



Zimbabwe Economic
Policy Analysis and
Research Institute

A Diagnosis of Structural Transformation in Zimbabwe:

Trends, Challenges, and Opportunities





Zimbabwe Economic
Policy Analysis and
Research Institute

A Diagnosis of Structural Transformation in Zimbabwe:

Trends, Challenges, and Opportunities

Gibson Chigumira

Philton Makena

Wellington Matsika

Evengelista Mudzonga

Elisha Mavodyo

October 2026

© 2026 ZEPARI

All rights reserved.

Published by ZEPARI

ISBN 978-1-77926-224-0



CONTENTS

Acronyms	2
Acknowledgements.....	3
Abstract	4
1. Introduction.....	5
2. Zimbabwe's Pattern of Growth and Development.....	7
3. Economic Complexity and Export Diversification	13
4. Characteristics of Zimbabwe's Structural Transformation	17
4.1 Employment Shares for Zimbabwe and Upper-Middle Income Countries	17
4.2 Value Added Shares for Zimbabwe and Upper-Middle Income Countries	18
4.3 Total Labour Productivity Growth	20
4.4 Structural Transformation Index (STI).....	24
4.4.1 Structural Transformation Index (Employment).....	25
4.4.2 Structural Transformation Index (Value Added).....	26
4.4.3 Comparison of Employment- and Value-Added-Based STI	28
4.5 Urbanization and Rural-Urban Migration Analysis	29
4.6 Implications of Structural Transformation to Poverty, Inequality, and Labour Market Outcomes.....	31
5. Infrastructure as a Catalyst for Economic Transformation.....	33
5.1 Role of Physical Infrastructure in Structural Transformation.....	33
5.2 Role of Digital Infrastructure in Economic Transformation	37
5.3 Infrastructure Investment Gaps and Transformation Priorities	38
6. Policy Implications and Reform Priorities	39
7. Conclusion	41
Annexes	43
References	49

LIST OF FIGURES

Figure 1:	Zimbabwe's Gross Domestic Product (GDP) Growth (%): 1980-2025	7
Figure 2:	Sectoral Contributions to GDP in Zimbabwe by Economic Activity (Benchmark Years, % of GDP)	8
Figure 3:	Comparative Gross Value Added Across Sectors: 1980-2024	9
Figure 4:	Comparative Employment Across Sectors in Zimbabwe: 1991-2024	10
Figure 5:	Zimbabwe's Export Composition and Diversification	14
Figure 6:	Composition of Zimbabwe's Manufactured Exports: 2008-2024	15
Figure 7:	Zimbabwe's Net Barter Terms of Trade and Major Export Markets	16
Figure 8:	Share Of Employment By Economic Activity: Zimbabwe And UMICs: 1991-2023	18
Figure 9:	Share of Value-Added By Economic Activity: Zimbabwe UMICs: 1991-2023	19
Figure 10:	Total Labour Productivity Growth at Constant 2015 US Dollars, 1991-2023	20
Figure 11:	Labour Productivity Decomposition: Zimbabwe and UMICs: 1991-2023	22
Figure 12:	Labour Productivity by Sector: Zimbabwe and UMICs: 1991-2023	23
Figure 13:	Employment-Productivity for Zimbabwe: 1991 And 2023	24
Figure 14:	Employment-Based STI: Zimbabwe and UMICs: 1991-2023	25
Figure 15:	Disaggregated Employment-Based STI by Economic Activity, Zimbabwe and UMICs: 1991 - 2023	26
Figure 16:	Value-Added-Based STI: Zimbabwe and UMICs: 1991-2023	27
Figure 17:	Value-Added-Based STI Disaggregated by Economic Activity, Zimbabwe and Upper-Middle Income Economies, 1991-2023	28
Figure 18:	Rural & Urban Population Growth & Urban Share in Total Population for Zimbabwe, 1991-2023	30

BOXES

Box 1:	Comparative Analysis of Zimbabwe's Structural Transformation	9
Box 2:	Public-Private Partnerships (PPPs) for Infrastructure Development in Zimbabwe	34
Box 3:	Case Study: Electricity Supply in Zimbabwe: A Binding Constraint to Structural Transformation	36

ACRONYMS

AfCFTA	African Continental Free Trade Area
AU	Africa Union
CAAZ	Civil Aviation Authority of Zimbabwe
ECI	Economic Complexity Index
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IFIs	International Financial Institutions
IPP	Independent Power Producer
LMIC	Lower Middle-Income Country
MoFEDIP	Ministry of Finance, Economic Development and Investment Promotion
NDS1	National Development Strategy 1
NDS2	National Development Strategy 2
NRZ	National Railways of Zimbabwe
PFRAM	Public-Private Partnership Fiscal Risk Assessment Model
POTRAZ	Postal and Telecommunications Regulatory Authority of Zimbabwe
PPP	Public-Private Partnership
RISDP	SADC Regional Indicative Strategic Development Plan
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SEZs	Special Economic Zones
SOEs	State-Owned Enterprises
STI	Structural Transformation Index
TVET	Technical and Vocational Education and Training
UMIC	Upper Middle-Income Country
UN	United Nations
WDI	World Development Indicators
ZERA	Zimbabwe Energy Regulatory Authority
ZESA	Zimbabwe Electricity Supply Authority
ZIDA	Zimbabwe Investment and Development Agency
ZWE	Zimbabwe

ACKNOWLEDGEMENTS

The Zimbabwe Economic Policy Analysis and Research Institute (ZEPARI) gratefully acknowledges the financial support provided by the Government of Zimbabwe, through the Ministry of Finance, Economic Development and Investment Promotion. This support was instrumental in enabling the successful undertaking and completion of this study.

The study team also gratefully acknowledges the contributions of the various stakeholders who shared their expertise, insights, information and data throughout the research process. Their willingness to engage with the study team and provide valuable perspectives greatly enriched the analysis and findings of the study.

Special appreciation is extended to Dr. C. Pindiriri for his valuable review and constructive comments on the draft paper during the research process. The study team further appreciates the thoughtful comments, observations and recommendations provided by participants at the dissemination workshop held on 22 July 2026 at the Harare International Conference Centre in Harare, Zimbabwe. These contributions helped strengthen the quality and relevance of the final study.

The findings, interpretations and conclusions presented in this study do not necessarily reflect the views of ZEPARI or the Ministry of Finance, Economic Development and Investment Promotion. The authors bear full responsibility for the accuracy of the analysis and for any factual errors, omissions or interpretations contained in the study.

ABSTRACT



Structural transformation refers to the long-term shift of an economy from low-productivity sectors such as subsistence agriculture toward higher-productivity sectors like manufacturing and services. Zimbabwe's economic structure has undergone significant changes since attaining independence in 1980, influenced by policy reforms, economic crises, globalization, and political developments. This paper analyses trends in Zimbabwe's structural transformation, identifies the key challenges hindering progress, and explores opportunities for sustainable economic transformation. The study finds that Zimbabwe has experienced limited structural transformation over the past two decades, characterized by deindustrialization, expansion of the informal sector, and over-reliance on primary commodities. Despite these constraints, opportunities exist in agriculture modernization, mining, industrialization, and digital innovation. Strengthening macroeconomic stability, improving governance, investing in infrastructure, and promoting value addition are essential for Zimbabwe's long-term structural transformation.

1. INTRODUCTION

Structural transformation, also referred to as structural change, refers to the movement of labour and other productive resources from low-productivity to high-productivity economic activities (Lewis, 1954; Kuznets, 1966; Syrquin, 1988; Herrendorf et al., 2014). Naturally, it involves shifting economic activities among the three main sectors: agriculture, manufacturing, and services, accompanied by sustained productivity growth, to improve economic well-being (ibid). This shift from low to high productivity sectors boosts overall productivity, income, and economic welfare, evident in historical and modern examples. Sectoral change is, however, only one aspect of structural transformation as, according to Kuznets (1973), this transformation also includes an increase in the size of productive units, a move from personal enterprises to larger, impersonal economic firms, and a significant change in the occupational status of labour. Other structural changes encompass a wider range of shifts which includes people moving from rural to urban areas (Lagakos et al., 2023), changes from home-based to market-based activities (Dinkelman & Ngai, 2022), shifts from informal to formal employment (Bassi et al., 2022), changes in firm sizes and types “such as moving from artisanal self-employment to large firms with complex management structures” (Gollin & Kaboski, 2024), and changes in states and institutions (de Vries et al., 2015).

Structural transformation is considered to have been essential for economic progress in present day developed economies/countries (Felipe, 2012). Herrendorf et al. (2014) contend that structural transformation is a key driver of differential growth performance, both in theoretical models of development and in empirical examples of rapid economic growth from 19th-century Europe to contemporary East Asia. The process of structural transformation can be particularly beneficial for developing countries since their structural heterogeneity, a combination of significant inter-sectoral productivity gaps in which high-productivity activities are few and isolated from the rest of the economy, slows down their development. Understanding how economies undergo this transformation is vital for crafting effective growth strategies (Anderson & Ponnusamy, 2023). Many developing nations face low productivity in agriculture, which traps a significant portion of the workforce in poverty and contributes to income disparities (Caselli, 2005; Dorosh & Thurlow, 2018). As such, the quality of structural transformation is critical for long-run growth, poverty reduction, and employment creation in developing economies such as Zimbabwe, (McMillan & Rodrik, 2011; McMillan, Rodrik & Verduzco-Gallo, 2014). A thriving agricultural sector can lead to increased labour and capital moving towards manufacturing and services, enhancing overall production and income. Innovation can further boost enterprise productivity and exports (Huang et al., 2022; Vasin, 2022). Export-oriented structural transformation is viewed as a key factor in economic growth, with tariff liberalization promoting industrialization and agricultural trade (Khan, 2020). For instance, South Korea’s trade policies fostered transformation more effectively than trade restrictions (Teignier, 2018). Urbanization in China also drove changes in housing markets, while trading costs and shifting advantages altered the global manufacturing landscape (Anderson & Ponnusamy, 2023) and Garrige et al. (2023) identify urbanization and structural change as main causes of China’s housing boom. However, trade

developments, such as reduced net exports and industrial output, counterbalance subsidy reforms without altering structural change. East Asian economies have experienced growth with equity but face increased income inequality, explained by Kuznets' inverted U-shaped curve (Hillbom & Bolt, 2015; Khan et al., 2021). Despite achieving growth, some East Asian economies struggle with rising income inequality, as outlined by Kuznets' observation of a relationship between growth and inequality. As economies grow, income distribution can worsen initially, but absolute poverty typically decreases, leading to improvements for low-skilled workers over time.

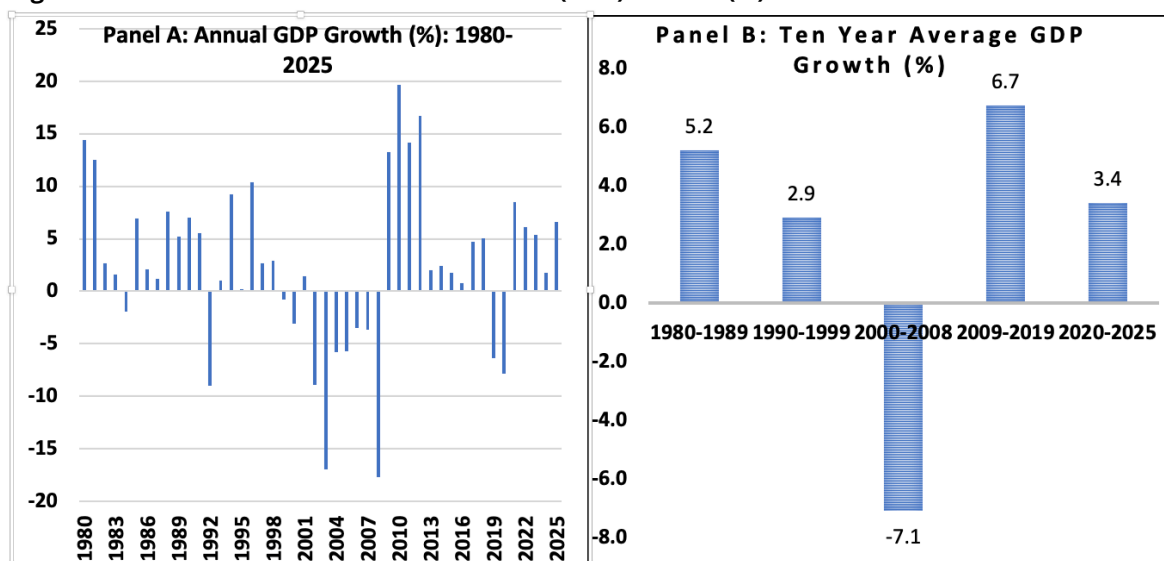
Upon independence in 1980, Zimbabwe inherited a dual economy with a sophisticated, though exclusionary, manufacturing sector (Kanyenze, 2011). The immediate post-independence era focused on growth with equity, improving social services, and attempting to integrate the marginalized majority (ibid). However, the 1990s marked a sharp turning point with the adoption of the Economic Structural Adjustment Programme (ESAP), which was intended to liberalize the economy but instead resulted in de-industrialization and sluggish growth (Chidoko, 2023). The subsequent land reforms post-2000 fundamentally altered the agrarian structure from a bi-modal to a tri-modal arrangement, further disrupting the existing economic structure (ibid).

Entering the 2020s, and looking toward 2030, Zimbabwe has embarked on a "Second Republic" strategy, anchored in National Development Strategy 1 (NDS1) (2021 - 2025), National Development Strategy 2 (NDS2) (2026 - 2030) and the vision of becoming an upper-middle-income economy by 2030 (Vision 2030). While recent years have shown, for example, an 8.3% GDP growth in 2025 driven by mining and agriculture, the country continues to grapple with long-term structural impediments. Instead of moving toward high-tech manufacturing, the economy has seen an expansion of the informal sector and a resurgence of over-reliance on raw mineral exports. Structural transformation has been slow, with labor shifting into low-productivity informal activities rather than modern industries. This paper explores the dynamics of structural transformation in Zimbabwe by analyzing the trends, challenges, and potential opportunities for economic restructuring.

2. ZIMBABWE'S PATTERN OF GROWTH AND DEVELOPMENT

Zimbabwe's economy has experienced several structural changes and aggregate supply shocks dating back to the 1960s with implications on the country's long-term economic growth and inflation outturn. The country's economic growth has been volatile since 1980 (Figure 1: Panel A). Post-independence, the Government instituted structural, economic and social changes that sought to address pre-independence inequalities. In addition, the lifting of sanctions, favourable domestic and external conditions boosted aggregate demand and the country's real GDP growth averaged 5.2 percent between 1980 and 1989.

