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Structural transformation and labor market dynamics in Afghanistan: An evidence-based analysis of economic development and employment changes (2017–2024)

Abdul Ahmad Pooya

Hunan University, 2 Lushan S Rd, Yuelu Qu, Changsha Shi, Hunan Sheng, Tiongkok, 410008, China
e-mail: ahmadpooya777@gmail.com

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ABCTRACT

This study examines the path of structural change and the labor market in Afghanistan between 2017 and 2024, focusing on the disruption following the 2021 political transition. The analysis based on cross-sectoral data from the World Bank, the ILO, and national reports reveals a trend of "reversed structural transformation" when labor moves out of higher-productivity (services and manufacturing) sectors towards lower-productivity (agriculture and informal activities) sectors. Formal job destruction, the reduction of aid-funded services, and the massive return of Afghan migrants from Iran and Pakistan have all changed the employment structure, leading to an increase in unemployment, informality, and gender inequality. Despite a slight recovery in the agricultural, mining, and construction sectors, the economy remains vulnerable to external shocks and institutional inefficiencies. The results highlight that discovering the post-2021 labor adjustment in Afghanistan has been more of subsistence survival rather than productive relocation efforts and indicate the pressing need to have inclusive and employment-based recovery efforts.

Keywords: Structural transformation, labor market dynamics, reverse structural change, employment composition, economic vulnerability, Afghanistan.

1. INTRODUCTION

Global labor markets have experienced significant structural changes over the last 10 years, including the decline of traditional sectors, automation, and the growing significance of service-oriented and knowledge-based sectors (OECD, 2025; Sevinc, 2019; Jung and Choi, 2006). Although overall productivity and employment are growing, most developing and conflict-affected economies are characterized by high rates of informality, underemployment, and gender inequality (Bonnet, 2018). These problems are even more complicated in weak states, where frequent shocks—including political instability, migration crises, and external economic shocks—compromise labor market stability and institutional strength (I. Shtunder & Shkuropadska, 2024). Afghanistan is one of the most dramatic examples of the fragility of the labor market in the post-conflict period, the employment system of which is heavily influenced by decades of aid dependency, migration flows, and instability of regional trade (Pooya, 2025b; Loschmann and Marchand, 2020; World Bank, 2018).

One of the most important factors of sustainable economic development is structural transformation, that is, the transfer of labor and resources from low-productivity sectors (such as agriculture) to higher-productivity sectors (such as industry and modern services) (Diao et al., 2019; Lukalo & F. Kiminyei, 2021). Successful transitions not only increase productivity but also widen formal job opportunities and income distribution (Sevinc, 2019). However, in weak and aid-dependent economies, the process may be manipulated and even inverted (Sevinc, 2019). In Afghanistan, recurring security shocks, institutional fragility, and external dependencies have hindered the natural evolution of the productive sectors. Consequently, labor shifts often occur from formal to informal or subsistence activities rather than toward higher-value sectors, reflecting a phenomenon of "reverse structural transformation" (World Bank, 2025; Farahi, 2024).

Mass job losses, the departure of foreign institutions, and a contraction of the service and trade industries were caused by political and economic shocks following the 2021 regime change (Mowahed et al., 2025). Simultaneously, the agricultural sector absorbed the laid-off workers, serving as the so-called shock absorber of livelihoods, but also contributed to underemployment and a decrease in production (Farahi, 2024). In addition, the mass repatriation of Afghan refugees from Iran and Pakistan added more pressure on home labor markets, and the further contraction of aid reduced the possibility of creating formal employment. This interplay of shocks in the structure and labor displacement highlights the vulnerability of Afghanistan's employment system (Pooya, 2025a; Loschmann and Marchand, 2020; Kamminga and Zaki, 2018).

Although structural change in developing world economies has been widely studied in the literature, there is a noticeable knowledge gap regarding how these processes unfold in fragile, post-conflict, and aid-dependent environments such as Afghanistan. There is a dearth of empirical research that has conducted a systematic analysis of the 2021 change in the Afghan labor market, especially how employment composition has changed due to economic shocks, out-migration, and sectoral contraction. This study fills this gap by providing an evidence-based, sectoral overview of the process of labor market development in Afghanistan during 2017-2024.

This study adds value to the literature in three major ways. (1) It presents one of the earliest complete sets of data on changes in employment in Afghanistan during political transformation and economic turmoil. (2) It also presents the notion of reverse structural transformation, which explains the retrogressive pattern of labor reallocation that occurred after 2021. (3) It provides policy-oriented information regarding strategies for facilitating productive employment and inclusive recovery in fragile states through the exploitation of emerging sectors such as construction, mining, and digital services. Overall, this study adds to the knowledge of the interaction between structural transformation and labor market dynamics in crisis-affected economies. This has implications for Afghanistan and other similarly vulnerable countries.

The remainder of this paper is structured as follows. Section 2 reviews the theoretical and empirical literature on structural transformation and labor market dynamics, especially as applied to developing and fragile economies. Section 3 outlines the data sources and research methodology used to examine economic and employment developments in Afghanistan between 2017 and 2024. Section 4 presents the empirical results and discusses the structural changes observed across sectors and labor market segments. Finally, in Section 5, which is the final section of the paper, conclusions are presented based on the research findings, summarizing the main lessons, policy implications, and future research directions.

2. LITERATURE REVIEW

Traditionally, economic development has been based on the idea of structural transformation, which refers to the systematic reallocation of labor and output across sectors with low and high productivity (such as manufacturing, services, and agriculture) (Cevik et al., 2019; Nanga et al., 2024; Broeck et al., 2023). The process changes the sectoral structure of output and reforms employment patterns, productivity levels, and the overall growth path of the economy (Beylis et al., 2020). The classical pattern of development remains predictable: as agricultural production increases, surplus labor is directed to other production areas and finally to the service sector, which becomes predominant at more advanced stages of development (Cevik et al., 2019).

Theoretically, the framework of structural transformation is based on the interplay among technological advancements, capital accumulation, and sector-specific productive differentials, which collectively drive changes in output and employment composition (Kongsamut et al., 2001; Cevik et al., 2019). However, the empirical data indicate that. In contrast, the output transformation process may be relatively quick, but employment transformation usually takes longer because modern industries are more capital- and knowledge-intensive (Fox et al., 2018). Therefore, the contribution of agriculture to GDP can decrease sharply in most lower-middle-income countries, even though most workers still work in the agricultural sector (Fox et al., 2018).

