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Analysis of the Employment Effect of the Chinese FDI on the Ethiopia Economy

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Abstract: This research highlights the critical need to examine how Chinese Foreign Direct Investment (FDI) influences employment in Ethiopia, particularly given the nation's growing reliance on external capital to stimulate job generation. Employing an Autoregressive Distributed Lag (ARDL) model with national time-series data, the study evaluates the effects of Chinese FDI on employment in both the short and long term. The analysis reveals a substantial positive influence in the long run, most notable in labour-intensive industries such as manufacturing and construction, whereas the short-term impact remains constrained due to mismatches in workforce skills and the predominance of capital-intensive project designs. Considering that China contributes nearly half of Ethiopia's total FDI inflows, the findings emphasise the necessity of aligning domestic labour market capacities with the structural characteristics of incoming investments. The outcomes offer empirically grounded guidance for formulating policies that optimise employment benefits through targeted labour market interventions.

Introduction

FDI is widely recognised as a major catalyst for economic development in emerging economies, as it provides financial resources, facilitates technological progress, and introduces managerial expertise that collectively support sustained economic expansion (Dunning & Lundan, 2008; UNCTAD, 2023). Beyond enhancing productivity, FDI contributes substantially to job creation, infrastructure advancement, and industrial growth, making it a vital instrument for nations seeking rapid economic transformation (Arnal & Hijzen, 2008). Among its various advantages, employment generation stands as one of the most notable outcomes of FDI. This occurs when foreign enterprises establish new operations, expand existing ones, and strengthen domestic industries through supply chain linkages (Ndikumana & Verick, 2008). From a theoretical perspective, FDI promotes employment through two principal mechanisms: direct and indirect effects. Direct effects arise from positions created within foreign-owned firms, while indirect effects result from heightened demand for goods and services in the local economy, alongside knowledge spillovers that enhance domestic productivity (Jenkins, 2006).

The extent to which FDI creates sustainable employment depends significantly on the host country's absorptive capacity, the skill profile of its workforce, and the regulatory framework governing foreign investment (Makwembere, 2014). While some research points to substantial employment gains from FDI, other studies highlight that these benefits are not universal (Jenkins, 2006). Evidence suggests that countries with well-designed FDI policies and favourable business climates achieve greater employment benefits (Todaro & Smith, 2019). In contrast, where investments are highly capital-intensive or concentrated in resource extraction, job creation is often minimal, limiting the broader employment impact (Chen, 2012; Ndikumana et al., 2008). Although the benefits of FDI are well established, several challenges can restrict its employment potential in developing nations such as Ethiopia. A central issue is the gap between the skills demanded by foreign firms and those possessed by the local workforce, which can reduce opportunities for domestic labour (UNCTAD, 2020). Many foreign projects, particularly in manufacturing and infrastructure, require advanced technical skills that may be scarce locally, prompting the importation of skilled personnel and reducing domestic spillover effects (Gebreyesus, 2013).

Overreliance on foreign capital presents another challenge, as it may undermine the long-term growth of domestic industries and increase vulnerability to global market fluctuations (UNCTAD, 2023). Furthermore, investments in capital-intensive sectors such as extractives, infrastructure, and advanced manufacturing often yield limited employment gains due to automation and the reliance on imported technologies, making them less effective in tackling high unemployment in low-income economies (OECD, 2019; World Bank Group, 2024). Unemployment remains a significant concern in Ethiopia, driven by rapid population growth (Geiger & Goh, 2012; Weldegebriel, 2018). In this context, FDI is viewed as a strategic means of generating employment, fostering skills development, and facilitating knowledge transfer (Tadesse, 2014). Among Ethiopia's investment partners, China has emerged as the most prominent, accounting for approximately 46.77% of total FDI inflows over the past two decades (Cheng, 2024). Chinese investments have been channelled mainly into infrastructure, manufacturing, and energy, contributing notably to employment creation and broader economic

development. Despite substantial literature on FDI and employment, there is a scarcity of empirical studies focusing specifically on the employment effects of Chinese FDI in Ethiopia. Previous works (Ackah et al., 2025; Worku, 2025) have primarily examined aggregate FDI's influence on economic growth, offering limited insights into the specific impact of Chinese capital on employment dynamics (Muse & Mohd, 2021). Moreover, much of the existing research relies on cross-sectional or panel datasets, which reveal static correlations rather than capturing evolving, time-sensitive relationships (Raza & Khan, 2024).

