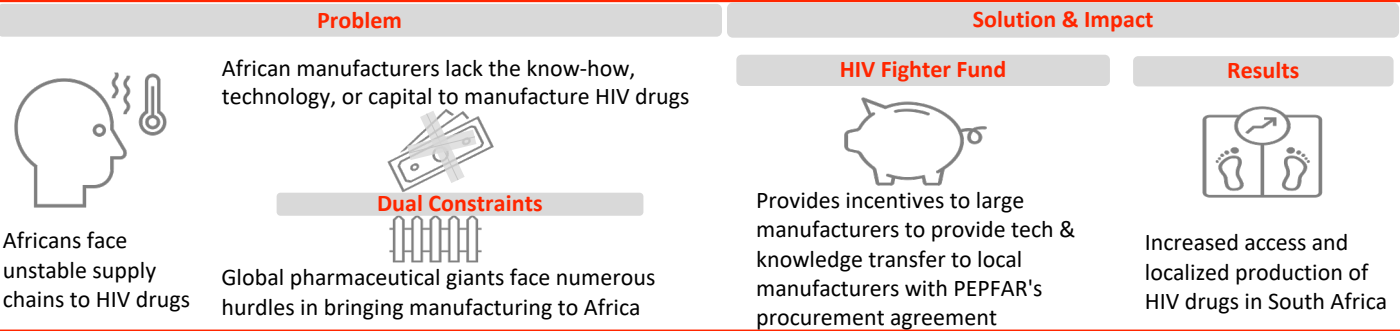
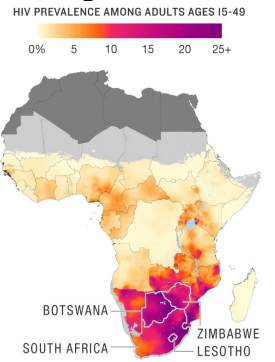
HIV Fighter Fund facilitates local manufacturers to enter a joint venture ("JV") partnership with global pharmaceutical giants to scale up HIV medicine production in Sub-Saharan Africa ("SSA") to facilitate a resilient and efficient supply chain that is more responsive to local HIV medicine needs. Convertible bonds are issued to raise necessary capital with a procurement contract from United States President's Emergency Plan for AIDS Relief ("PEPFAR") as credit enhancement to mitigate risks.

**PROBLEM:** Sub Saharan Africa ("SSA") is the world's region most impacted by HIV and remains as the largest market for HIV medication. Despite the strong local demand, manufacturing of HIV drugs in SSA is still preliminary stages with 70 - 90% of consumed drugs imported. The lack of locally manufactured HIV drugs restricts the local community's stable access to these drugs, especially when supply chains are disturbed by external events such as COVID. Large international manufacturers are unfamiliar with local landscapes so are hesitant to invest in the market.



## TARGET GEOGRAPHY: SOUTH AFRICA

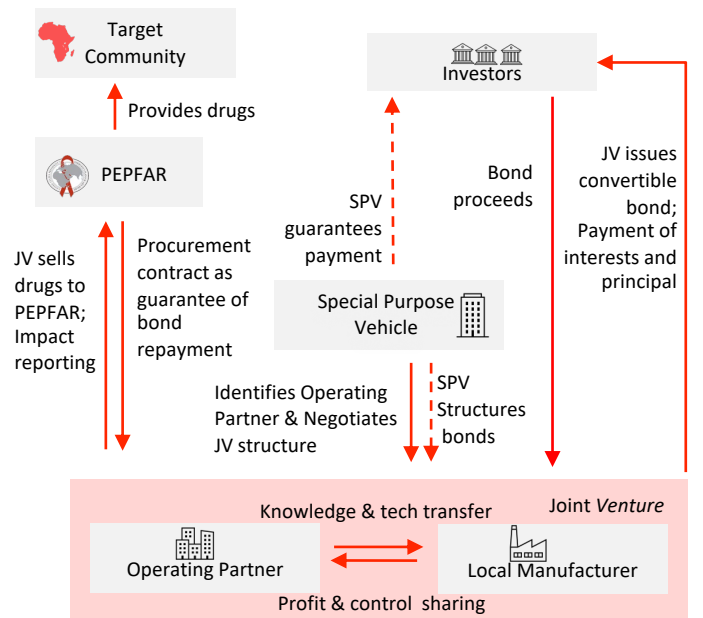
- Large market (~8.5M people living with HIV with ~\$752M annual drug spending)
- Existing drug import, sourcing, manufacturing, & distribution infrastructure
- Renewed government support in growing local manufacturing
- Mitigating supply chain risk of critical healthcare needs
- University of Cape Town provides key funnel of skilled medical professionals
- Existing local manufacturers of other non-HIV drugs to target
- Precedent of existing partnership between large pharma and local manufacturer for COVID vaccine