Empirical analyses worldwide show significant diversity in the rates and patterns of structural change across regions. The movement of labor, especially in low-productivity agriculture, to more productive manufacturing and services, especially in East and Southeast Asia (especially in South Korea, Malaysia, and Vietnam), has been highly growth encouraging (Nissanke, 2019; Baymul et al., 2019). Long-term investments in manufacturing capacity and human capital make the Asian model stand out, as income transitions much faster than in non-Asian economies (Foster-McGregor et al., 2016). Conversely, in most economies in sub-Saharan Africa and Latin America, structural transformation has been productively reduced, whereby employment is moving out of agriculture too soon and directly into low-productivity service sectors, skipping the manufacturing phase that is essential to continue driving productivity (Sen, 2019; Baymul et al., 2019; Nissanke, 2019).

International experience indicates that transformation effectiveness is determined by both macroeconomic and institutional factors, such as trade transparency, infrastructure levels, population changes, and human capital development, as well as microeconomic factors, including labor mobility and company-level dynamics (Cevik et al., 2019). The high rate of population growth has the potential to decelerate employment change despite the ongoing output diversification process, which is why employment-intensive growth policies are necessary (Fox et al., 2018). In addition, trade and technological shocks may entail high adjustment costs, especially when labour mobility is low, and displaced workers and new industries may experience long-term mismatches (Hollweg et al., 2014).

Another critical approach to transformation is wage employment relations. Evidence from India and other developing economies demonstrates that in the process of structural change, employees abandon agricultural self-employment and move to gain earnings in industries and services through wage employment (Hasan et al., 2019). Larger, urban-centered firms have a greater chance of attracting higher

payments and offering better working conditions; thus, the focus is on policies to encourage the development of the formal sector and urban employment. Labor market institutions play a critical and complex role in this process. Protectionist and flexible policies, such as severance payments that work to secure the worker but do not restrict their mobility, may help to promote welfare and facilitate the process, while the rigidity of the dismissal legislation would push workers toward informality (Ranjan et al., 2018).

Cross-country evidence of specific labor market patterns in developing and developed economies also exists. Employees in low-income nations are facing longer working hours, greater informality, and less mobility across sectors than employees in developed economies (Lagakos et al., 2023; Bick et al., 2021). The fact that self-employment is being replaced by wage employment is an indicator of successful structural change, and much of the rise in the total working hours with economic development can be attributed to this process (Lagakos et al., 2023). The other method is occupational upgrading: in addition to the development of service-based and knowledge-intensive jobs, these jobs are on the rise across industries, indicating more radical technological and organizational change (Duernecker et al., 2021; Dinkelman et al., 2024).

Structural change has been accompanied by new forces of change, including automation, digitalization, and the rise of the platform economy, two of which have emerged in recent technological changes. These tendencies have transformed the form of traditional employment relations, making them less stable in terms of wages and more mobile and precarious (Li et al., 2022). The automation of developing countries is also an interesting issue, as it reduces the labor-intensive nature of the production process and may lead to premature deindustrialization (Autor et al., 2020). This is due to the polarization of developing and developed economies, which are taking away middle-skill jobs, and the polarization of developing countries is incomplete, as low-skilled workers are not keeping pace with the growth of highly skilled workers.

However, there are essential channels through which the transfer of surplus labor from the agricultural and informal sectors to more productive sectors can be critical for sustainable development despite such problems (Basole, 2022). It is the process that occurs due to the concomitant action of within-sector productivity gains (the Solow process), intersectoral labor transfer (the Kuznets process), and the exit of subsistence and a transition to profit pursuits (the Lewis process), and establishes virtuous growth cycles (Donovan et al., 2023). However, the process can still be slowed by unresolved labor market tensions, including skills misfit, low mobility, and sectoral wage differentials in low-income economies (Donovan et al., 2023).

The service sector, which was regarded as a late-stage change driver, has turned out to be a productivity growth engine not only in developed economies but also in developing ones. Information technology, finance, and business process outsourcing, also called trade services, were the main drivers of growth in India after 1990 (Avdiu et al., 2022; Salimova, 2021). Similarly, education and investment in infrastructure have been critical in supporting this change by enabling labor mobility and advancing technology (Laurente, 2022; Martins, 2018). Nevertheless, the shift toward a greater share of the service sector has been shown to lower labor productivity when labor markets lose flexibility and demand workers with higher skill levels (Abbott et al., 2017; Laurente, 2022).

Structural transformation is a complex issue because it must consider the following interdependent areas: industrialization, urbanization, demographic transition, and human capital accumulation (Degu et al., 2019). Failure to make progress in one aspect may bring the entire transformation process to a standstill. Skills mismatch and low absorption capacity are of particular concern in industries across different developing countries, where agricultural activities are more likely to dispose of workers from the farming sector than non-agricultural industries (Palmtag, 2023; Degu et al., 2019). They are also external shocks, including wars and prolonged turmoil, that disrupt the channels of change by killing human capital and demoralizing investment (Adelaja et al., 2021).

The policy implications are that, as a structural change, the interventions to be implemented should involve increasing labor mobility, enabling skill upgrading, and strengthening institutional capacity (Pasieka et al., 2020). The key to modernizing workers in modern areas is education and investment in vocational training. Meanwhile, labor market policy needs to be more receptive than protectionist, which will stimulate labor mobility without undermining security. Investments in transport, telecommunications, and financial infrastructure are also essential to support diversification and connect rural workers to urban and digital markets. Second, developing countries must consider the impact of automation and artificial intelligence, which have the potential to change comparative advantages and shift employment trends (Venkat & Kirshna Kumar Balaraman, 2025).

Despite extensive research worldwide on structural transformation and labor market dynamics, empirical gaps remain in fragile and aid-dependent economies. Afghanistan has a low productive base, aid-based growth, and a volatile labor market; as a result, it has not received much scholarly attention in this framework. Regardless of the economic and labour reallocations in the period between 2017 and 2024, the country does not have systematic, evidence-based research examining the changes in sectoral structures on the employment composition, productivity, and income dynamics. This study thus lies on a crucial gap, in that it empirically investigates structural change of Afghanistan and worker-market transformation, and it offers valuable perspectives of how weak economies may succeed in growing sustainably in an inclusive framework, given that the state remains perpetually dependent on foreign markets and institutions are vulnerable to imbalances.