Figure 1: Zimbabwe's Gross Domestic Product (GDP) Growth (%): 1980-2025



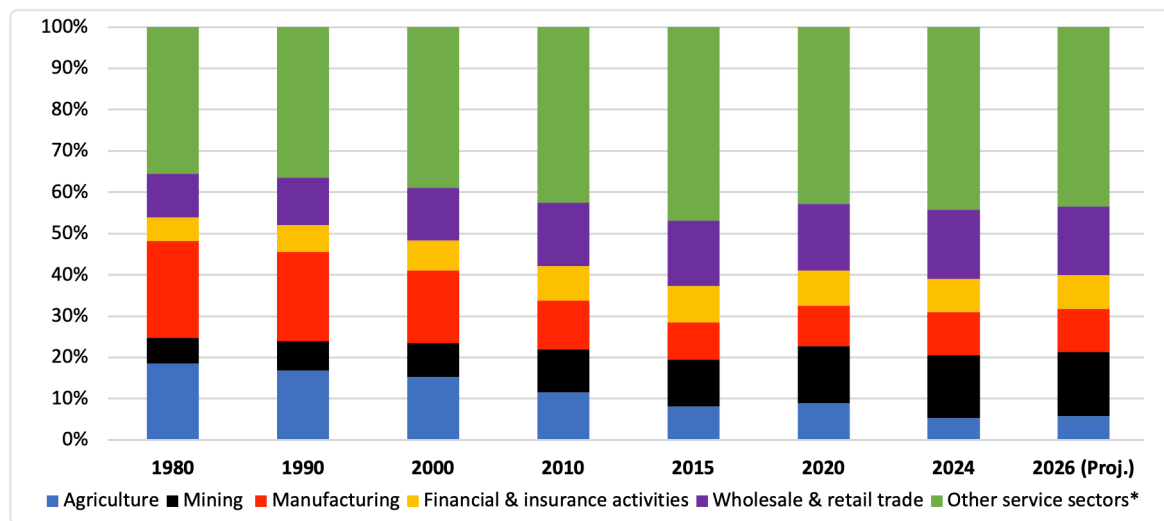
Source: WDI, MoFEDIP

The country experienced a sustained decline in economic activity between 2000 and 2008 as growth averaged -7.1 percent per year, in part due to intermittent droughts, loss of international financial support, capital flight, and low investment (Figure 1: Panel B). This culminated in hyperinflation between 2007 and 2008 and with it a cumulative decline of real gross domestic product (GDP) of close to 50 percent. Economic growth resumed post the adoption of a multicurrency system in February 2009. The country's real GDP growth averaged of 6.7 percent between 2009 and 2019 before moderating to an average of 3.4 percent for the period 2020 to 2025, largely due to improved policies and a favorable external environment. However, the economy remains heavily reliant on primary industries. The World Bank (2022) contends that weak structural transformation has resulted in high levels of informality, low competitiveness, high vulnerability to shocks, and a large share of employment comprising low-paid jobs and ultimately kept economic growth and incomes low.

In the 1990s, Zimbabwe attempted economic reform through the Economic Structural Adjustment Programme (ESAP), aiming to shift from a state-controlled to a market-driven economy. This led to a decline in manufacturing, high unemployment, and the beginning of premature de-industrialization. The period from 1998 to 2008 saw a prolonged economic decline, hyperinflation, and significant cuts in agricultural output, in part due to land reforms that disrupted production.

From 2009 onwards, the adoption of a multi-currency system offered stability, but the economy remained heavily reliant on primary industries. The informal sector grew, constituting a large proportion of employment, while efforts to restore industry were constrained by energy shortages, high inflation, and political instability. Overall, Zimbabwe's economic journey has shifted from a formal, diversified structure to reliance on informal, low-productivity activities. In particular, the country's economy transitioned from a relatively diversified base - strong agriculture and manufacturing - towards a service-driven model, though episodes of high inflation and policy shifts impacted all sectors (see Figure 2). Recent years show renewed growth in agriculture and emerging strengths in manufacturing.

Figure 2: Sectoral Contributions to GDP in Zimbabwe by Economic Activity (Benchmark Years, % of GDP)



Source: Zimstat

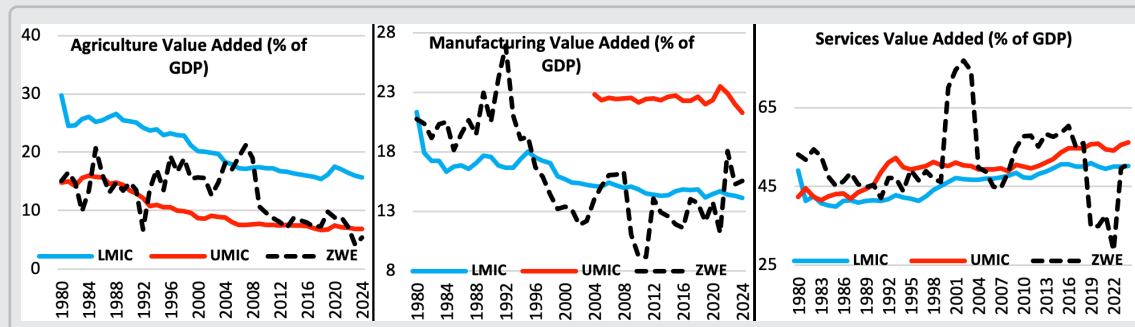
Zimbabwe's structural transformation has been characterised by declining shares of agriculture and manufacturing alongside the expansion of mining and service industries (Figure 2). However, this transition has largely reflected changes in sectoral composition rather than sustained productivity improvements. Limited structural transformation has resulted in low growth of the economy and incomes and contributed to a high susceptibility to shocks the economy relies on few key firms and industries, mainly minerals and tobacco, while agriculture dominates production and employment. Higher value-added sectors like manufacturing employ fewer workers and receive less lending.

Agriculture is crucial for employment and growth, experiencing output increases since 2019 despite challenges like climate shocks (Box 1). Manufacturing peaked in 1992, fell due to instability, but showed slight growth in the early 2020s and became a major GDP contributor in 2024. Services remain the largest sector, with substantial growth recently. The country's economy is now less diversified, even though the main pillar of the economy has shifted from the agriculture sector to the service sector (wholesale and retail trade, recreation and tourism, and financial and insurance activities). The country's exports remain highly concentrated in a small number of products (mostly minerals and tobacco, which account for over 80% of total exports). Heavy reliance on low-sophistication agricultural and mineral exports reflects limited success in diversifying into non-traditional exports and upgrading production technology. Over the last decade, the country's economic complexity has been declining. It ranks 129th out of 145 countries in the 2023 Economic Complexity Index (ECI) with a score of -0.99, showing a concentrated export base reliant on raw and semi-processed commodities (See Section 4 for a detailed discussion).

Box 1: Comparative Analysis of Zimbabwe's Structural Transformation

Since 1980, Zimbabwe's economic structure has shifted from high agricultural dependence to a service-oriented economy with fluctuating industrial output, often tracking toward Upper Middle-Income Country (UMIC) sectoral shares in GDP (around 55-60% services) despite lower income levels. While agriculture's GDP share dropped from over 20% in the 1980s to roughly 5-15% recently, it remains more volatile than in typical peer nations.

Figure 3: Comparative Gross Value Added Across Sectors: 1980-2024



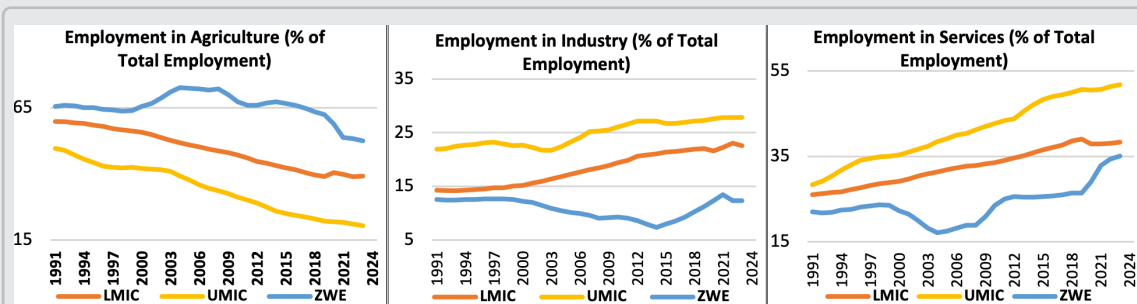
Source: WDI

Agriculture (Value Added % of GDP): 1980-2000: Agriculture was a dominant, stable pillar, often comprising a higher percentage of GDP than average lower-middle-income countries, driven by robust commercial farming. Post-2000, the share dropped significantly due to disruptions emanating from the land reform, droughts and economic downturns, falling from over 20% in 2001 to around 10% by 2008. In recent years, agriculture value-added has fluctuated between 5% and 15% of GDP (5.4% in 2024), generally lower than the average for many developing economies.

Industry (Value Added % of GDP): Initial Period: Post-1980, Zimbabwe possessed a relatively mature industrial sector compared to many sub-Saharan peers. In recent years, the sector has seen volatility, recently contributing approximately 11%–18% of GDP. This is often higher than many lower-middle-income countries, though often driven by mining rather than diversified manufacturing.

Services (Value Added % of GDP): Trend: The service sector value-added has grown to become the largest contributor to GDP, similar to upper-middle-income trends, now accounting for over 55% of the total GDP.

Figure 4: Comparative Employment Across Sectors in Zimbabwe: 1991–2024



Source: WDI

Since 1980, Zimbabwe's job market has been mainly driven by agriculture, employing about 52.53% of the workforce in 2023. This is higher than the average for upper-middle-income countries, where less than 20% work in agriculture. The manufacturing sector, once strong, has declined since 2000, resulting in only 7% of employment in industry by 2017. The services sector is smaller than in other countries, with growing but still limited gender participation. Overall, Zimbabwe shows a slower economic shift compared to its peers. While the structural composition (high services) mirrors UMICs, the high reliance of the population on subsistence agriculture keeps the employment structure closer to low-income countries than to lower middle and upper middle-income countries.

Efforts to structurally transform the economy have been constrained by a high and complex regulatory environment with a multiplicity of compliance requirements, infrastructure deficiencies and costly logistics support. In addition, high incidences of smuggling create an uneven playing field between locally produced and legally imported products, thus undermining the effectiveness of structural transformation efforts. Despite becoming a lower-middle-income country in 2019, productivity improvements have not been enough to foster significant inclusive economic growth and needed to be on a firm path to attaining upper-middle income status by 2030, as envisioned by the country's Vision 2030. While the government aims to become an upper-middle-income country by 2030, productivity remains hindered by a narrow industrial base and over-

dependence on primary commodities. Future improvements in labour productivity will depend on structural reforms, increased capital investment in technology, and formalizing the workforce.

2.1 Measures of Structural Transformation

The two main measures of structural transformation are employment shares and value-added shares of sectors, which help analyze sectors in total employment and value added. Employment shares are calculated using the number of workers or hours worked by sector. Labour productivity in a sector with a share of employment larger than its share of total output is below the average labour productivity in the economy and vice versa. Value-added shares are commonly expressed in current prices (“nominal shares”), but they may also be expressed in constant prices (“real shares”). Export shares by sector as percentages of GDP can also be used to measure structural transformation. This measure may be misleading. Higher exports can lead to higher imports due to global value chains, which can lower GDP despite increasing export shares. Employment and value-added shares also have limitations as singular measures. Employment shares may not reflect true labour input differences, while value-added shares do not consider quantity and price changes. The other measures of structural transformation are:

- a) Economic Complexity and Export Diversification:** Measures diversity and sophistication of a country's export basket using the Economic Complexity Index (ECI), Export Diversification Index or Product Space Analysis.
- b) Structural Transformation Index (STI):** A composite measure including GDP diversification, employment shifts, productivity changes, and trade structure.
- c) Input-Output and Value Chain Analysis:** Measures economic linkages across sectors, upstream/downstream integration, and spillover potential. Stronger inter-sector linkages indicate more mature transformation. This could also identify sectors with high multiplier effects and potentially assess relative integration into regional/global value chains.
- d) Structural Change Diagnostics:** An analytical approach used to identify constraints, opportunities, and conditions that shape a country's ability to shift from low-productivity economic activities (e.g., subsistence agriculture) to higher-productivity sectors (e.g., manufacturing, modern services and green industries). It helps policymakers understand why structural transformation is slow, what is holding it back, and which reforms can unlock faster economic upgrading. It examines constraints across several dimensions: productivity and competitiveness; labor movement between sectors; institutional and regulatory barriers; investment and finance constraints; infrastructure and energy bottlenecks; human capital and skills gaps; trade and value-chain integration issues; environmental and resource constraints; technological capacity and innovation. This allows policymakers to judge which constraints are binding and therefore where interventions will have the greatest impact.
- e) Night-Time Lights Data (Remote Sensing):** This measures changes in economic activity and urbanization using satellite imagery when economic data are poor. It tracks spatial transformation through detecting shifts in economic centers and comparing growth patterns across countries.

- f) Urbanization and Rural–Urban Migration Analysis:** Structural transformation is accompanied by rising urban share of population, growing secondary cities, and expanding manufacturing zones. This method helps track urban-led transformation and benchmark urbanization levels globally if data permits.
- g) Natural Capital and Environmental Productivity Assessment (for Green Structural Transformation):** This method is increasingly used in assessing nature-based or green structural transformation. It measures ecosystem services contribution, sustainable natural resources.

3. ECONOMIC COMPLEXITY AND EXPORT DIVERSIFICATION

Economic complexity reflects the diversity and sophistication of knowledge, skills and technology that is embedded in a country's production and export structure.¹ Evidence reveals that countries should strive for economic complexity as they are a key driver of economic prosperity (Hausman et al, 2014). It enables nations to move from production of low value resource-based export goods that expose them to external shocks to production of more competitive and highly sophisticated export goods. In structural transformation, it facilitates the shift of factors of production from low productive activities such as subsistence agriculture towards high productivity, knowledge intensive manufacturing and services. Thus, it facilitates increased employment of skilled labour. Economic complexity evolves over time, as countries expand their productive capabilities and begin to make more and more complex products (Hausman et al, 2014). Several indices can be used to infer economic complexity of countries. These include trade structure, industrial activity as well as financial and technical depth. These indices help identify a country's shift from commodity dependence to producing a more diverse range of goods and services. In this section we analyze the changes in the country's trade structure to infer the extent of the economy's structural transformation.

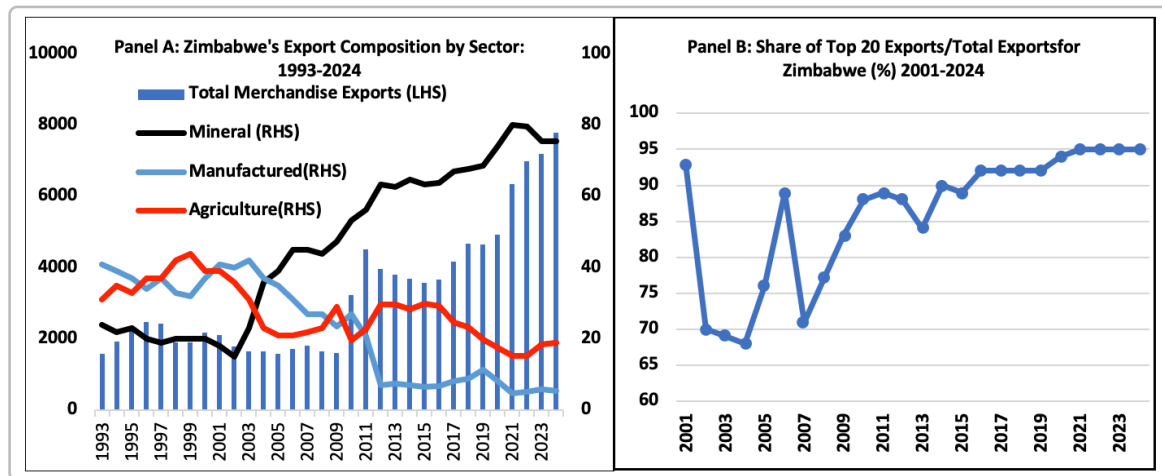
3.1 Zimbabwe Trade Structure

Several dimensions can be used to analyse the country's trade structure to infer a country's economic complexity and its evolution over time. These include export composition by sector; export diversification by product; share of manufactured export to total export merchandise; high technology exports share to manufactured exports and net barter terms of trade as discussed hereunder.