## FUND PROFILE

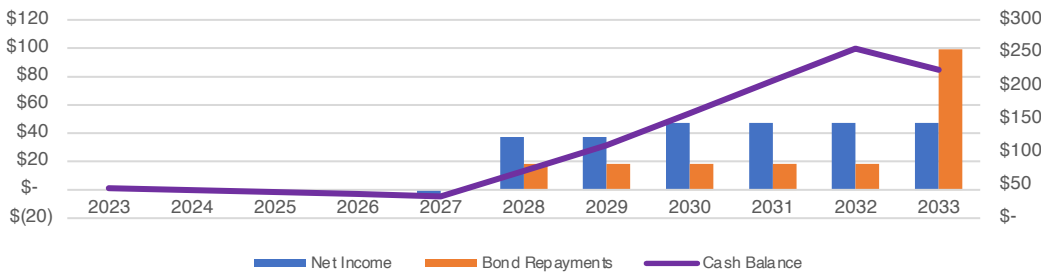
Fund type	Convertible bond
Fund size	81 million USD
Asset class	Collateralized Debt
Ticket size	5 million USD
Tenor	10 years
Geography	South Africa
Interest Rate	Fixed at 8.8%
Interest PMT Dates	Every six months
Fees	2%
Use of funds	Working capital and manufacturing facility capex
Credit Enhancement	Procurement contract from PEPFAR

## FUND DIAGRAM



# BOND ISSUER 10-YEAR FINANCIAL PERFORMANCE (M USD)

Net Income & Cash Balance on Portfolio Investment (In Millions)



## Key assumptions:

- 81 M USD bond issuance at the end of 2023;
- 100% bond principal repayment in year 10 if not converted;
- 10.8% annual interest rate;
- Total 33M USD CAPEX spreading evenly in the first 5 years;
- Drug sales beginning in year 4

## SCALABILITY



**Market Expansion:** Expand to other diseases such as tuberculosis and malaria that cause disproportional deaths in SSA.



**Geographical Expansion:** Expand to other SSA countries such as Kenya, Nigeria, and Rwanda etc.



**Value Chain Expansion:** Extend local manufacturer's capabilities to produce active pharmaceutical ingredients (APIs).

## IMPACT & METRICS

The proposed solution help address several sustainable development goals declared by UN:

### SDG GOALS



**IMPACT**  
By localizing manufacturing, HIV Fighter Fund helps stabilize the access to key HIV medicines in SSA, where people are harmed by the AIDS pandemic the most. The growing drug manufacturing industry will also enlarge health workforce in these countries. (SDG 3.3, 3.8, 3.B & 3.C)

**METRICS**  
# of HIV patients benefited;  
\$ of HIV drug sales;  
# of people in health workforce.



HIV Fighter Fund helps grow the pharmaceutical industry in SSA, improve local infrastructure, develop technical capabilities, diversify the economy and create jobs for local people. (SDG 9.3, 9.5, 9.A & 9.B)

\$ of GDP created;  
# of jobs created;  
% of pharmaceutical industry growth.

## TARGET INVESTORS

Our potential investors usually finance enterprises and intermediaries that result in long-term growth and sustained benefits to communities, probably with a focus on emerging markets. Typical investors include:

- Multilateral development banks THE WORLD BANK, IFC, AFRICAN DEVELOPMENT BANK GROUP
- Foundations BILL & MELINDA GATES foundation, CLINTON FOUNDATION
- Impact investors Adjuvant Capital, GLOBAL HEALTH INVESTMENT FUND, LEAPFROG INVESTMENTS, MERCK COMPANY FOUNDATION

## RISK

Credit risk: Issuer not able to repay interest and principal

Regulatory risk: Change of government regulations and delay of drug approval

Project risk: Local manufacturer not able to set up facilities and produce

Supply Chain risk: Dependency on API imports and local supply chain delays

## MITIGATION

- The procurement agreement from PEPFAR ensures sale revenue for repayment

- Monitor policy changes closely and proactively communicate with policy makers and partners such as PEPFAR

- Operating partners transfers tech, expertise and experience
- Work closely with governments to ensure stable supply of essential resources such as electricity

- Leverage PMPA pooled procured mechanism and AfCFTA to strengthen local supply chain, market distribution and trade