3. DATA AND METHODOLOGY

3.1 Data

The current paper is based on integrated information collected through multiple institutional and international sources in order to have a strong basis of comparison. The World Bank Group data will serve as the primary data source to reflect national accounts and sector production, the International Labor Organization (ILO) to model unemployment and labor participation (2018-2024), and CEIC Data (2024) to reflect the macro-labor indicators. The additional data were taken on the ACAPS (2024) about the informal economy and on the National Statistics and Information Authority (NSIA, 2024), which offers easy-to-obtain and more up-to-date data about the labor market and demographic distributions. Moreover, Farahi (2024) and Akbari (2025) carried out local empirical research on the post-2021 forces of job loss, structural transformation reversal, and gender-based job inequality. The aggregate of these cross-verified data sets is useful in canceling the differences in the fragmented post-shock statistical system in Afghanistan, particularly in the agricultural job estimates. All the indicators were calculated at constant prices to compare the global employment, which makes their analysis consistent over sources and time (2017-2024).

3.2 Methodology

This study uses a mixed method to examine the dynamics of Afghanistan's labor markets between 2017-2021, considering the quantity, quantity, and availability of data, through which quantitative analyses of the trends of the studied variables are evaluated before and after the 2021 shock, and then combines qualitative structural interpretation with quantitative data to examine the dynamics of Afghanistan's labor markets between 2017 and 2024. In the first stage, a sectoral analysis of gross domestic product and employment shares was conducted to examine labor mobility across sectors before and after the 2021 shock. The assessment mentioned above, conducted comparatively and descriptively, used a temporal analysis of 2017-2024 to determine the volume of labor movement between sectors, the nature of unemployment, and the extent of informal employment. In the next step, an evidence-based interpretive model was used to examine the interaction between macroeconomic shocks, labor mobility, institutional fragility, and structural transformation theory. The analysis model presents the term "reverse structural

transformation," which refers to the regression of labor in the high- and low-productivity sectors during crisis conditions. The combination of micro-level and macro-level dynamics (youth NEET rates and gendered labor outcomes) and macro-level indicators (GDP contraction, informality rates, unemployment) allows the approach to understand multidimensional labor adjustment in Afghanistan following 2021. Such a mixed-methods approach is consistent with the requirements of comparative development research and enhances the explanatory power of the results for fragile and conflict-affected economies.

4. RESULT AND DISCUSSION

4.1 Structural Fragility and Uneven Recovery

On August 15, 2021 (24 Asad 1400), the Islamic Emirate of Afghanistan took over the country. This was a sudden turning point that had a significant impact on the economy and society. After this date, Afghanistan could no longer use the international banking system or its foreign exchange reserves, and the central bank's assets were frozen. The drop in foreign aid and the resulting uncertainty led to a sharp decline in overall demand, which in turn triggered capital flight and a significant drop in investment confidence (World Bank Group, 2024; Afghanistan, 2023; Sahibzada et al., 2021).

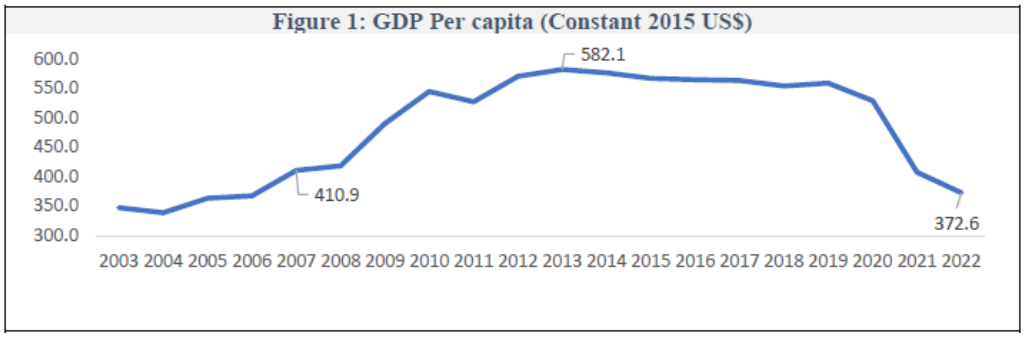

Figure 1. Long-Term Fluctuations in Afghanistan's GDP per Capita (Constant 2015 US$), 2003–2022

Source: World Bank Development Indicators Database

Figure 1 shows that Afghanistan's GDP per capita grew steadily from 2003 to 2012, reaching a high of US$582.1 in 2012, after ten years of high aid inflows and growth driven by rebuilding. But in the years that followed, the average growth rate fell below the population growth rate. In 2021, the Islamic Emirate of Afghanistan took over, and GDP per capita fell sharply to US$372.6 in 2022, its lowest level since 2008. This was a 27 percent drop in total output.

As a result, Afghanistan's gross domestic product (GDP) immediately fell by 27.0%. This event brought the modern parts of the economy to a halt, which had previously accounted for a large share of total output. In 2016, estimates indicated that the services sector accounted for 55.9% of GDP, industry for 21.1%, and agriculture for 23.0%. The financial shock caused a drop in overall demand and a liquidity freeze, hurting the services and manufacturing sectors significantly. This pushed workers toward low-productivity subsistence and informal activities (Afghanistan, 2023; Sahibzada et al., 2021).

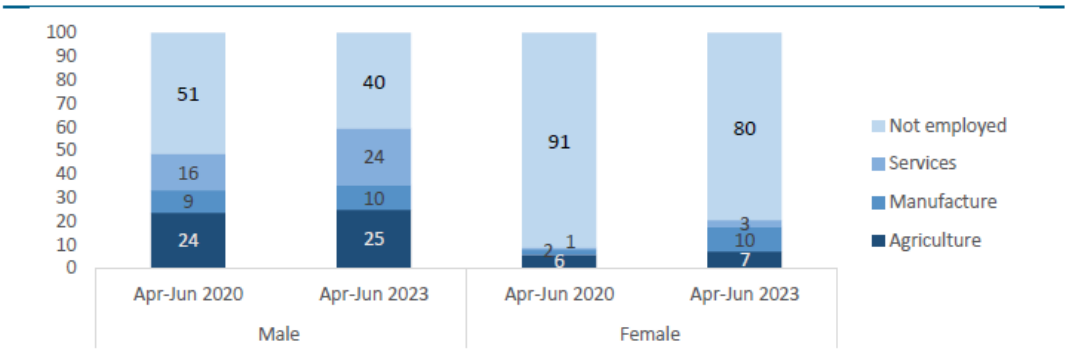

Figure 2. Sectoral Distribution of Youth Employment in Afghanistan by Gender, 2020–2023