3.1.1 Export Composition and Diversification

IMF (2017) asserts that a more diversified economy in terms of production and export structure is associated with higher growth outcomes. As a country's economic complexity deepens, it shifts away from overreliance on a single sector like agriculture or mining towards a more balanced mix of manufacturing, construction and advanced services with increased economic resilience and income. Figure 5: Panel A illustrates that the composition of Zimbabwe's export basket was largely balanced in terms of minerals, agriculture and manufacturing exports sectors prior to the year 2000.

¹<https://www.wipo.int/gii-ranking/en/indicators/632>

Figure 5: Zimbabwe's Export Composition and Diversification

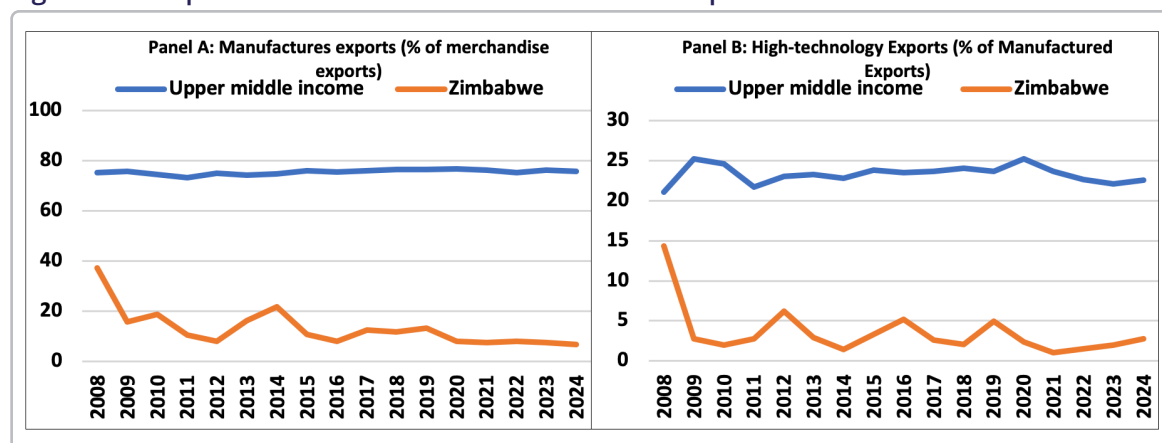
Source: Reserve Bank of Zimbabwe and Author's computations using the ITC Trade Map Database, 2026

Overtime, however, the shares of agriculture and manufacturing exports gradually declined with the minerals sector share increasing from 20% in 2000 to 76% in 2024. The decline in manufactured exports and the increase in raw mineral exports implies that Zimbabwe's export basket is dominated by primary agricultural and mineral exports which are susceptible to international price volatility. This exposes the country to external shocks induced by international price fluctuations and geopolitical developments.

Export diversification entails shifting away from narrow primary commodities towards broader and more sophisticated range of products and services. A diversified export base increases a country's capacity to absorb economic shocks, while also creating new opportunities for innovation, investment, and job creation. Further, it boosts export earnings and fosters long-term sustainable economic growth (IMF, 2024). Zimbabwe's export basket has not been diversifying over time as the top 20 export products constituted between 68% and 95% between 2001 and 2024 with concentration increasing over time (Figure 5: Panel B). The country's export basket has largely been dominated by agricultural products (mostly semi-processed tobacco) and minerals. This exposes the country to vulnerabilities of international price fluctuations resulting in low export earnings. The dominance of less sophisticated primary product exports implies that Zimbabwe is participating in the lower end of regional and global value chains and missing out on potential revenue that could be earned from the production and export of high technology intensive manufactured exports. This development undermines the country's capacity to induce structural transformation through changes in its trade structure.

3.1.2 Zimbabwe's Manufacturing Exports Share

Zimbabwe's share of manufactured exports to total merchandise goods was almost at par with that of UMICs between 1984 and 1986 (see Figure 6: Panel A). It averaged 30% compared to 33% recorded in the upper middle-income countries grouping during that period.

Figure 6: Composition of Zimbabwe's Manufactured Exports: 2008-2024

Source: Own Computation using data from World Development Indicators (WDIs)

The upper middle income countries' performance, however, significantly increased overtime to an average and stable performance of 75% between 1992 and 2024 (see Figure 6: Panel A). In contrast, Zimbabwe scored an average of 21% during that period but exhibited a sharp decline from 35% in 1992 to a mere 7% share in 2024. This shows that Zimbabwe's export basket has been losing its sophistication overtime. It largely comprised of unprocessed and low-valued added commodities, hence the need for industrial diversification. A stronger manufacturing sector, integrated with mining (e.g., lithium processing), can create more jobs, reducing the unemployment rate and informal sector reliance².

High-technology exports are products with high research and development (R&D) intensity, such as aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery³. Tracking their share of complex products in a country's manufactured export basket is important as it signals a nation's shift toward high-value-added production, enhanced innovation capacity, and stronger economic competitiveness⁴. Zimbabwe's high-technology exports share to manufactured exports has been very small averaging 3.5% for Zimbabwe compared to 23.3% for upper middle-income economies between 2008 and 2024. This confirms that Zimbabwe's exports do not exhibit high intensity of R&D as compared to economies the country aspires to join come 2030. This signals the need for robust R&D as well as innovation policy interventions to build the requisite production capabilities needed for transforming the country's economic structure in line with its middle-income economy vision.

3.1.3 Net Barter Terms of Trade and Export Market Diversification

The Net Barter Terms of Trade Index is a measure calculated as the ratio of an export price index to an

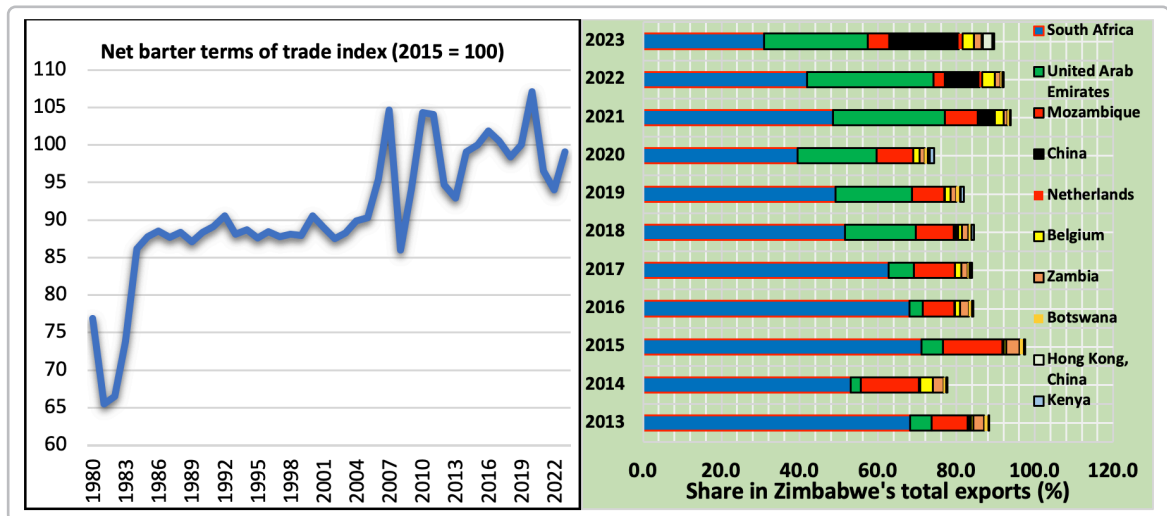
²<https://equityaxis.net/post/18522/2025/8/manufacturing-sector-leads-gdp-contributions-in-half-year-performance>

³<https://databank.worldbank.org/metadataglossary/world-development-indicators/series/TX.VAL.TECH.MF.ZS>

⁴<https://databank.worldbank.org/metadataglossary/world-development-indicators/series/TX.VAL.TECH.MF.ZS>

import price index, multiplied by 100. A value above 100 indicates that a country can exchange its exports for more imports thereby improving national welfare and real income. Conversely, a value below 100 signifies a deterioration in terms of trade and loss of consumer welfare. This index is linked to structural transformation as the shifts in a nation's production structure affect its ability to exchange exports for imports⁵. Since independence, Zimbabwe has largely been experiencing deteriorated terms of trade although the gap was narrowing over time (see Figure 7: Panel A). This means that the country could not generate enough exports to buy its imports more cheaply. It therefore implies that consumer welfare deteriorated. Zimbabwe only enjoyed improved terms of trade in 2007, 2010-2011 and in 2015-2020 except for 2018 (see Figure 7: Panel A).

Figure 7: Zimbabwe's Net Barter Terms of Trade and Major Export Markets



Source: Own computations using the ITC Trade Map Database and WDIs

Export market diversification is critical as it helps countries mitigate, reduce, and better manage risk from external shocks and trade volatility. World Bank (2017) asserted that it drives output diversification. Export market diversification needs, however, to be buttressed by the development of capabilities to produce a diverse range of manufactured products (WTO, 2019). Zimbabwe's regional and international export markets have been shrinking overtime leaving South Africa as a dominant export destination for Zimbabwe's merchandise goods followed by China and United Arab Emirates (see Figure 7: Panel B). Such high level of concentration in few markets not only exposes the country to external shocks but stifles the growth of its manufacturing sector. Whilst evidence shows that sustainable growth of manufacturing industries requires access to foreign markets and technologies (WTO, 2019), Zimbabwe's market access to regional and international markets is limited by numerous trade barriers. These constrain it to seize the opportunity for productivity increases and expansion of the manufacturing sector as presented by regional integration.

⁵<https://databank.worldbank.org/metadataglossary/world-development-indicators/series/TT.PRI.MRCH.XD.WD>

4. CHARACTERISTICS OF ZIMBABWE'S STRUCTURAL TRANSFORMATION

This section examines the nature and quality of Zimbabwe's structural transformation over the period 1991 to 2023, benchmarking outcomes against upper-middle-income countries (UMICs) that Zimbabwe aspires to attain by 2030. Structural transformation is assessed using complementary lenses - employment shares, value-added shares, labour productivity dynamics, productivity decomposition, structural transformation indices, and population dynamics - to distinguish between transformation that is productivity enhancing and that which reflects structural stagnation or regression (Kuznets, 1966; Lewis, 1954; McMillan & Rodrik, 2011). Zimbabwe's structural transformation aligns with national goals: Vision 2030, which aims for an upper-middle-income status, and the National Development Strategy 2, focused on value addition and economic diversity. It also aligns with the African Union (AU)'s Agenda 2063 goal of "The Africa We Want," promoting industrialization and integration into global value chains. Globally, it directly addresses the United Nations (UN)'s Sustainable Development Goals, (SDGs), specifically SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 12 (Responsible Consumption and Production). However, challenges exist, a possibility of macroeconomic instability that could emanate from a resurgent in inflation, currency depreciation, a massive debt overhang (estimated at US\$23.4 billion as at end of September 2025) and geopolitical factors such as the Iran-Israel-USA war could cripple investment and financial planning. In addition, institutional and governance challenges in the form of high levels of informality (one of the highest in the world), persistent corruption, inadequate infrastructure, external sanctions, and a trend towards de-industrialization and slow regulatory reforms would hinder business growth.

Key drivers for the country's structural transformation include infrastructure investment, value addition policies, and a strong push for private sector growth while rich mineral resources (gold, lithium, platinum) and agricultural potential provide a base for value-added industry.

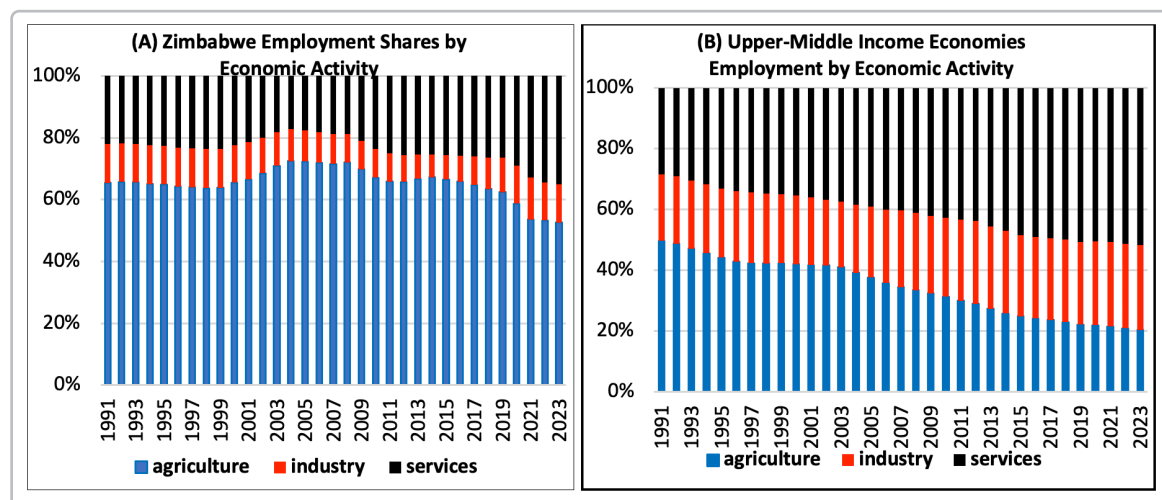
4.1 Employment Shares for Zimbabwe and Upper-Middle Income Countries

Between 1991 and 2023, Zimbabwe experienced a gradual but incomplete movement of labour away from agriculture (Figure 8). While agricultural employment declined cumulatively by 12.9 percentage points, the sector remained the dominant employer, absorbing an average of 65.4% of total employment (Figure 3: Panel A). This persistence reflects limited absorption capacity in non-agricultural sectors and underscores the slow pace of labour reallocation out of low-productivity activities (Lewis, 1954; Chenery, Robinson & Syrquin, 1986).

Employment in industry stagnated over the entire period, declining marginally by 0.2 percentage points and accounting for only 10.8% of total employment on average (Figure 8: Panel A). This lack of industrial

employment expansion is a critical structural weakness, as industry historically played a central role in absorbing labour from agriculture while raising aggregate productivity (Lewis, 1954; Chenery, Robinson & Syrquin, 1986; McMillan, Rodrik & Verduzco-Gallo, 2014). In contrast, services absorbed most labour exiting agriculture, with employment shares rising by 13.1 percentage points. However, as later sections show, this shift largely reflects growth in low-productivity and informal services rather than expansion of modern, high-productivity service activities (Rodrik, 2016; Diao, McMillan & Rodrik, 2017; World Bank, 2020). Annex 1 on informalization shows generally high levels of informality that increased marginally over the period 1990-2020 in Zimbabwe.