Source : World Bank, 2025

The changes in the youth employment structure in Afghanistan were enormous, based both on sector and gender, as illustrated in Figure 2. The male job market was still relatively diverse, with the major ones being agriculture (25 percent), manufacturing (10 percent), and services (24 percent). However, female employment was tilted towards non-employment, although it was somewhat better, that is, 91% in 2020 and 80% in 2023. This change indicates women being pushed to low-productivity activities like agriculture and informal services, primarily for economic reasons and not due to the expansion of formal opportunities. The year 2024 was expected to see a 2.5% rise in the country's GDP, which would be the second consecutive year of economic growth. The sectoral areas of agriculture, mining, construction, and trade have been the main contributors to this growth. Nevertheless, the manufacturing and service sectors are still experiencing significant difficulties because of the unwelcoming business climate, export barriers, and a reduction in foreign aid (Group, 2025; World Bank Group, 2024).

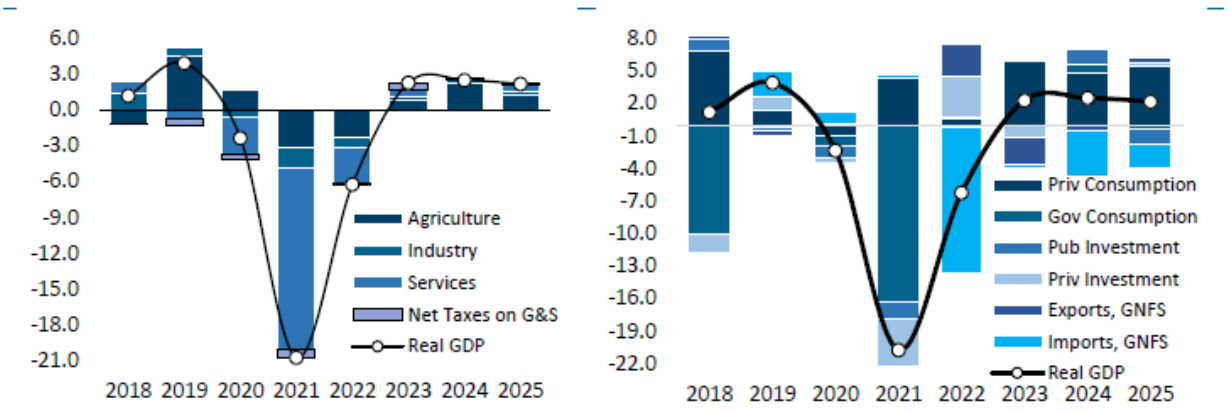

Figure 3. Sectoral and Demand-Side Drivers of Afghanistan's Post-Shock Growth: Evidence of Uneven Recovery and Structural Fragility (2018–2025)

Source: (World Bank, 2025)

The scenario for Afghanistan's growth by sector and demand between 2018 and 2025 is illustrated in Figure 3. This shows that recovery, in general, is weak and patchy. Agriculture is the major contributor to real GDP growth, taking in unemployed workers and providing them with some support. The industrial and service sectors, on the other hand, remain weak, the result of trade barriers, low investment, and institutional constraints. On demand, the short-term expansion was made possible by private consumption, which is the main factor that contributed to the situation of remittances and lower domestic prices, while at

the same time, the rising imports were deepening the external imbalances. The trends signify a recovery that is mainly of the subsistence-resilient type and not structurally transformative, demonstrating that Afghanistan's economy is still very much dependent on agriculture and therefore vulnerable not only to external shocks but also to policy changes.

Table 1. Sectoral Contributions and Economic Performance in Afghanistan

Economic Sector	Share in GDP (2016)	Estimated Performance (2024)	Analytical Note
Agriculture	23.0%	Main driver of recovery growth	Stabilization of domestic demand played a key role
Industry (including mining and construction)	21.1%	Primary source of growth (investment in infrastructure)	Revitalization of mining and infrastructure projects
Services	55.9%	Facing persistent challenges and stagnation	Contraction due to reduced foreign aid and an unfavorable business climate.

Source: World Bank Group, 2024

In Table 1, the structure and performance of the economy of Afghanistan by sector are shown, as well as the pre-crisis GDP shares in 2016 and the projected sectoral dynamics in 2024. From the data, it can be seen that agriculture (which used to account for 23% of GDP) is gradually taking the lead in recovery, mainly due to the stabilization of domestic demand and its role as a lifeline during the 2021 political transition. The industrial sector, including logging and construction, which together account for 21.1% of GDP, has been the primary contributor to short-term growth through their investment in infrastructure, especially the development of mining and the Qosh Tepa Canal. The other side of the coin is the case of the services sector, which used to account for 55.9% of GDP but now still suffers a severe stagnation due to the decline in foreign aid, low institutional activity, and a poor business environment.

Moreover, the country has lost tens of thousands of high-quality Afghans, which has had a very negative impact on the human capital in the country. This brain drain not only hinders the economy's ability to achieve the modern structural transformation but also forces future growth to be dependent on low-productivity models (Rahmat, 2025).

Sectors	2020	2021	2022	2023
Agriculture	4.4	-9.8	-6.6	2.1
Industry	-5.6	-12.8	-5.7	2.6
Mining & Quarrying	1.4	1.7	4.1	6.9
Manufacturing	-7.2	-10.3	-10.0	1.7
Food and Beverages	2.7	2.2	-9.5	1.7
Non-Food Manufacturing	-19.2	-29.4	-11.1	1.6
Electricity, Gas and Water	-3.4	-5.8	-3.0	5.0
Construction	-6.4	-35.4	-0.8	-0.9
Service	-4.6	-30.1	-6.5	2.3
Wholesale & retail trade	-2.1	-14.8	-8.6	17.9
Transport, Repair of Vehicles & Storage	-18.0	-37.4	-0.4	5.9
Restaurants & hotels	-38.1	-42.8	-4.9	1.6
Post and telecommunications	1.0	-18.6	-4.7	1.4
Finance and Insurance	-9.0	-30.0	-6.6	1.6
Real Estate	-0.2	-12.9	-5.2	-5.0
Other Service	-2.0	-37.9	-7.7	-0.8
Plus, Import Duties	-5.4	-16.5	-3.0	11.4
Totals / GDP at Market Prices	-2.1	-20.7	-6.2	2.7

Figure 4. Sectoral Dynamics of Afghanistan's Real GDP Growth, 2020–2023

Source: National Statistics and Information Authority 2024 (2019=100)

As depicted in Figure 4, the Afghan economy has shown a high degree of volatility across the board from 2020 to 2023. The economy's performance not only shrank heavily in 2021 (-20.7%), but also the most affected sectors were agriculture (-9.8%) and industry (-12.8%). Afterwards, the total GDP growth of 2.7% was mainly due to mining (+6.9%), utilities (+5.0%), and trade-related services (+17.9%), and small recoveries took place in 2023. Still, the main economic sectors like construction and real estate were stagnant or continued to decline, thus signaling an uneven recovery.

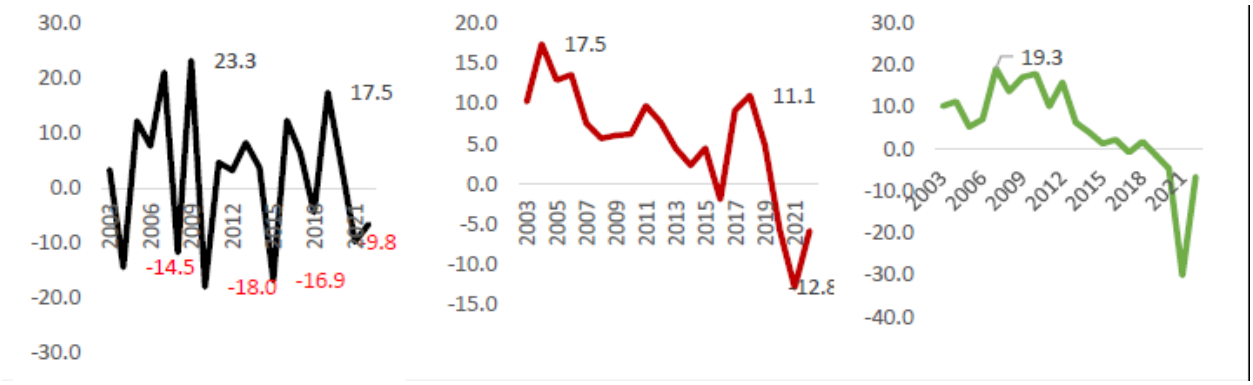

Figure 5. Sectoral and Aggregate GDP Growth Trends in Afghanistan (2003–2023): A Comparative Analysis of Agriculture, Industry, and Services Before and After the Islamic Emirate Takeover

Note: The black figure represents agriculture output (% change year-on-year), the red figure shows industry growth (% change year-on-year), and the green figure depicts services growth (% change year-on-year).

Source: National Statistics and Information Authority 2024 (2019=100)

Afghanistan's economic growth from 2003 to 2023 experienced many ups and downs, as illustrated in Figure 5. It was a time not only of significant change in the political and economic scene, but also of the

revelation of trends within and among sectors of the economy. A very significant and substantial growth rate of around 9 percent per annum characterized the decade from 2003 to 2012 and was mainly due to international aid, reconstruction funds, and security-related inflows. However, the anarchist model of ups and downs based on aid was rapidly becoming extinct. Thus, the slow growth that marked the post-2013 period was even lower than population growth, indicating the depletion of the aid-based model.

Agricultural production (black figure) in Afghanistan suffers from climatic impacts, and that is why it fluctuates strongly. The growth of industries (red figure) follows an unstable downward curve, limited by poor investment, declining construction, and decreased external funding. The services sector (green figure), which was in the past reliant on foreign aid, was not only experiencing reduced demand in the city but also experiencing a decrease in international assistance, and this was the reason why it experienced a sustained decline after 2012.

One can say that the political transition that took place in August 2021 brought about a synchronized breakdown of all industries, which, to a great extent, was the result of the deep-rooted economic shock that the change of regime brought about, the isolation, and the sanctions imposed on the country by the international community. The GDP has slightly improved in 2023 by 2.7 percent; however, it is still about 70 percent of the level reached in 2021, an indication of structural stagnation and a weak, low-growth equilibrium situation in Afghanistan's economy post-transition.

4.2 Macroeconomic Dynamics of the Labor Market: Unemployment, Participation, and Demographic Pressure

Over the past few years, unemployment in Afghanistan's labor market has increased, and the labor force participation rate has changed significantly. The general unemployment rate (calculated by the ILO) rose by 13.28 per cent in 2021 to 14.1 per cent in 2022 and to 15.4 per cent in 2023. It was estimated that the unemployment rate would remain high in 2024 and 2025 (Akbari, 2025; CEICdata.com, 2024).

With the increasing unemployment, the economy of Afghanistan has been experiencing intense pressures due to high rates of poverty of up to at least half of the population and due to food insecurity that challenges a large proportion of about 15 million people. These have led to forced labor participation, as households are forced to enlist more labor, especially youth, to sustain themselves. This influx of involvement, coupled with a shortage of employment opportunities, has compounded labor-market pressures, thereby increasing unemployment. Workers in these conditions of survival can hardly choose their employment: they are forced to accept any available job, most of which are in the informal sector (World Bank, 2024; Farahi, 2024; Afghanistan, 2023).