Figure 8: Share Of Employment By Economic Activity: Zimbabwe And UMICs: 1991-2023



Source: Own calculations from data obtained from WDI Database, 2026

Upper-middle-income economies display a markedly different employment trajectory over the same period (Figure 8: Panel B). Agricultural employment declined considerably by 29.2 percentage points, while industry and services expanded steadily (5.9 and 23.3 percentage points, respectively). Services became the dominant employer, accounting for 40.9% of total employment, while industry maintained a substantial employment base (24.8% of total employment). This pattern reflects relatively mature structural transformation⁶ where labour transitions are more likely supported by sustained productivity growth and sectoral upgrading (Syrquin, 1988; McMillan et al., 2014).

4.2 Value Added Shares for Zimbabwe and Upper-Middle Income Countries

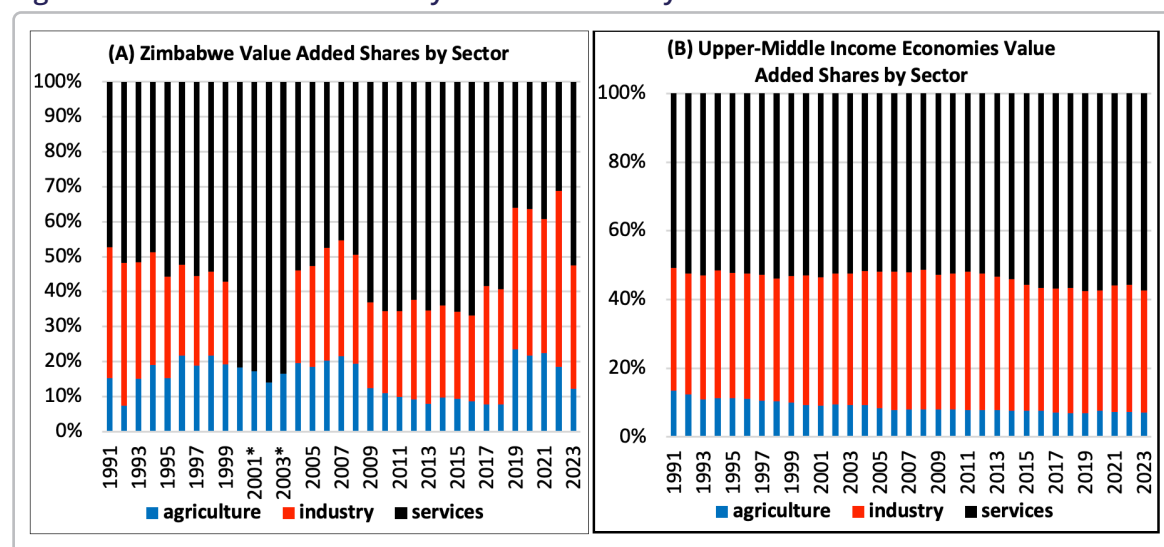
Zimbabwe's value-added structure reveals a services-dominated economy, with services contributing an

⁶Mature structural transformation refers to the advanced stage of economic structural change in which an economy has largely completed the shift from low-productivity activities to high-productivity ones, and where growth is driven more by within-sector productivity gains than by large reallocations of labor across sectors.

average of 57.2% of total value added (Figure 9: Panel A). While this share increased modestly over time by 5.2 percentage points, the expansion of services occurred alongside a contraction in industrial value added, which declined cumulatively by 4.9 percentage points and averaged 31.1%. Within the industrial sector, manufacturing—historically a key driver of structural transformation—has experienced periods of stagnation and decline. In the 1980s and early 1990s, manufacturing accounted for approximately 22–23% of Zimbabwe’s GDP, reflecting a relatively diversified industrial base at the time (United Nations Industrial Development Organization, 2013; African Development Bank, 2018). However, this share declined significantly during the 2000s amid macroeconomic instability, declining investment, and disruptions to industrial supply chains. More recent estimates suggest that manufacturing contributes around 14–15% of GDP, while capacity utilization in the sector has remained relatively subdued, averaging around 50–60% in recent years, reflecting persistent constraints such as high production costs, infrastructure bottlenecks, and limited access to foreign currency (Confederation of Zimbabwe Industries, 2023; Zimbabwe National Statistics Agency, 2024; World Bank, 2024).

The weakening of industry, particularly manufacturing, signals de-industrialization rather than industrial upgrading, raising concerns about the sustainability of a services-led growth path (Dani Rodrik, 2016; Gabriel Palma, 2005; Fiona Tregenna, 2009). In contrast to successful structural transformation experiences where labour shifts from agriculture into higher-productivity manufacturing activities, Zimbabwe’s economic expansion has increasingly been concentrated in services and trade-related sectors. Agriculture’s contribution to value added declined slightly by 3.1 percentage points, averaging 15.5%, suggesting that while the sector remains labour-intensive, its relative contribution to total output has diminished.

Figure 9: Share of Value-Added By Economic Activity: Zimbabwe UMICs: 1991-2023



Source: Own calculations from data obtained from WDI Database, 2026

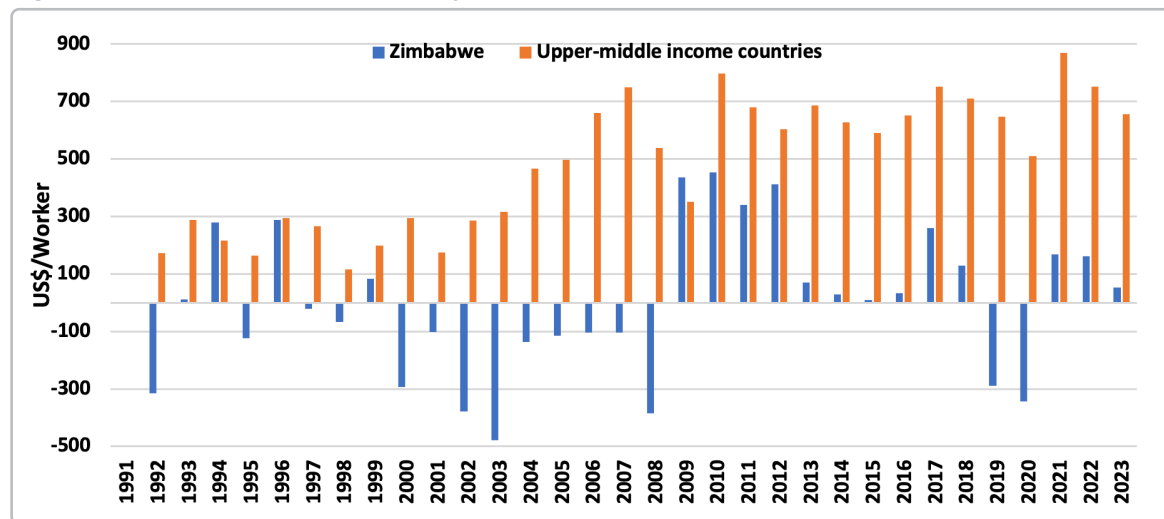
*Data is missing for industry sector from 2000 to 2003.

In contrast, upper-middle-income economies exhibit a more balanced value-added structure (Figure 9: Panel B). Services expanded by 6.6 percentage points, alongside a stable industrial base accounting for 37.5% of value-added, while agriculture's contribution declined significantly by 6.4 percentage points. This pattern reflects a relatively healthy diversification and the maintenance of productive industrial capacity, enabling services growth to be underpinned by strong tradable sectors (Chenery et al., 1986).

4.3 Total Labour Productivity Growth

Zimbabwe's aggregate labour productivity (i.e. total valued added divided by total employment) performance has been highly volatile and, over the full period 1991-2023, negative in cumulative terms (Figure 10). A cumulative labour productivity decline of 1.0% was experienced during the entire period. Productivity decline during the 2000-2008 crisis period reflects macroeconomic instability, institutional breakdown, and capital flight (Easterly, Kremer, Pritchett & Summers, 1993; Hausmann, Rodrik & Velasco, 2005). Between 2009 and 2018, Zimbabwe recorded its longest streak of positive growth in total labour productivity. This performance highlights the critical role of macroeconomic stability—particularly low inflation, a stable currency environment, and relatively prudent fiscal and monetary policies—in supporting productivity gains and improving economic efficiency.

Figure 10: Total Labour Productivity Growth at Constant 2015 US Dollars, 1991-2023



Source: Own calculations from data obtained from WDI Database, 2026

However, subsequent productivity slowdowns and renewed declines point to structural weaknesses that have not been resolved. By contrast, upper-middle-income economies experienced sustained productivity growth of 353.8% throughout the period, underscoring the central role of stable and growing productivity for long-term structural transformation (Figure 10).

4.3.2 Decomposition of Real Total Labour Productivity

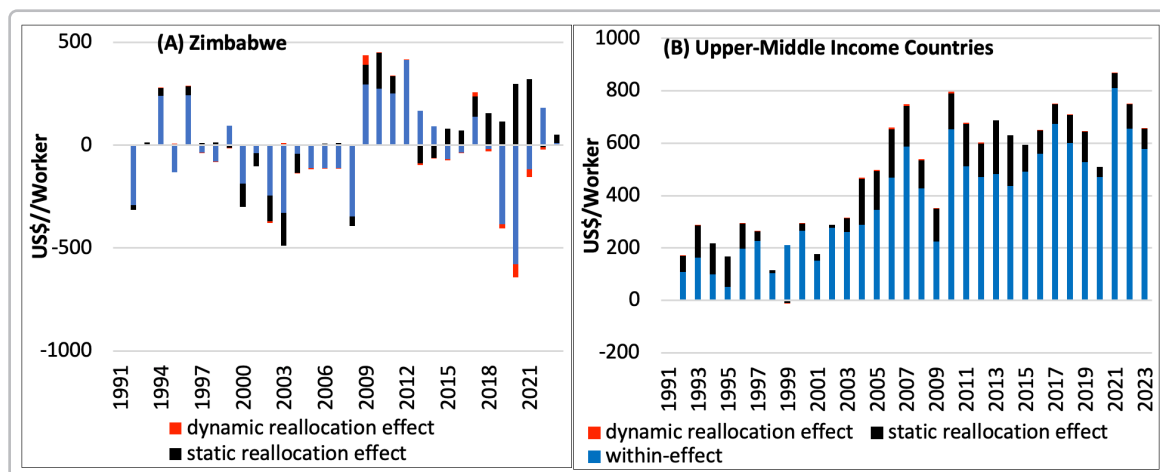
To understand the dynamics of total labour productivity in Zimbabwe, total labour productivity was decomposed using the following variant of the canonical decomposition originating from Fabricant (1942):

$$\Delta P = \sum_i (P_i^T - P_i^0) S_i^0 + \sum_i (S_i^T - S_i^0) P_i^0 + \sum_i (P_i^T - P_i^0)(S_i^T - S_i^0) \dots \dots \dots (1)$$

Where S_i is the share of sector i in total employment, P_i the labour productivity of sector i , and superscripts 0 and T refer to initial and final period, respectively. In equation (1), the change in aggregate productivity is decomposed into within-sector productivity changes or “within-effect” which is the first term on the right-hand side of the equation. The second term is the “static reallocation effect” and the third term is the “dynamic effect”. The static reallocation effect or “between effect” captures productivity gains from workers moving from low-productivity sectors to high-productivity sectors, without changing productivity levels observed in the initial period. It shows that there is structural transformation, or labour is shifting from one economic activity to another, or there are urbanization and sectoral upgrading, among others. The dynamic effect captures whether labour is moving toward sectors that are experiencing faster productivity growth. It shows whether there is alignment between job creation and productivity growth. It indicates whether the expanding sectors are the right sectors. When dynamic effect is positive it means labour is flowing into rising, dynamic sectors. When negative, it indicates that labour is flowing into stagnant or declining sectors (Fabricant, 1942; Timmer & de Vries, 2009; McMillan & Rodrik, 2011). When there is large within and small static effect, it means there is growth in productivity without transformation. When there is large static and small within effect, it implies that there is reallocation of labour without upgrading within the sector. A combination of positive static effect and dynamic effect indicates that there is healthy structural transformation. The dynamic effect acts as a key driver of long-term economic growth by improving overall efficiency, though it is usually smaller than the static reallocation effect and within-industry growth.

The decomposition analysis provides critical insight into the drivers of Zimbabwe’s productivity decline. Although labour reallocation generated a positive static effect, indicating movement away from low-productivity agriculture, the negative within-sector effect dominates, reflecting declining productivity within sectors themselves. This suggests that reallocation occurred in the absence of technological upgrading, capital deepening, or efficiency improvements. The negative dynamic effect further reveals that labour moved into sectors experiencing weak or declining productivity growth, notably informal services. This misalignment between labour flows and productive opportunities is a hallmark of premature or distorted structural transformation (McMillan & Rodrik, 2011; Diao et al., 2017).

Figure 11: Labour Productivity Decomposition: Zimbabwe and UMICs: 1991-2023

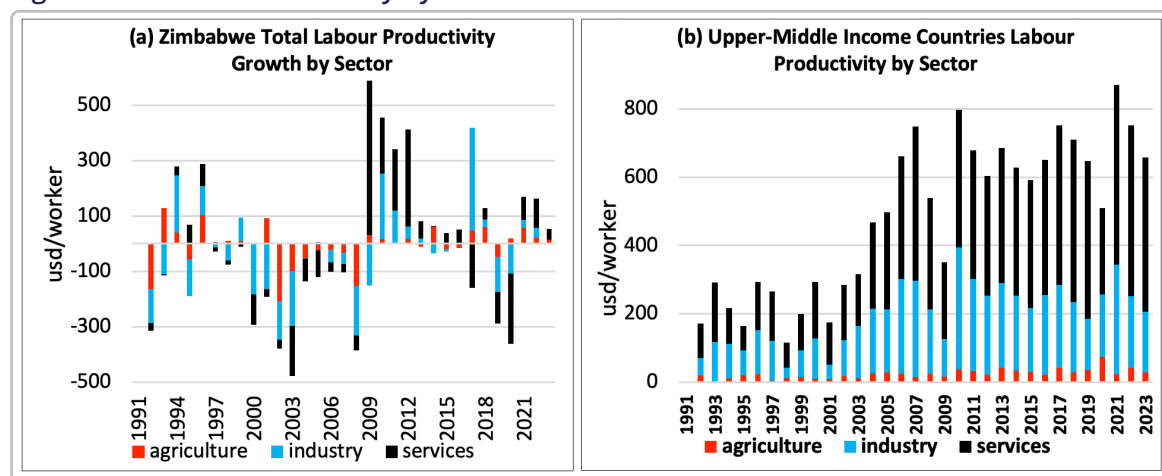


Source: Own calculations from data obtained from WDI Database, 2026

Upper-middle-income economies display the opposite configuration. Strong within-sector productivity growth complemented by positive static and dynamic effects. Labour not only moved into higher-productivity sectors, but into sectors experiencing rapid productivity growth, indicating coherent, growth-enhancing transformation.

4.3.2 Sectors Driving Productivity Growth

Zimbabwe's productivity losses are primarily driven by significant declines in industry (-US\$542/worker) and agriculture (-US\$183/worker), with modest productivity gains in services (+US\$688/worker) insufficient to offset these losses. This pattern confirms that services' growth has not been productivity-enhancing and that industrial erosion has had a disproportionately negative impact on aggregate productivity.