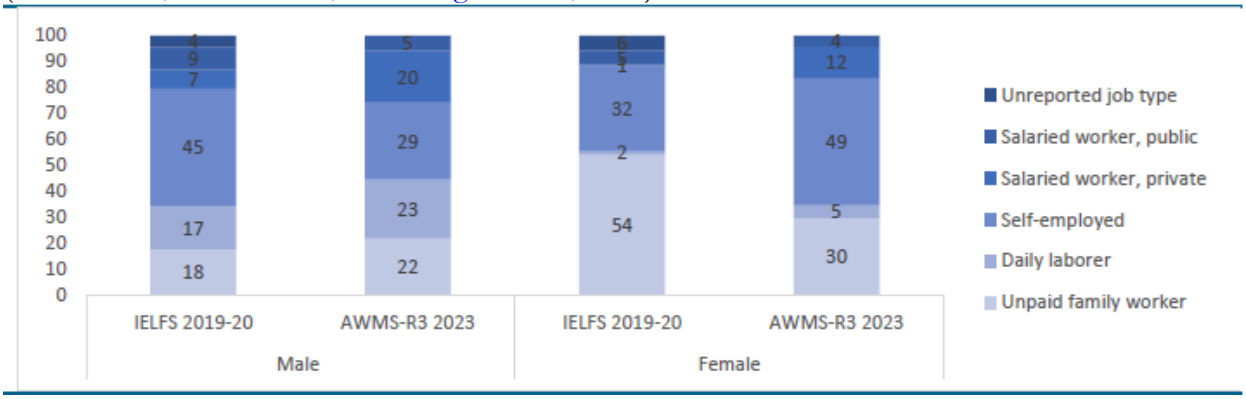

Figure 6. Employment Type Distribution among Afghan Youth by Gender, 2019–2023
Source: (World Bank, 2025)

Figure 6 shows a significant change in the gender makeup of youth employment from 2019–20 to 2023. The percentage of men who were self-employed rose slightly (from 17% to 23%), while the rate of men who worked for wages, especially in the private sector, fell (from 45% to 29%). For young women, the structural change is even more apparent: unpaid family work went from 54% to 30%, and self-employment went from 2% to 49%. This rise is due to a shift toward low-productivity activities done at home, such as handicrafts and small businesses, rather than more formal entrepreneurship.

4.3 Youth Unemployment

One of the most significant problems in Afghanistan's job market is that young people can't find work. In 2021, 52.7 percent of young people were NEET (not in employment, education, or training). This is much higher than the regional and income-group averages. The World Bank (2025) reports that 16.4% of young people aged 15 to 24 are unemployed, underscoring the vulnerability of this group.

Table2. Key labor market indicators of Afghanistan: Trends from 2018 to 2023

Indicator	2018	2021	2022	2023
Overall unemployment rate (ILO estimation)	8.4%	13.28%	14.1%	15.4%
Youth unemployment rate (ages 15–24)	17.7%	16.4%	N/A	N/A
Youth NEET rate (%)	N/A	52.7%	N/A	N/A

Source: Afghanistan, 2023; CEICdata.com, 2024

Table 2 presents the significant indicators of labor markets in Afghanistan between 2018 and 2023, along with the overall trend of an increasing employment crisis during and after the 2021 political transition. Economic decline, institutional breakdown, and decreased investment led to an overall rise in the unemployment rate from 8.4% in 2018 to 15.4% in 2023. Youth unemployment remained at 16.4 percent in 2021, and the number of young people not in education, employment, or training (NEET) rose to 52.7 percent, indicating that the majority of the Afghan population's largest cohort is not connected to the labor market.

4.4 Return Migration Pressure and Regional Disruption

Return migration relations have become a key aspect in defining the process of labor-market adaptation and structural transformation in post-2021 Afghanistan. The recent large-scale repatriation of Afghan refugees, most of whom return from Iran and Pakistan, has worsened the labor-market pressures within the country and demonstrated an inevitable underlying structural frailty in the effectiveness of the employment absorption process and the institutional capacity. These return migration flows, which have already surpassed the millions since 2016 and rose swiftly after 2021, have flooded the already underperforming infrastructure in Afghanistan and burdened the country, placing an unusual strain on its limited productive sector (Kamminga & Zaki, 2018; Farahi, 2024).

This has been coupled with a decline in formal job openings and an influx of returning children, creating a severe imbalance between labor demand and supply. The informality and low productivity that have already characterized the labor market in Afghanistan do not have the mechanisms to absorb such returnees into the wage sector. In this regard, the concept of labor repositioning has played out as a retrogressive adjustment, taking a considerable proportion of workers into subsistence agriculture, daily wage labor, and informal city services. This is a classic case of reverse structural change, in which the shocks (external and internal) accelerate the reallocation of labor back into low-productivity sectors rather than upward mobility. The outcomes of its return migration are extensive: instead of fostering the diversification of the nation and growth in productivity, return migration has deepened Afghanistan's dependence on agriculture and informal survival (World Bank, 2024; Loschmann and Marchand, 2020).

The deportation and voluntary repatriation of the Afghan workers have caused disproportional labor-market effects in the economies of the neighboring countries in the regional sense. The reduction in the number of Afghan migrant workers in Iran has led to high wage inflation, doubling the wages of unskilled labor and increasing the wages of skilled labor to a maximum of 2.5 times (Afghan Paper, 2025). This wage increase underscores the structural dependence of large industries in Iran, including construction, agriculture, and low-end services, on the Afghan labor force. The phenomenon reveals a localized interdependence in labor that has emerged over decades, in which Afghanistan has played both sending and receiving roles in labor mobility shocks. This system has not been in place and has consequently contributed to underemployment and unemployment in Afghanistan, a shortage of labor, and high costs in the host countries.

Institutional discoordination between migration management and domestic labor policy has not helped the reintegration of returned migrants in Afghanistan, to say the least, due to skills mismatches. Numerous returning migrant workers have specific sector experience abroad, especially in construction and manufacturing. However, the local demand for these skills is low because industrialization and urban investment are stagnant. The absence of vocational requalification initiatives or reemployment assistance has fueled the depreciation of this human capital to the extent that it counterbalances the possible productivity spillovers that a process of returning migration would have produced (Garrote Sanchez, 2018; Farahi, 2024).

4.5 Sectoral Transformation of Employment: Reverse Shift and Data Inconsistencies

The labor market in Afghanistan before the 2021 political shock (government transition) followed the general trend of developing economies, with the agricultural sector as the largest employer, accounting for 45.7 percent of total employment —roughly 2.6 million jobs. Social and public services (16.7) followed the retail and hospitality sector (10.8). This type of composition in the industry is what makes it possible to conclude that the country relied on low-productivity and informal jobs before the institutional shocks of 2021(Farahi, 2024).

However, the latest statistics on employment reveal that there is a high level of discrepancy among sources of jobs. Contrary to other data sets showing 44.3 percent in agricultural employment in 2017 and 45.7 percent in 2020, a more recent source shows it to be at 78 percent. The implication of this high dramatic difference is the erosion of homogeneous definitions of the aspect of employment and the mass transfer of labor to subsistence and self-employment activity in the informal sector of agriculture. This deviation highlights the structural shocks that have displaced the workforce out of the productive areas to survival-based lives (Akbari, 2025; Farahi, 2024).

This drastic growth in dependence on agriculture is a powerful sign of a structural change, or the shift of labor from less productive pursuits to more productive ones, as a shock absorber to the household needs in an unstable economy. To that extent, the displaced and unemployed laborers have a new refuge in agriculture and in subsistence self-employment. Not only a turnaround of the overall economic productivity, but also a manifestation of the inability of the formal labor market to provide enough and sustainable employment opportunities (Sen, 2019; Boone and Wilse-Samson, 2021).

The financial and institutional crises induced by the economic and institutional shocks that followed the 2021 political transition led to a mass breakdown of formal employment in Afghanistan. It was estimated that around 2,640,454 jobs had been lost in 2021-2023. The most significant loss of growth went to the services sector, which used to be the most important contributor to GDP. It was fueled by the withdrawal of foreign institutions, the sharp decline in foreign aid, and the cutting of the activities of the public sector. This downturn has made the industry very weak in terms of maintaining talented employees and thus decreased the general employment creation as well as increased the skilled drainage. Such developments, in their turn, have contributed to the increase in structural imbalances and deteriorated the chances of an inclusive labor market recovery (Group, 2025; Farahi, 2024).

The informal economy in Afghanistan has expanded rapidly, unlike during the disintegration of the formal labor market. It is estimated that informal sector activity contributes 73.6 percent of all GDP in the country, nearly twice the figure in neighboring Pakistan (35.7 percent). This expansion has been attributed mainly to internal displacement, decline in formal employment, and reliance on jobs that were not hard to access, like seasonal employment, petty trade, and self-employment. Domination of the informal sector is a serious policy challenge, since it hinders the government's capacity to generate domestic revenue and to implement labor policies, including social protection and minimum wage policies. According to this course, the transition to chronic formalization can occur, and its long-term effects can include productivity, fiscal sustainability, and an inclusive recovery process for the economy (Group, 2025; ACAPS, 2024).

Table 3. Sectoral Employment Structure and Post-2021 Labor Market Transformation in Afghanistan

Sector/Category	Total employment (IELS2020)	Share in Employment (IELS 2020)	Job loss rate (2021–2023)	Structural Transformation Status
Agriculture	2.6 million	45.7%	N/A	Increased dependency after the 2021 shock (up to 78%)
Industry	N/A	18.1% (2017)	N/A	Recession in industries except construction services
Services	N/A	37.6% (2017)	N/A	Severe contraction of the formal sector employment
Total estimated job losses	N/A	N/A	2.64 million	Sharp decline in formal sector employment
The proportion of the informal economy of GDP (2024)	N/A	N/A	N/A	73.6% (2024)

Source: ACAPS, 2024; Akbari, 2025; Farahi, 2024

Table 3 outlines the reform of the Afghan labor market that occurred due to the 2021 political and economic shock. This data demonstrates a strict pattern of restructuring backward, since labor went back to low-productivity agriculture and the employment portion increased to nearly 78 per cent in 2024, contrasted with 45.7 per cent in 2020. In the meantime, the industry had become contracted, unless there was resistance to construction. The services sector, which was one of the biggest employers, was the worst hit as international organizations withdrew and aid-based operations failed. It was shown that approximately 2.64 million formal jobs were lost in the period between 2021 and 2023, which shows the level of economic disruption. In the meantime, the informal sector had risen to 73.6 percent of the GDP, which is the power of informal employment, subsistence-oriented jobs. On the whole, the table shows that the labor market in Afghanistan has fallen back to informality and subsistence employment, compromising productivity growth and the institutional stability of the labor market.

4.6 Capacity Building through Emerging and Infrastructure Sectors

Despite the broader economic decline, other industries such as mining and construction have been singled out in 2024 as possible sources of GDP growth. This trend is primarily fuelled by the introduction of large national and regional-level infrastructure projects that will incrementally restart the economy. For example, the Mes Aynak copper project, when fully realized, is expected to create about 40,000 direct and indirect employment opportunities and to provide the government with an estimated USD 350 million in

tax revenue each year. When well-coordinated, these initiatives would become important capacity-building levers, economic diversification levers, and could provide a means of reinstating formal jobs in Afghanistan (Group, 2025; World Bank Group, 2024; Gouhari, 2014).

The massive infrastructure projects, including the Qosh Tepa Canal (285 km long), that will be used to reuse about 550,000 hectares of desert lands under farming and the development of major highways (e.g., the Salang corridor) and regional connectivity projects (e.g. the Khaf-Herat railway and TAPI gas pipeline) are central to the facilitation of trade and the economic integration of the region. In addition to facilitating trade, these projects also create large numbers of jobs in construction, transportation, and agriculture, thereby boosting dynamism and reducing unemployment in Afghanistan (Hussaini, 2024; Contemporary Economics, 2024).

Nevertheless, this type of growth, which focuses on infrastructure and extractive sectors, tends to lead to low sustainability and temporary jobs unless it is supplemented by broader private-sector participation and modern services. The high dependence on these industries exposes the economy to changes in commodity prices on the world market, climate changes threatening the agriculture sector, and political instability that makes it challenging to attract stable foreign direct investment in the mining sector. Therefore, in the absence of structural diversification and more robust interpectoral connections, such a growth trajectory will not be translated into sustainable and inclusive economic change (Farahi, 2024).

4.7 Structural Inequalities: The Youth and Gender Employment Crisis

The result of the 2021 institutional shock has been the severe gender division of the labor market in Afghanistan, one of the most notable consequences. The massive deprivation of women in terms of their economic and social involvement in life has resulted in an unequal loss of jobs among women employees. This has not only resulted in an enormous wastage of the human capital of women and their contribution to national production, but also grossly affected the capacity of the economy to realize an inclusive, sustainable, and profitable productivity (Akbari, 2025; World Bank Group, 2024).