Figure 12: Labour Productivity by Sector: Zimbabwe and UMICs: 1991-2023

Source: Own calculations from data obtained from WDI Database, 2026

In upper-middle-income economies, productivity gains are broad-based, led by services (+US\$9,227/worker) and strongly supported by industry (+US\$5,582/worker). Agriculture, with productivity gains of US\$776/worker, plays a smaller, yet positive role, reflecting modernization rather than labour entrapment.

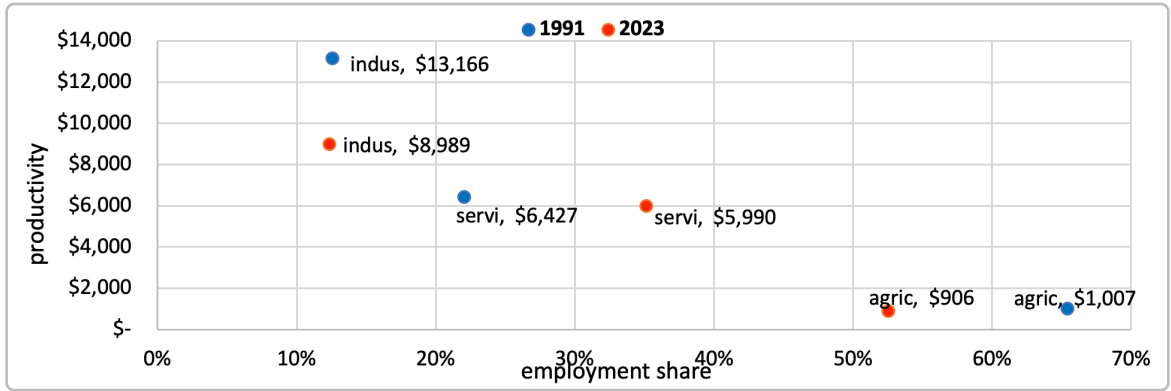
4.3.3 Productivity-Employment Analysis

The productivity-employment (Kuznet-style) plot visually captures whether structural transformation was growth-enhancing or not by showing if labour moved from low-productivity to high-productivity sectors over time (Kuznets, 1966; Timmer & Akkus, 2008). The productivity-employment plot reinforces the conclusion that Zimbabwe's structural change has not been strongly growth-enhancing. Over the past two decades, labour has gradually moved out of agriculture primarily into the services sector rather than into higher-productivity industrial activities. However, much of this shift has occurred in low-productivity and largely informal services, limiting the overall productivity gains associated with structural transformation (Figure 12).

Evidence from Zimbabwe's Labour Force Surveys supports this interpretation. According to the 2019 Zimbabwe Labour Force and Child Labour Survey, approximately 76.1% of employed persons were engaged in informal employment, with the services sector accounting for the largest share of employment (Zimbabwe National Statistics Agency, 2020). The survey also shows that agriculture remained a major employer, accounting for roughly 54–56% of total employment, while the manufacturing and broader industrial sector employed less than 10% of the labour force. More recent labour market updates continue to show similar patterns, with informal employment remaining dominant and industry absorbing only a limited share of workers (Zimbabwe National Statistics Agency, 2023). These patterns suggest that labour reallocation has largely occurred between low-productivity agriculture and low-productivity informal services, rather than toward higher-productivity manufacturing or modern tradable sectors.

The absence of significant employment growth in industry further confirms that Zimbabwe's structural transformation has been characterized more by premature deindustrialization than by industrial upgrading. As a result, labour movements across sectors have not generated the productivity gains typically associated with successful structural transformation, reinforcing the conclusion that Zimbabwe's recent structural changes have been limited in their growth-enhancing effects.

Figure 13: Employment-Productivity for Zimbabwe: 1991 And 2023



Source: Own calculations from data obtained from WDI Database, 2026

4.4 Structural Transformation Index (STI)

Structural transformation is further assessed using the Structural Transformation Index (STI), defined as half the sum of absolute changes in sectoral employment or value-added shares over time (Michaely, 1962; Syrquin, 1988; UNECA, 2015). The Structural Transformation Index (STI) measures how much an economy's employment (or value added) structure changes over time. Structural transformation is about reallocation across sectors. It does not measure productivity or welfare directly — only the magnitude of structural change.

$$STI = \frac{1}{2} \sum_i |s_{i,t} - s_{i,t-1}| \quad (2)$$

Where $s_{i,t}$ is employment share of sector i at time t . The index is divided by 2 to avoid double counting of labour that is reallocated from one sector to another. STI can be interpreted as the share of workers that would need to change sectors to generate the observed structural change. The same index can be calculated using value-added shares instead of employment shares, as follows:

$$STI^{VA} = \frac{1}{2} \sum_i |v_{i,t} - v_{i,t-1}| \quad (3)$$

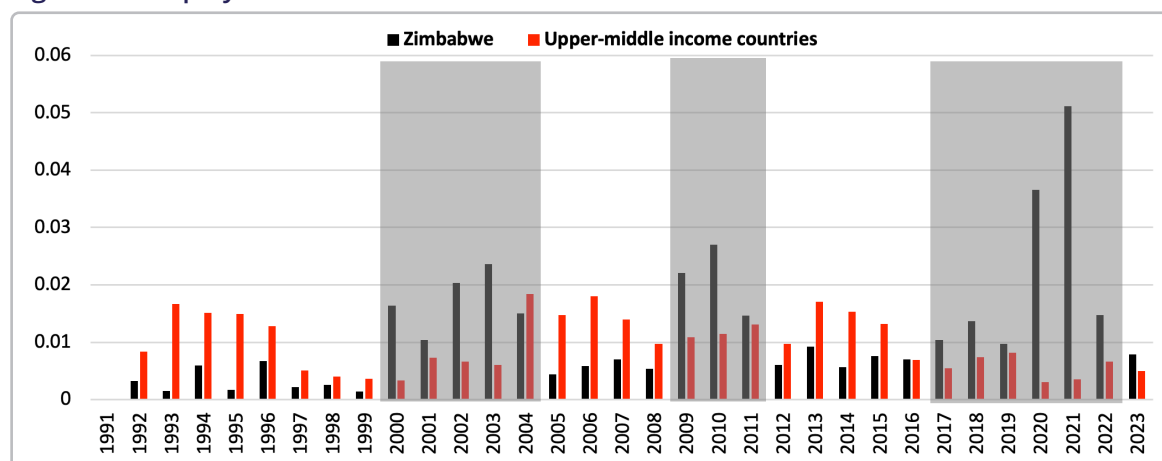
Where v_i = value-added share of sector i . The comparison between employment STI and value-added STI gives insight into whether structural transformation is through jobs or capital-intensive growth.

The STI can be interpreted using threshold ranges that reflect the pace of change in an economy's structure. Values below 0.05 indicate negligible or very limited structural transformation. An STI between 0.05 and 0.15 suggests slow structural change, while values from 0.15 to 0.30 reflect a moderate pace of transformation. STI values exceeding 0.30 are generally interpreted as evidence of rapid structural transformation (McMillan & Rodrik, 2011; de Vries et al., 2015).

4.4.1 Structural Transformation Index (Employment)

Zimbabwe's low average employment-based Structural Transformation Index (STI) of 0.012 indicates limited labour reallocation across sectors over the period (Figure 13). Periods of relatively higher STI values tend to coincide with major economic transitions, including the fast-track land reform programme, episodes of macroeconomic instability, dollarization in 2009, exchange rate reforms, and the COVID-19 shock. This pattern suggests that structural shifts during the period may have been influenced largely by short-term adjustments by firms, households, and government in response to changing economic conditions, rather than reflecting a sustained and deliberate structural transformation process. In some instances, policy measures introduced to address immediate economic challenges may also have influenced sectoral incentives and labour allocation, contributing to episodic shifts in economic activity rather than sustained transformation.

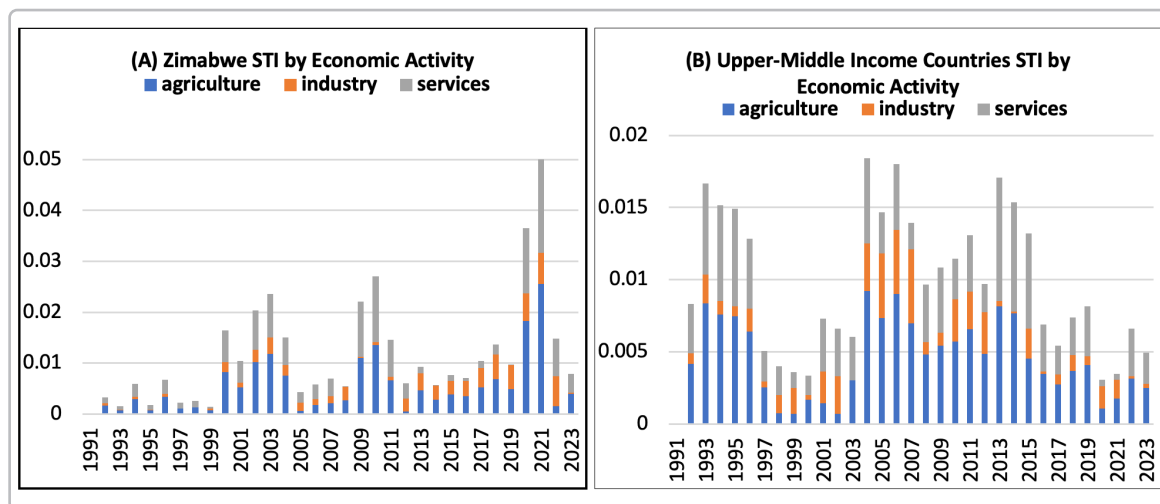
Figure 14: Employment-Based STI: Zimbabwe and UMICs: 1991-2023



Source: Own calculations from data obtained from WDI Database, 2026

The employment-based STI was similarly low for upper-middle income economies, averaging 0.010, indicating relatively limited labour reallocation across sectors (Figure 14). Figure 15: Panel A and B present the sectoral decomposition of the employment-based STI, highlighting the sectors driving overall labour reallocation. The results show that in Zimbabwe, labour reallocation was predominantly concentrated between agriculture and services, with limited movement involving the industrial sector. In contrast, upper-middle-income countries exhibit a more balanced pattern of labour reallocation across agriculture, industry, and services, reflecting a broader and more productivity-enhancing structural transformation process.

Figure 15: Disaggregated Employment-Based STI by Economic Activity, Zimbabwe and UMICs: 1991 - 2023

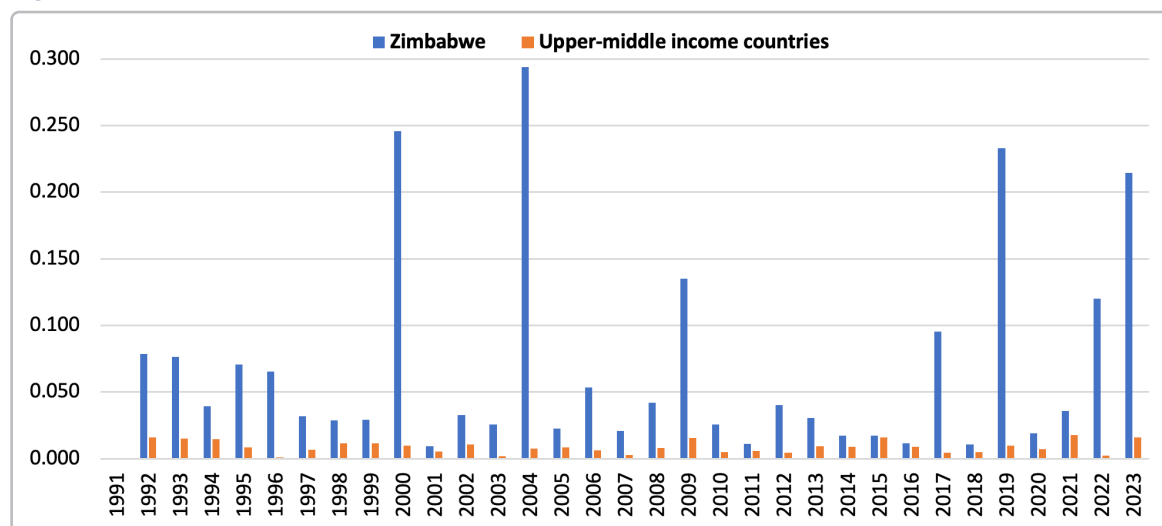


Source: Own calculations from data obtained from WDI Database, 2026

4.4.2 Structural Transformation Index (Value Added)

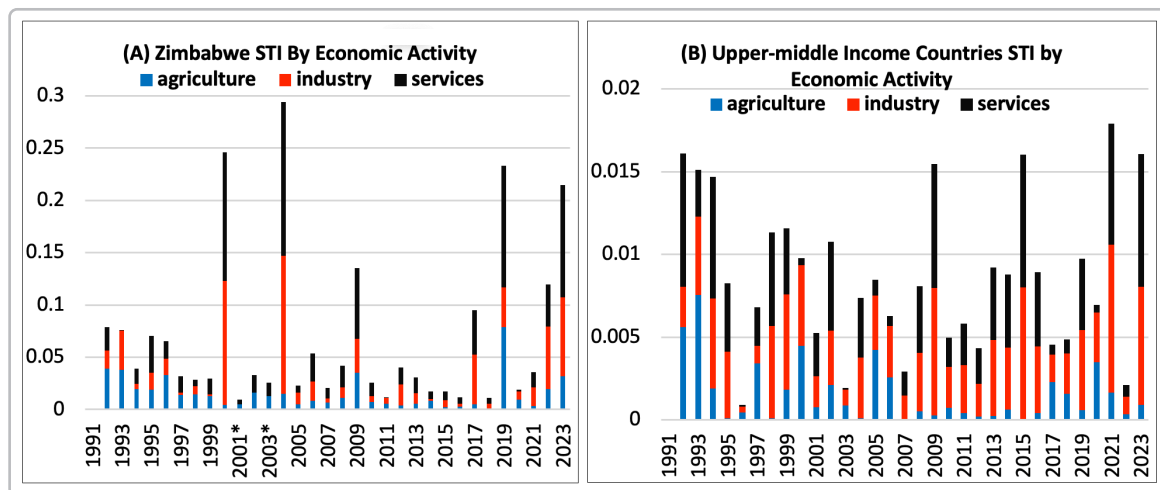
On average, Zimbabwe experienced slow structural transformation in terms of value added, with an STI of 0.068 over the period 1991-2023. While most years reflect limited change, a few episodes, specifically 2000, 2004, 2019, and 2023, show modest spurts of structural transformation, with STI values exceeding 0.2. In contrast, upper-middle-income countries recorded very limited value-added reallocation over the same period, with an average STI of 0.009. However, the STI captures only the magnitude of structural change and does not indicate whether the observed transformation is productivity-enhancing or development-supportive. To address this limitation, the STI results are interpreted alongside the other indicators presented in this study—including sectoral value-added dynamics, employment shifts, productivity patterns, and trade structure—which together provide a more comprehensive assessment of the nature and direction of structural transformation in Zimbabwe. These complementary indicators help determine whether the observed shifts in economic structure reflect movement toward higher-productivity activities or simply short-term adjustments without sustained development gains.

Figure 16: Value-Added-Based STI: Zimbabwe and UMICs: 1991-2023



Source: Own calculations from data obtained from WDI Database, 2026

To assess which sectors contributed most to structural transformation, Figure 17: Panel A and B decompose the value added based STI by sector. For Zimbabwe, the results indicate that the average magnitude of structural transformation over the reference period was highest in the services sector (0.030), followed by industry (0.023) and agriculture (0.015). This pattern suggests that observed structural change was largely driven by shifts toward services rather than by industrial expansion. Although there were specific years - namely 2000, 2004, 2019, and 2023 - during which the STI exceeded 0.2, indicating moderate structural transformation, these episodes were sporadic. Overall, the evidence points to a modest and uneven transformation process over the period.

Figure 17: Value-Added-Based STI Disaggregated by Economic Activity, Zimbabwe and Upper-Middle Income Economies, 1991-2023

Source: Own calculations from data obtained from WDI Database, 2026

For upper-middle-income countries, the magnitude of structural transformation was highest in the industrial sector (0.004), followed by services (0.003) and agriculture (0.002). Despite this sectoral ordering, the overall STI values indicate that structural transformation in upper-middle-income economies over the reference period was very limited, reflecting a relatively stable production structure with only marginal sectoral reallocation of output.

4.4.3 Comparison of Employment- and Value-Added-Based STI

Comparing STI values derived from employment and value-added provides important insights about how structural transformation is happening in an economy (McMillan et al., 2014; UN ECA, 2017). The comparison shows whether jobs and production are moving together. When employment-based STI is low and value added-based STI is high, it means that there is capital-intensive transformation characterized by output shifting rapidly across sectors, while employment structure changes slowly. It implies that while productivity rises, few jobs are being created. When employment-based STI is high and value added-based STI is low, it implies labour-absorption but low-productivity transformation. Thus, many workers move across sectors, but output structure barely changes, implying that labour is moving into low-productivity activities such as in the informal sector.

When both employment- and value added-STI are high, it implies a healthy structural transformation where labour and output grow together and where labour moves into productive, expanding sectors. It implies inclusive growth enhancing transformation. When both employment- and value added-based STI are low, it implies structural inertia, where economic structure barely changes, and growth relies on within-sector improvements. It implies presence of structural bottlenecks and the need for reforms to enable reallocation.

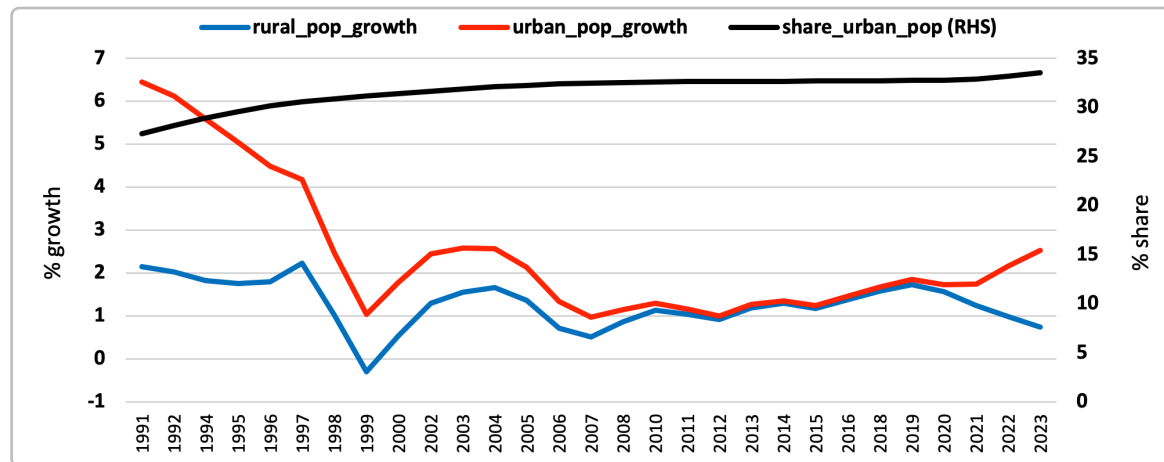
The STI analysis above showed that value-added STI was relatively higher than employment-based STI, indicating structural inertia in Zimbabwe's transformation. Thus, changes in output structure were more pronounced than changes in employment structure, pointing to structural transformation that is associated with relatively greater changes in capital-intensity, rather than broad-based job creation. Output changes occurred without commensurate employment transformation.

4.5 Urbanization and Rural-Urban Migration Analysis

Urbanization and rural–urban migration are central lenses for analyzing and understanding economic structural transformation, as they reveal where labour is relocating, the underlying drivers of that movement, and whether such shifts are associated with productivity gains. In a healthy structural transformation, labour transitions from rural agriculture into urban industry and modern services, leading to higher average productivity and rising incomes. Under these conditions, an increasing urban population share should be accompanied by sustained productivity growth. Conversely, an increase in the urban population share without corresponding productivity gains signals a pattern of urbanization without industrialization (Gollin, Jedwab & Vollrath, 2016; Jedwab & Vollrath, 2019).

In Zimbabwe, the urban population share increased by 6.2 percentage points between 1991 and 2023, even as both rural and urban populations continued to grow at decelerating rates (Figure 12). Rural population growth slowed from 2.2% to 0.7%, while urban population growth decelerated more sharply, from 6.5 % to 2.5% (see Figure 18).

While this broad pattern suggests limited productivity-enhancing urban transformation, it is important to acknowledge that there have been emerging pockets of modernization within the rural economy, including the development of modern agricultural estates and the growth of rural enterprises in some areas. These developments demonstrate the potential for productivity-enhancing structural change within rural spaces. However, such initiatives remain relatively isolated and small in scale and have not yet generated the widespread sectoral shifts required to drive economy-wide structural transformation. For these initiatives to contribute meaningfully to national transformation, there is a need for deliberate policy support to scale them up across the economy, including investment in infrastructure, value chains, rural industrialization, and enterprise development. Expanding and mainstreaming these emerging models could help catalyse broader productivity growth, strengthen rural–urban economic linkages, and support a more balanced and development-enhancing pattern of structural transformation.

Figure 18: Rural & Urban Population Growth & Urban Share in Total Population for Zimbabwe, 1991-2023

Source: Own calculations from data obtained from WDI Database, 2026

The population dynamics illustrated in Figure 18 suggest that the observed increase in urbanization over the period was not primarily driven by large-scale rural-urban migration associated with industrial job creation. Instead, the available demographic evidence points to a more complex pattern of population change shaped by demographic convergence, outward migration, and circular migration between rural and urban areas. While the share of the urban population increased modestly over the period, Zimbabwe has remained predominantly rural, with only about 32-33% of the population residing in urban areas by 2023, while roughly two-thirds of the population continues to live in rural areas (World Bank, 2024; United Nations World Urbanization Prospects, 2022). Census data also show that although the urban share of the population increased over time, the rural population continues to grow in absolute terms, reflecting the importance of agriculture and rural livelihoods in the national economy (Zimbabwe National Statistics Agency, 2022). For example, the 2022 national census recorded approximately 61.4% of the population living in rural areas and 38.6% in urban areas, indicating that Zimbabwe remains largely rural despite gradual urbanization.

Census and migration studies also indicate that internal migration flows have not been dominated by rural-urban movements alone. For example, analysis of intercensal migration patterns shows that rural-to-rural migration has been the largest internal migration flow, while rural-to-urban migration has been roughly comparable to urban-to-rural migration (Zimbabwe National Statistics Agency, 2014; World Bank, 2019). In some periods, particularly during episodes of economic crisis, significant numbers of urban residents returned to rural areas as employment opportunities declined and the cost of living in cities increased. These dynamics suggest that urban population growth has not been consistently driven by strong industrial or service-sector employment pull factors.

Taken together, these demographic trends support the interpretation that the observed rise in the urban population share during the study period was not primarily the result of productivity-driven structural transformation, but rather reflects broader demographic processes, outward migration, and circular mobility between rural and urban areas. Consequently, increases in the urban population share did not necessarily translate into sustained productivity growth or rising incomes, reinforcing the characterization of Zimbabwe's experience as urbanization occurring in the absence of strong industrialization.

4.6 Implications of Structural Transformation to Poverty, Inequality, and Labour Market Outcomes

This section analyses the implications of Zimbabwe's structural transformation on poverty, inequality and labour market outcomes.

Zimbabwe's pattern of structural transformation over the period 1991–2023 has important implications for poverty reduction, income distribution, and labour market outcomes. The analysis shows that the bulk of employment remains concentrated in the agriculture sector, which is characterized by persistently low labour productivity and weak growth in value added. As a result, a large share of the labour force is trapped in low-income activities, reinforcing high poverty incidence, particularly in rural areas (Ravallion & Chen, 2007; World Bank, 2020; McMillan, Rodrik & Sepúlveda, 2017).

The slow decline in agricultural employment, combined with limited productivity growth in the sector, suggests the presence of a poverty trap, where workers remain in subsistence or semi-subsistence activities with little scope for income growth (Ravallion & Chen, 2007; World Bank, 2020; McMillan, Rodrik & Sepúlveda, 2017). While agriculture continues to absorb labour, the sector has not generated commensurate increases in output and income. In this context, continued policy emphasis on agricultural subsidies, without parallel measures to raise productivity or facilitate labour mobility, may unintentionally incentivize the persistence of labour in low-productivity activities, thereby slowing economy-wide poverty reduction.

At the same time, workers employed in industry and services enjoy substantially higher productivity and incomes relative to those in agriculture. However, the limited expansion of employment in the industry sector, alongside declining industrial productivity, points to premature deindustrialization, whereby the economy fails to generate sufficient productive wage employment at relatively low levels of income. This constrains the capacity of structural transformation to reduce poverty in a broad-based and sustainable manner.

The productivity–employment (Kuznets-style) analysis further reveals a dualistic transformation path, where labour has moved out of low-productivity agriculture primarily into low-productivity services and informal activities, rather than into high-productivity modern industry or formal services. This form of labour reallocation does little to raise average productivity or income and is consistent with the observed negative dynamic effect on the labour productivity decomposition. Consequently, employment growth has been concentrated in sectors with limited capacity to generate decent jobs, contributing to persistent underemployment and informality.

From an inequality perspective, this pattern of transformation is likely to widen income disparities. Productivity and income gains accrue disproportionately to workers in modern segments of services and industry, while most of the labour force remains in low-productivity agriculture and informal services. The resulting divergence between high- and low-productivity sectors reinforces structural inequality across sectors and between rural and urban areas.

The STI analysis reinforces these findings. Zimbabwe's low employment-based and value-added-based STI values indicate structural inertia, where both employment and production structures change only marginally over time. This implies that productivity growth, where it exists, has relied largely on within-sector changes rather than on dynamic reallocation of labour and capital toward more productive activities. Such inertia reflects deep structural bottlenecks, including limited industrial capacity, weak investment, skills mismatches, and inadequate infrastructure, which collectively constrain labour mobility and job creation in high-productivity sectors.

Finally, the urbanization and rural–urban migration analysis suggests that increases in the urban population share have not been driven by strong economic pull factors such as industrial expansion or productivity growth. Instead, urbanization has largely reflected demographic convergence and outward migration, rather than productive absorption of labour into urban industry and services. This pattern of urbanization without industrialization further limits the poverty-reducing potential of structural transformation and places additional pressure on urban labour markets and public services.

Overall, Zimbabwe's experience highlights that structural transformation has been slow, uneven, and insufficiently productivity-enhancing. Without policies that explicitly promote labour reallocation into high-productivity sectors, particularly manufacturing and modern services, while simultaneously raising productivity within agriculture, the economy is likely to continue experiencing high poverty, persistent inequality, and fragile labour market outcomes. Addressing these challenges will require coordinated reforms aimed at boosting productive investment, upgrading skills, strengthening industrial capabilities, and removing barriers to labour and capital mobility.

5. INFRASTRUCTURE AS A CATALYST FOR ECONOMIC TRANSFORMATION

International experience demonstrates that sustained investment in resilient physical and digital infrastructure is a critical driver of structural transformation, enabling productivity growth, industrial upgrading, and economic diversification. This perspective is reflected in the UN's SDGs, particularly SDG 9 (Industry, Innovation and Infrastructure) and SDG 8 (Decent Work and Economic Growth), which emphasise infrastructure as a foundation for inclusive and sustainable economic development (UN, 2015). At the regional level, Zimbabwe's infrastructure priorities align with the Southern African Development Community (SADC) Regional Indicative Strategic Development Plan (RISDP 2020-2030), which identifies transport, energy, and information, science and technology (CT) infrastructure as key enablers of regional integration and industrialisation, as well as the African Continental Free Trade Area (AfCFTA), which underscores the role of infrastructure in facilitating trade, value chain development, and competitiveness (SADC, 2020; African Union, 2018). Within the national policy framework, Vision 2030, NDS1 and NDS2 explicitly position infrastructure as a strategic economic asset for achieving upper middle-income status, promoting private sector-led growth, and supporting industrialisation and value addition (Government of Zimbabwe, 2020; Government of Zimbabwe, 2021).

5.1 Role of Physical Infrastructure in Structural Transformation

Physical infrastructure plays a critical role in facilitating the reallocation of economic activity in Zimbabwe from low-productivity primary sectors towards higher-productivity manufacturing, agro-processing, and services. Consistent with Vision 2030, NDS1 and NDS2, infrastructure investment is intended to lower transaction costs, improve productivity, and strengthen linkages across sectors of the economy (Government of Zimbabwe, 2020; 2021).

Transport Infrastructure: Transport infrastructure, particularly road and rail network, remains central to trade efficiency and industrial viability. Zimbabwe's strategic position as a regional transit economy places high importance on key transport corridors such as the North-South Corridor, including the Beitbridge-Harare-Chirundu Highway, which has undergone significant upgrading under the Public-Private Partnership (PPP) framework. Improvements along this corridor have reduced travel times, enhanced border efficiency, and strengthened connectivity with South Africa, Zambia, and the Democratic Republic of Congo, thereby supporting trade facilitation and regional value chain participation under SADC and AfCFTA frameworks. However, the country's limited rail capacity, aging rolling stock, and underinvestment continue to raise logistics costs for bulk commodities and manufactured goods, constraining industrial competitiveness (World Bank, 2022).

Infrastructure development in Zimbabwe faces critical gaps that constrain industrialisation, trade, and service delivery. The World Bank's (2021) InfraSAP First Phase PPP report highlights how strategically structured PPPs can mobilise private finance, expertise, and innovation to close these gaps, particularly in energy, transport, ICT, and airports, thereby supporting the country's structural transformation agenda. The key findings and recommendations are summarised in Box 2.

Box 2: Public-Private Partnerships (PPPs) for Infrastructure Development in Zimbabwe

Purpose/Background: The World Bank's InfraSAP First Phase PPP report aimed to assess how private sector participation can address Zimbabwe's critical infrastructure gaps in energy, transport, ICT, and airports, identifying opportunities to deliver cost-effective, sustainable infrastructure that supports industrialisation, trade, and structural transformation.

Current Progress

- ▶ **Legal & Institutional Framework:** PPP Unit and Committee established under ZIDA Act (2020).
- ▶ **Completed Projects:**
 - ✓ **Kupinga Small Hydropower Plant** (US\$6m) & **Uhuru Solar Plant** (US\$61m), 2017.
 - ✓ **Beitbridge Border Post Upgrade** (US\$108m).
 - ✓ **Plumtree-Bulawayo-Harare-Mutare Highway** (DBSA-funded, US\$206m, 2015-2025).
- ▶ **Pipeline Projects:** Short-term - solar IPPs, roads maintenance and mobile market entry; Medium-term - power transmission and rail freight.
- ▶ **ICT & Airport Initiatives:** Victoria Falls Airport lease/management, converged licensing framework for mobile sector.