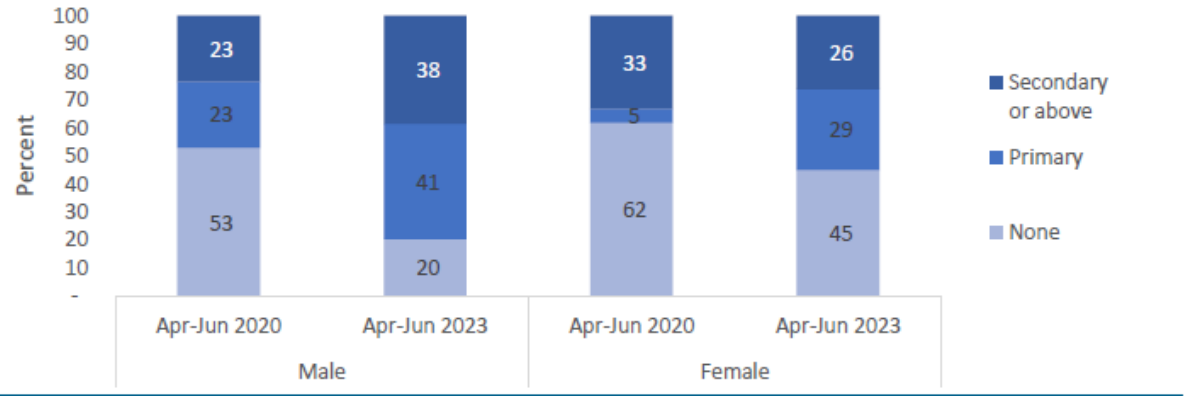

Figure 7. Educational Attainment of Unemployed Youth (Aged 15–29) by Gender in Afghanistan, 2020–2023

Source: World Bank, 2025

Figure 7 indicates that there are varying changes in the educational profile of unemployed Afghan youth in 2020 and 2023. Among males, the trends indicate a real educational improvement: the number of individuals lacking education is decreasing, and the rate of those with secondary education or more is increasing (23 percent to 38 percent). In the case of women, it is a more subtle image. Even though the proportion of women with no schooling was significantly lower (it decreased by half to 45), this did not

imply a higher proportion of highly educated women in the unemployed population. Instead, the rate of women with secondary or higher education decreased to 26% from 33%. This shows that the educational process for young women has been mostly limited to the primary level, and they are not enjoying the same opportunities for higher education and the avenues to higher education that lead to employment as their male counterparts.

It was also seen that in the years 2021-2023, most women lost their jobs, with 67 percent of their careers at risk, compared to 42 percent for men. That is, women had 1.6 times the chance of being laid off than men, and as a result, approximately 641,028 job opportunities were lost among women. This extreme constriction has effectively barred half of the potential labor force in Afghanistan from the formal economy, with a devastating impact on the country's human capital base and family-level economic capacity (Farahi, 2024; Afghanistan, 2023). Usually, the problem of female unemployment in Afghanistan is significantly more significant than that of men, which is primarily explained by the institutional barriers, the absence of social support, and the inability to receive vocational education. In the year 2021, the unemployment rate of young women was 21.4%, which shows that a large number of them had been left out of the formal labor market (World Bank, 2025).

Youth employment is also further noted to contribute to gender differences, as indicated by sector distribution. Young men have a more balanced distribution across industries (30) and services (29), but young women are very much concentrated on sectors that are subsistence-based. Approximately 66 per cent of women in the agrarian industry are in the agricultural sector as compared to 41 per cent of men (World Bank, 2024). The extreme structural chasm is depicted by the fact that women are very concentrated in the agricultural sector and have extremely little representation in the industry and services (only 17% of farming, 17% of industry, and 17% of services) (World Bank, 2024).

5. CONCLUSION AND RECOMMENDATION

The empirical findings demonstrate that the sectoral transformation of Afghanistan has reversed since 2021, that is, the disintegration of formal employment and the rapid growth of informality. The post-political shift reduced the economy by almost a quarter, leaving it without approximately 2.6 million jobs. There was a predominant shift towards subsistence farming, where labor was employed in this sector to nearly 78 percent, implying a reversal of structural development. The informal sector has become approximately 74 percent of total GDP, which reveals the strength of low-productivity and unregulated activities. Meanwhile, the exclusion of women increased: out of 2021-2023, women were deprived of about two-thirds of their jobs, dropping their role in the formal economy to extremely low percentages. Unemployment rates and NEETs are extremely high among the youth, and this is evidence of a significant structural problem. Despite light indicators of recovery in agriculture, mining, and construction, these areas have no productivity linkages and institutional basis to enable sustainable recovery. All in all, the results indicate that the labor market in Afghanistan is mired in a cycle of more informality, demography, and loss of skills, factors that prevent the development of human capital and long-term economic stability. The policy to achieve a sustainable recovery should therefore be coordinated, and it should be aimed at diversification, gender inclusion, and strengthening of institutions.

Based on the results, the current study will propose a series of evidence-based policy guidelines to minimize labor-market frictions and trigger a sustainable structural transformation. To begin with, there must be gender stabilization and social investment in the labor market. Policies that limit women's participation should be eliminated, and special efforts should be made to encourage women's entrepreneurship and equal access to vocational training, particularly in small-scale manufacturing and agribusiness, to avoid overrepresentation of women in subsistence farming, where 66 percent of young working women are employed at present. Second, it is essential to reenergize the financial infrastructure for the private sector. The banking system needs to be reformed (by addressing non-performing loans (NPLs),

restoring liquidity, and enhancing regulatory supervision) to attract both foreign direct investment (FDI) and domestic capital into productive sectors and services. Third, there should be the promotion of quality investment and value chain integration to get out of a situation of short-term infrastructure projects. The economic policy must be directed towards innovative value-added sectors, including textile and food processing, which have high labor-absorbing potential. Long-term collaboration with organizations such as the ILO might help ensure employment-focused growth policies. Lastly, rural labor absorption capacity should be increased through massive agricultural and infrastructure projects, such as the Qosh Tepa Canal, which may create approximately 200,000 jobs, and should be the central pillar of the transformation policy. These projects should be accompanied by specific training programs that will enable the rural employees with skills that are applicable in mechanized agriculture and construction. Collectively, these measures will be able to transform the labor market in Afghanistan, over time, to become less survival-related informality and more productive, inclusive, and resilient economic growth.

Ethical Approval
This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki.

Informed Consent Statement
Not applicable.

Authors' Contributions
Not applicable.

Disclosure Statement
The author(s) reported no potential conflicts of interest.

Data Availability Statement
The data used in this study are accessible from the international database mentioned in the Data and Methodology section.

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Notes on Contributors

Abdul Ahmad Pooya
Abdul Ahmad Pooya is affiliated with Hunan University

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