Key Challenges

- ▶ **High Country Risk:** currency volatility, macroeconomic instability, limited IFIs support.
- ▶ **Sector Weaknesses:** off-taker financial viability, partially unbundled SOEs (ZESA, NRZ), regulatory gaps.
- ▶ **PPP Framework Limitations:** reliance on unsolicited proposals (USPs), non-competitive procurement, inadequate contract management, unclear MoFEDIP role and limited transparency.
- ▶ **Infrastructure Constraints:** NRZ rail losses, road toll revenue gaps, ICT sector concentration, airport operational inefficiencies.

Impact on Economic Transformation

- ▶ Delays or poorly structured PPPs limit industrial growth, value addition, and service quality.
- ▶ Energy, transport, and ICT deficits increase costs, reduce productivity, and hinder structural transformation.
- ▶ Private finance, technology transfer, and operational efficiency remain underutilised.

Recommended Actions

- ▶ **Strengthen PPPs Framework:** clarify MoFEDIP role, regulate USPs, adopt standard contracts, ensure competitive procurement.
- ▶ **Improve Fiscal Management:** assess PPPs affordability and liabilities using PFRAM.
- ▶ **Enhance Transparency & Capacity:** publish contracts, train officials via PPP Certification, engage reputable advisors.
- ▶ **Prioritise High-Impact Projects:** short-term solar, roads, airports; long-term transmission, rail and ICT expansion.
- ▶ **Sector Governance Reforms:** unbundle SOEs, strengthen regulatory autonomy (ZERA, POTRAZ, CAAZ), enable private participation.

Source: World Bank (June 30, 2021). *Zimbabwe InfraSAP First Phase Public Private Partnerships*. <https://documents1.worldbank.org/curated/en/099535006262268359/pdf/P1750670a6bc9704f0b4930b18ea5b8e256.pdf>

Water and Irrigation Infrastructure: Water and irrigation infrastructure is critical for promoting agricultural transformation, agro-industrial development, and climate resilience in Zimbabwe. The country has made significant investments in dams and irrigation schemes to support both commercial and smallholder farming. Key government-led projects include the Tokwe-Mukosi Dam, completed in 2016, which provides irrigation, domestic water supply, and flood management (Government of Zimbabwe, 2021); the rehabilitation of smallholder irrigation schemes across Mashonaland Central, Manicaland, and Matabeleland provinces under various programmes (FAO, 2019); and the operation of Manyuchi and Osborne Dams, which supply water to downstream commercial and communal farmers in drought-prone areas (World Bank, 2020). Non-governmental organisations (NGOs) and development partners have also contributed to enhancing water infrastructure, including FAO's Smallholder Irrigation Revitalisation Programme, which promotes sustainable irrigation techniques and farmer training (FAO, 2019), and the World Bank-funded Zimbabwe Irrigation Rehabilitation Project (ZIRP), focused on modernising irrigation systems and strengthening water governance (World Bank, 2020). Regional initiatives under SADC further support cross-border water infrastructure and capacity building for climate-resilient agriculture (SADC, 2021).

Despite an estimated irrigation potential exceeding 2 million hectares, actual irrigated land remains substantially below this threshold due to high rehabilitation costs, aging infrastructure, and institutional capacity constraints in water management. Addressing these deficits through targeted investment, improved water governance, and capacity building is essential to enhance agricultural productivity, strengthen agro-processing linkages, and reduce vulnerability to climate shocks, thereby supporting Zimbabwe's structural transformation agenda (FAO, 2019; Government of Zimbabwe, 2021; World Bank, 2020; SADC, 2021).

Urban and Industrial Infrastructure: Urban and industrial infrastructure, including serviced industrial parks, special economic zones (SEZs), and urban utilities, shapes the spatial distribution and productivity

of economic activity. While the establishment of SEZs in areas such as Sunway City (Harare) and Bulawayo reflects efforts to promote industrial clustering and investment, aging urban infrastructure-particularly water, sanitation, and electricity systems in major cities such as Harare and Bulawayo-continues to undermine industrial efficiency and private sector growth. Addressing these infrastructure deficits is essential for revitalising manufacturing hubs, supporting innovation, and enabling economies of scale in industry and modern services.

Energy Infrastructure: Energy infrastructure remains one of the most binding constraints to industrialisation and productivity growth in Zimbabwe. Persistent electricity supply shortages, driven by generation shortfalls, drought-related hydropower constraints, and aging transmission infrastructure, have adversely affected capacity utilisation in manufacturing and increased reliance on costly alternative power sources. Recent investments, including the expansion of Hwange Power Station Units 7 and 8 and increased deployment of solar energy projects by both public and private actors, have begun to ease supply constraints. Nevertheless, energy demand continues to outpace supply, underscoring the need for accelerated investment in generation, transmission, and renewable energy solutions to support industrial expansion and decentralised economic activity (Government of Zimbabwe, 2021; ZESA Holdings, 2023). Overall, while Zimbabwe has made progress in rehabilitating and expanding key infrastructure assets, persistent gaps in transport, energy, water, and urban infrastructure continue to constrain the pace and depth of structural transformation. The constraints posed by inadequate energy infrastructure to Zimbabwe's structural transformation were detailed by the Portfolio Committee on Energy and Power Development, as summarised in Box 5.2 (Parliament of Zimbabwe, 2024).

Box 3: Case Study: Electricity Supply in Zimbabwe: A Binding Constraint to Structural Transformation

Purpose and Background of the Report

On Wednesday, 18 October 2023, The Speaker announced the appointment of members to serve in the Portfolio Committee on Energy and Power Development to assess the adequacy and reliability of Zimbabwe's electricity supply to determine its capacity to support economic growth, industrialisation, and national development objectives.

State of Energy Supply in Zimbabwe

The Committee found that electricity supply remains structurally inadequate, with effective generation averaging 1,000–1,400 MW against national demand of approximately 1,700–2,200 MW. Output from major power stations, particularly Hwange and Kariba South, has been constrained by infrastructure breakdowns, maintenance challenges, and reduced hydropower generation. As a result, load shedding is persistent, directly affecting productive sectors of the economy.

Key Challenges in Energy Supply

- ▶ Aging generation, transmission, and distribution infrastructure.
- ▶ Inadequate maintenance and delayed rehabilitation.
- ▶ Financial constraints affecting the power utility.
- ▶ Climate-induced variability in hydropower output.
- ▶ Slow implementation of Independent Power Producer (IPP) projects.

Energy Deficit and Structural Transformation Implications

The electricity deficit is identified as a binding constraint to industrialisation and economic diversification. Power outages reduce manufacturing capacity utilisation, raise production costs through reliance on diesel generators, and discourage investment in energy-intensive industries. Small and medium enterprises are particularly affected, reinforcing informality and limiting value addition across key sectors.

Committee Recommendations

- ▶ Accelerate investment in generation capacity and complete ongoing projects.
- ▶ Diversify energy sources, particularly renewable energy.
- ▶ Rehabilitate transmission and distribution infrastructure.
- ▶ Strengthen utility governance, cost recovery, and regulatory frameworks to attract private investment.

Source: Parliament of Zimbabwe (Tenth Parliament) (2024), Report of the Portfolio Committee on Energy and Power Development on the State of Electricity Supply in Zimbabwe, SC02 (Veritas).

https://www.veritaszim.net/sites/veritas_d/files/EPD_report_on_state_of_power_supply.pdf

5.2 Role of Digital Infrastructure in Economic Transformation

Digital infrastructure has emerged as a key driver of modern structural transformation, with the potential to accelerate productivity gains, formalisation, and market integration (World Bank, 2020). Broadband connectivity, mobile network coverage, and affordable data access enable firms and households to participate in digital markets, access financial services, and adopt new business models (POTRAZ, 2020). In Zimbabwe, the expansion of mobile and internet connectivity has facilitated the growth of digital financial services, e-commerce, and technology-enabled entrepreneurship (World Bank, 2020).

Digitalisation has enhanced financial inclusion through mobile money platforms, reducing transaction costs and enabling greater participation of households and small enterprises in the formal economy (World Bank, 2020). In addition, the digitalisation of government services—including business registration and tax administration—has improved service delivery and reduced administrative barriers to enterprise formalisation (Government of Zimbabwe, e-Government Strategy 2021–2025; World Bank, 2020). These developments underscore the role of digital infrastructure in strengthening institutional efficiency and supporting private sector development.

Nevertheless, disparities in digital access persist between urban and rural areas, limiting the inclusive impact of digital transformation (POTRAZ, 2020; SADC, 2021). Inadequate digital skills, high data costs, and limited infrastructure in underserved regions continue to constrain the adoption of digital technologies, particularly among small-scale producers and informal enterprises. Addressing these gaps is essential to ensure that digital transformation contributes meaningfully to broad-based economic restructuring rather than exacerbating existing inequalities (World Bank, 2020; AU, 2020)

5.3 Infrastructure Investment Gaps and Transformation Priorities

Despite notable progress in selected areas, infrastructure deficits remain a significant impediment to Zimbabwe's structural transformation. Maintenance backlogs, financing constraints, and coordination challenges across sectors have reduced the effectiveness of infrastructure investments. Moreover, infrastructure development has not always been sufficiently aligned with industrial policy priorities, resulting in weak linkages between infrastructure provision and productive sector development.

Closing these gaps requires a strategic and integrated approach that prioritises infrastructure investments with the highest transformation impact. This includes infrastructure that supports value addition in agriculture, enhances manufacturing competitiveness, facilitates trade logistics, and enables digital adoption across sectors. Strengthening public-private partnerships, improving project preparation and execution, and enhancing institutional coordination will be critical in mobilising resources and improving infrastructure outcomes.

6. POLICY IMPLICATIONS AND REFORM PRIORITIES

The findings of this analysis underscore that Zimbabwe's structural transformation did not sufficiently increase labour productivity and therefore did not sufficiently lead to significant poverty reduction. To reverse the current trajectory and unlock the poverty-reducing potential of structural change, a coherent set of policy reforms is required.

First, accelerating productivity growth within agriculture must remain a central priority. Given agriculture's continued dominance in employment, raising agricultural productivity is essential for reducing rural poverty and narrowing rural-urban income gaps. This requires shifting policy emphasis from input-based support toward investments in irrigation, extension services, climate-resilient technologies, and access to markets. Improving productivity in agriculture can raise incomes directly while enabling surplus labour to transition into higher-productivity sectors.

Second, policies must actively promote labour-absorbing industrialization. The analysis highlights premature deindustrialization and limited employment absorption by industry, constraining inclusive growth. Addressing this requires targeted industrial policies that support value-adding manufacturing, agro-processing, and light industry, particularly in sectors with strong backward and forward linkages to agriculture. Improving access to finance, reducing regulatory and infrastructure bottlenecks, and fostering small and medium enterprise (SME) growth are critical to expanding productive wage employment.

Third, the quality of services-sector expansion must be improved. While services have absorbed a growing share of labour, much of this expansion has occurred in low-productivity and informal activities. Policy efforts should therefore focus on upgrading services through skills development, digitalization, and support for higher-productivity segments such as logistics, ICT, tourism, and business services. Strengthening linkages between services and industry can enhance productivity and create more resilient employment pathways.

Fifth, urbanization must be supported by productive job creation. The evidence of urbanization driven largely by demographic convergence rather than economic pull factors points to the need for integrated urban-industrial strategies. Investments in secondary cities, industrial zones, and urban infrastructure can help transform urbanization into a driver of productivity growth rather than a source of labour market congestion and informality.

Sixth, Infrastructure development. When effectively planned and implemented, has the potential to accelerate Zimbabwe's transition towards a more diversified, productive, and resilient economy. Physical infrastructure

reduces production and transaction costs, while digital infrastructure expands access to markets, finance, and information. Together, they form the backbone of an enabling environment for industrialisation, innovation, and inclusive growth.

To maximise its transformational impact, infrastructure policy must be closely integrated with broader economic and industrial strategies. This entails aligning infrastructure investment decisions with sectoral development priorities, regional integration objectives, and the country's long-term development vision. By adopting a coordinated and forward-looking infrastructure strategy, Zimbabwe can leverage infrastructure as a catalyst for sustainable structural transformation and inclusive economic growth. This policy shift is central to achieving the objectives of Vision 2030, NDS2, Agenda 2063, and the Sustainable Development Goals.

In sum, achieving inclusive and sustainable structural transformation in Zimbabwe will require a deliberate shift from passive, demographic-driven change toward an active development strategy centred on productivity, decent job creation, and sectoral upgrading. Without such reforms, structural inertia is likely to persist, limiting progress on poverty reduction, exacerbating inequality, and weakening labour market outcomes over the medium to long term.

7. CONCLUSION

Structural transformation in Zimbabwe has been uneven and incomplete. The economy has diversified beyond agriculture, with services and mining now major contributors to GDP, while agriculture remains central for employment, exports, food security, and manufacturing inputs. Agriculture still contributes significantly to GDP, exports, and employment, but productivity remains vulnerable because production is heavily rain-fed and exposed to droughts and climate shocks. The quality of structural transformation has been constrained by deindustrialisation, macroeconomic instability, and the expansion of informality. Zimbabwe once had a stronger manufacturing base, but capacity utilisation, investment, and competitiveness declined over time. Many workers have moved not into formal industry, but into informal trade and low-productivity urban services. This means labour has shifted sectors without equivalent gains in productivity, wages, or technology adoption. Recent growth rebounds have been driven more by mining, agriculture recovery, and services than by broad-based industrialisation.

Several challenges continue to slow transformation. These include domestic and foreign debt overhang, limited access to long-term finance, and weak infrastructure. Climate change is another major risk as droughts reduce agricultural output, hydroelectric power generation, rural incomes, and agro-processing supply chains. High unemployment and skills mismatches also make it difficult to absorb labour into productive formal sectors.

Despite these constraints, Zimbabwe has strong opportunities for deeper structural change. The country has abundant mineral resources (especially gold, platinum, lithium, and chrome), relatively high literacy levels, a strategic regional location, and an entrepreneurial population. There is potential to build mineral beneficiation industries, revive agro-processing, modernise manufacturing, and expand digital and financial services. Regional trade through SADC and the AfCFTA could also create export markets for higher-value products. If supported by stable macroeconomic policy, infrastructure upgrades, and stronger institutions, Zimbabwe can move from commodity dependence and informality toward more productive industry and services.

Overall, Zimbabwe's structural transformation is best described as partial and fragile: the economy has changed composition, but not yet in a way that consistently raises productivity, formal employment, and living standards. The long-term opportunity lies in converting its natural resources, human capital, and regional market access into diversified industrial growth. By focusing on value addition and inclusivity, Zimbabwe can transition from a primary resource-dependent economy to a modernized, diversified economy by 2030.

This study is subject to several limitations. First, it relies primarily on secondary and aggregate data, which describe structural transformation trends but do not establish causal relationships. Second, data gaps and

limited availability - particularly on informality, productivity, value chains, and infrastructure -restricted more detailed sectoral analysis. Third, the study focuses on broad sectoral changes and does not capture firm-level dynamics, technological upgrading, regional disparities, or value-chain integration. Finally, comparisons with upper-middle-income economies are descriptive and do not fully account for differences in institutional, macroeconomic, and historical conditions.

Future research should employ econometric methods to identify the drivers of structural transformation and evaluate policy impacts. Greater use of firm, household, and establishment-level data would improve understanding of productivity, innovation, and labour mobility. Further studies should also examine the roles of value chains, export sophistication, digitalisation, green industrialisation, and emerging sectors such as mineral beneficiation and agro-processing. Finally, future research should assess regional disparities and evaluate the long-term impacts of NDS2, Vision 2030, and AfCFTA implementation on productivity, diversification, and inclusive economic transformation.

ANNEXES

Annex 1: Indicators of informality in Zimbabwe, 1990-2020

Year	DGE_p	MIMIC_p	SEMP_p	Pension_p	Infemp_p	Infsize_p
1990	59.27					
1991	59.59		63.89			
1992	58.47		63.71			
1993	59.82	60.45	64.54			
1994	59.51	58.87	63.93			
1995	59.70	59.69	63.41	12.00		
1996	60.29	58.46	61.93			
1997	60.59	59.01	60.80			
1998	60.30	58.20	60.63			
1999	60.33	57.81	60.66			
2000	59.74	59.40	61.28			
2001	59.90	57.43	61.55			
2002	59.98	58.51	62.33			
2003	59.63	60.52	63.33			
2004	60.02	61.22	63.22			
2005	61.39	61.75	62.57			
2006	61.08	61.58	62.07			
2007	62.70	61.71	63.76			
2008	63.00	63.89	67.85			
2009	64.44	64.59	67.42			
2010	63.26	62.91	66.98			
2011	62.40	61.97	66.07		85.60	77.40
2012	61.75	60.44	65.99			
2013	61.99	60.23	66.23			
2014	61.74	60.34	66.28		87.40	79.20
2015	61.57	60.20	66.63			
2016	61.45	60.17	67.00			
2017	60.88	60.08	67.19			
2018	60.06	60.18	67.35			
2019	60.52	60.92	68.75		79.80	71.00
2020	60.43	62.23				

Source: Elgin, C., M. A. Kose, F. Ohnsorge, and S. Yu. 2021. "Understanding Informality", C.E.P.R. Discussion Paper 16497, Centre for Economic Policy Research, London. <https://www.worldbank.org/en/research/brief/informal-economy-database>

Variable definitions:

- DGE_p: Dynamic general equilibrium model-based (DGE) estimates of informal output (% of official GDP)
- MIMIC_p: Multiple indicators multiple causes model-based (MIMIC) estimates of informal output (% of official GDP)
- SEMP_p: Self-employment (% of total employment)
- Pension_p: Labor force with pension (% of labor force)
- Infemp_p: Informal employment (% of total employment; International Labour Organization; hamonized series)
- Infsize_p: Employment outside the formal sector (% of total employment; International Labour Organization; hamonized series)

REFERENCES

1. African Union (2018). The African Continental Free Trade Area. <https://au.int/en/african-continental-free-trade-area>
2. African Union (2020), African Union Digital Transformation Strategy, Addis Ababa: African Union Commission. <https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf>
3. Allard, C. (2017). Regional Economic Outlook, April 2017, Sub-Saharan Africa. International Monetary Fund.
4. Anderson, K., & Ponnusamy, S. (2023). Structural transformation away from agriculture in growing open economies. *Agricul. Econom.*, 54(1), 62-76
5. Bassi, V., Muoio, R., Porzio, T., Sen, R., Tugume, E., 2022. Achieving scale collectively. *Econometrica* 90, 2937–2978.
6. Chidoko, C. (2023). Post-independence reforms and policies in Zimbabwe. In *Post-independence development in Africa: Decolonisation and transformation prospects* (pp. 213-226). Cham: Springer International Publishing.
7. Caselli, Francesco. 2005. Accounting for cross-country income differences. *Handbook of Economic Growth* 1: 679–741.
8. Chenery, H., Robinson, S., & Syrquin, M. (1986). *Industrialization and Growth: A Comparative Study*. Oxford University Press.
9. Delechat, M. C. C., Melina, M. G., Newiak, M. M., Papageorgiou, M. C., & Spatafora, M. N. (2024). Economic diversification in developing countries: Lessons from country experiences with broad-based and industrial policies. International Monetary Fund.
10. de Vries, G.J., Timmer, M., de Vries, K., 2015. Structural Transformation in Africa: static gains, Dynamic losses. *J. Dev. Stud.* 51 (6), 674–688.
11. Diao, X., McMillan, M., & Rodrik, D. (2017). The recent growth boom in developing economies: A structural-change perspective. *Journal of Economic Perspectives*, 31(3), 3–30.
12. Dinkelman, T., Ngai, L.R., 2022. Time use and gender in Africa in times of structural transformation. *J. Econ. Perspect.* 36 (1), 57–80.
13. Dorosh, Paul, & Thurlow, James (2018). Beyond agriculture versus non-agriculture: Decomposing sectoral growth–poverty linkages in five African countries. *World Dev.*, 109, 440–451.
14. Easterly, W., Kremer, M., Pritchett, L., & Summers, L. (1993). Good policy or good luck? Country growth performance and temporary shocks. *Journal of Monetary Economics*, 32(3), 459–483.
15. Fabricant, S. (1942). *Employment in manufacturing, 1899–1939*. National Bureau of Economic Research.
16. FAO (2019), *Supporting Smallholder Irrigated Agriculture in Targeted Irrigation Schemes In Zimbabwe*. / <https://openknowledge.fao.org/server/api/core/bitstreams/cfe31757-0225-44c5-b830-22d2da20c740/content>

17. Felipe, Jesus (2012). *Inclusive Growth, Full Employment, and Structural Change: Implications and Policies for Developing Asia* (2nd ed). London: Anthem Press.
18. Garriga, C., Hedlund, A., Tang, Y., Wang, P., et al. (2023). Rural-urban migration, structural transformation, and housing markets in China. *Am. Econom. J. Macroeconom.*, 15(2), 413–440.
19. Gollin, D., Jedwab, R., & Vollrath, D. (2016). Urbanization with and without industrialization. *Journal of Economic Growth*, 21(1), 35–70.
20. Gollin, D., Kaboski, J., 2024. New views of structural transformation: insights from recent literature. STEG Synth. Pap.
21. Government of Zimbabwe (2020). *Vision 2030: Towards a Prosperous and Empowered Upper Middle-Income Society*.
 • <http://www.zim.gov.zw/index.php/en/government-documents/category/1-vision-2030?download=1:vision-2030>
22. Government of Zimbabwe (2021). *National Development Strategy 2 (2026–2030)*. <https://www.veritaszim.net/node/7741>
23. Handoyo, R. D., Ibrahim, K. H., Pratiwi, S. M. A., Sylviana, W., Jayadi, A., Prihandono, G., & Istifadah, N. (2025). The effect of the knowledge economy on the exports of high-technology intensive goods. *Social Sciences & Humanities Open*, 12, 102003.
24. Hausmann, R., Hidalgo, C. A., Bustos, S., Coscia, M., & Simoes, A. (2014). *The atlas of economic complexity: Mapping paths to prosperity*. Mit Press.
25. Hausmann, R., Rodrik, D., & Velasco, A. (2005). *Growth diagnostics*. Harvard University Working Paper.
26. Herrendorf, Berthold, Richard Rogerson, and Akos Valentinyi. 2014. *Growth and Structural Transformation Handbook of Economic Growth*. Amsterdam: Elsevier, vol. 2, pp. 855–941.
27. Hillbom, Ellen, and Jutta Bolt. 2015. *Changing Income Inequality and Structural Transformation: The Case of Botswana 1921–2010*. WIDER Working Paper. Helsinki: UNU-WIDER.
28. Huang, Heng, Baolei Qi, and Long Chen. 2022. Innovation and High-Quality Development of Enterprises—Also on the Effect of Innovation Driving the Transformation of China's Economic Development Model. *Sustainability* 14: 8440.
29. Jedwab, R., & Vollrath, D. (2019). Urbanization without growth in historical perspective. *Explorations in Economic History*, 74, 101276.
30. Kanyenze, G. (Ed.). (2011). *Beyond the enclave: Towards a pro-poor and inclusive development strategy for Zimbabwe*. African Books Collective.
31. Khan, Muhammad Aamir, Terrie Walmsley, Kakali Mukhopadhyay. 2021. Trade liberalization and income inequality: The case for Pakistan. *J. Asian Econom.* 74: 101310.
32. Khan, Muhammad Aamir. (2020). Cross sectoral linkages to explain structural transformation in Nepal. *Structural Change and Economic Dynamics*, 52, 221–235.
33. Kuznets, S. (1966). *Modern Economic Growth: Rate, Structure, and Spread*. Yale University Press.
34. Kuznets, Simon, 1973. Modern economic growth: findings and reflections. *Am. Econ. Rev.* 63 (3).
35. Lagakos, D., Mobarak, A.M., Waugh, M.E., 2023. The welfare effects of encouraging rural-urban migration. *Econometrica* 91 (3), 803–837.

36. Lewis, W. A. (1954). Economic development with unlimited supplies of labour. *The Manchester School*, 22(2), 139–191.
37. McMillan, M., & Rodrik, D. (2011). Globalization, structural change and productivity growth. NBER Working Paper No. 17143.
38. McMillan, M., Rodrik, D., & Sepúlveda, C. (2017). Structural change, fundamentals, and growth: An overview. *World Bank Economic Review*, 31(2), 263–279.
39. McMillan, M., Rodrik, D., & Verduzco-Gallo, Í. (2014). Globalization, structural change, and productivity growth, with an update on Africa. *World Development*, 63, 11–32.
40. Michaely, M. (1962). Concentration in international trade. North-Holland Publishing Company.
41. Palma, J. G. (2005). Four sources of de-industrialization and a new concept of the Dutch disease. In *Beyond Reforms* (pp. 71–116). Palgrave Macmillan.
42. Parliament of Zimbabwe (Tenth Parliament) (2024), Report of the Portfolio Committee on Energy and Power Development on the State of Electricity Supply in Zimbabwe, SC02 (Veritas). https://www.veritaszim.net/sites/veritas_d/files/EPD_report_on_state_of_power_supply.pdf
43. POTRAZ (2020), Annual Report 2019/2020, Postal and Telecommunications Regulatory Authority of Zimbabwe.
 - <https://www.potraz.gov.zw/wp-content/uploads/2022/08/Annual-Sector-Performance-Report-2021.pdf>
44. Ravallion, M., & Chen, S. (2007). China's (uneven) progress against poverty. *Journal of Development Economics*, 82(1), 1–42.
45. Rodrik, D. (2016). Premature deindustrialization. *Journal of Economic Growth*, 21(1), 1–33.
46. SADC (2020). Regional Indicative Strategic Development Plan (RISDP) 2020–2030. <https://www.sadc.int/pillars/regional-indicative-strategic-development-plan-2020-2030>
47. SADC (2021), Regional Water Infrastructure Development Strategy, Gaborone: SADC Secretariat.
 - https://www.sadc.int/sites/default/files/2021-07/Regional_Water_Infrastructure_Programme_brochure.pdf
48. SADC (2021), SADC Digital Transformation Strategy, Gaborone: SADC Secretariat. <https://www.sadc.int/document/sadc-digital-transformation-strategy-sadc-dts>
49. Syrquin, M. (1988). Patterns of structural change. In *Handbook of Development Economics*, Vol. 1. Elsevier.
50. Teignier, Marc. 2018. The role of trade in structural transformation. *J. Dev. Econom.* 130: 45–65.
51. Timmer, M. P., & Akkus, S. (2008). The structural transformation as a factor in economic growth. University of Groningen Working Paper.
52. Timmer, M. P., & de Vries, G. J. (2009). Structural change and growth accelerations in Asia and Latin America. *Asian Development Review*, 26(1), 96–134.
53. UN Economic Commission for Africa (UNECA). (2015). Economic Report on Africa: Industrializing through Trade.
54. UN Economic Commission for Africa (UNECA). (2017). Transformative Industrial Policy for Africa.
55. United Nations (2015). The 17 Goals Sustainable Development Goals. <http://sdgs.un.org/goals>

56. Vasin, Sergey Mikhailovich. 2022. Sectoral Transformation of the Economic System during Crisis and Stable Growth Periods (A Case Study of the European Countries). *Economies* 10: 148.
57. World Bank (2020), Digital Economy for Zimbabwe: Country Diagnostic Report. Washington DC:WorldBank.<https://documents1.worldbank.org/curated/en/982981621880260112/pdf/Digital-Economy-for-Zimbabwe-Country-Diagnostic-Report.pdf>
58. World Bank. (2020). World Development Report 2020: Trading for Development in the Age of Global Value Chains.
59. World Bank. (2026). World Development Indicators. Retrieved from <http://data.worldbank.org/indicator/>
60. World Bank (2022) Zimbabwe - Country Economic Memorandum: Boosting Productivity and Quality Jobs (English). Washington, D.C.: World Bank Group.
 - <http://documents.worldbank.org/curated/en/099515010132227870>
61. World Bank (2017) Economic Diversification Guidance Note
 - <https://ieg.worldbankgroup.org/sites/default/files/Data/reports/EconomicDiversification.pdf>
62. World Trade Organisation (WTO) (2019) Aid for Trade at A Glance 2019: Economic Diversification and Empowerment.
63. World Bank (2024). World Development Indicators: Urban population (% of total population), Zimbabwe.
64. United Nations (2022). World Urbanization Prospects.
65. Zimbabwe National Statistics Agency (ZIMSTAT) (2022). 2022 Population and Housing Census Preliminary Report.
66. African Development Bank. (2018). Zimbabwe Economic Outlook.
67. Confederation of Zimbabwe Industries. (2023). Manufacturing Sector Survey.
68. Rodrik, D. (2016). Premature Deindustrialization. *Journal of Economic Growth*.
69. Palma, G. (2005). Four sources of de-industrialization and a new concept of the “Dutch disease.” In J. A. Ocampo (Ed.), *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability*.
70. Tregenna, F. (2009). Characterising deindustrialisation: An analysis of changes in manufacturing employment and output internationally. *Cambridge Journal of Economics*.
71. United Nations Industrial Development Organization (UNIDO). (2013). Industrial Development Report.
72. World Bank. (2024). World Development Indicators.
73. Zimbabwe National Statistics Agency (ZIMSTAT). (2024). National Accounts Statistics.
74. Zimbabwe National Statistics Agency (ZIMSTAT). (2014). Zimbabwe Population Census 2012: National Report. Harare: ZIMSTAT.
75. World Bank. (2019). Analysis of Spatial Patterns of Settlement, Internal Migration and Welfare Inequality in Zimbabwe. Washington, DC: World Bank.



Zimbabwe Economic
Policy Analysis and
Research Institute



55 Mull Road, Belvedere
P. O. Box CY244
Causeway
Harare, Zimbabwe



+263 242 778423, 711451
+263 242 785926-7



administration@zepari.co.zw



www.zepari.co.zw

© 2026 ZEPARI
All rights reserved.
Published by ZEPARI
ISBN 978-1-77926-224-0