This study addresses this research gap by analysing the employment impact of the leading source of FDI, China, which is comparatively more labour-intensive than other major investment origins, using three decades of longitudinal data and an inferential approach. Through the application of the ARDL bounds testing framework, the analysis distinguishes between short-term and long-term employment effects, enabling a nuanced understanding of both immediate and sustained outcomes. By isolating Chinese FDI and comparing it with investments from other sources, the study offers practical insights into the types and origins of foreign capital most effective in promoting employment in Ethiopia (Mamo, 2024; Raza et al., 2024). These findings are intended to inform policy refinements in investment promotion and labour market regulation, aimed at maximising employment outcomes (Cheng, 2024). The subsequent section reviews recent empirical evidence from developing economies regarding the employment implications of FDI, with a particular focus on Ethiopia.

Literature Review

FDI is widely acknowledged for its potential to stimulate economic growth and employment, particularly within developing economies. Numerous empirical studies highlight the employment-enhancing effects of FDI, though findings often differ according to national contexts and methodological approaches. In Sub-Saharan Africa, and Ethiopia in particular, the employment implications of Chinese FDI have drawn increasing scholarly interest, reflecting China's expanding economic influence and strategic partnerships in the region. Empirical evidence across African economies generally indicates a positive association between FDI and employment, although substantial variation exists between countries and sectors. For example, Bekere & Bersisa (2018), using a panel cointegration method for East Africa, identified a strong long-run relationship between FDI inflows and employment growth. Similarly, Tadesse (2014) found that FDI positively influences long-term employment but produces mixed short-run outcomes, often due to institutional weaknesses, infrastructure limitations, and mismatches between investor requirements and domestic labour supply.

Sectoral labour intensity and technology utilisation add further complexity to the literature. Abdulrasaq (2021) demonstrates that labour-intensive industries such as textiles and footwear derive greater employment benefits from FDI than capital-intensive or high-technology sectors. Nabil Khodeir (2016) report that enterprises using less automated production processes generate more jobs, particularly in rural and peri-urban areas. However, they also note that Chinese firms frequently reserve managerial and technical roles for their own personnel, assigning local workers to repetitive, low-skill positions, thereby constraining opportunities for knowledge transfer. As China's global investment footprint has grown, interest in the distinctive features of its FDI has intensified. These

investments often exhibit unique sectoral preferences, financing arrangements, and strong state involvement. Early research, such as [Kaplinsky & Morris \(2009\)](#), observed that Chinese capital in Africa was often concentrated in resource-extractive, capital-intensive sectors, limiting its potential for large-scale job creation. Similarly, [Ayanwale \(2007\)](#) found that while Chinese FDI significantly boosted employment in Nigeria's manufacturing sector, its effects in the service and extractive industries were less pronounced. More recent developments suggest a gradual diversification in China's outward investment strategy. Evidence indicates a shift towards labour-intensive sectors such as light manufacturing, textiles, construction, and renewable energy. [Sun et al. \(2017\)](#) characterise this change as a transition to a "commercial maturity phase," during which Chinese enterprises increasingly localise operations to reduce costs, streamline logistics, and meet host government expectations. [Chen et al. \(2018\)](#) find that this strategic reorientation has improved employment outcomes in host nations, particularly in African countries with low labour costs. This pattern is especially visible in Ethiopia. According to UNCTAD (2020), the country's industrialisation strategy prioritises export-oriented FDI and labour-intensive sectors, aligning closely with China's evolving investment direction. [Gebreyesus \(2013\)](#) reports that Ethiopia's industrial parks have created thousands of direct jobs, particularly for women, though concerns persist over job stability and career progression. [Geda & Meskel \(2009\)](#) similarly note that Chinese firms employ large numbers of local workers in manufacturing, but they highlight inconsistencies in employment quality, pointing to limited skill development, high staff turnover, and inadequate labour protections. Moreover, [Brautigam \(2021\)](#) observe that although Chinese FDI plays a significant role in Ethiopia's industrial transformation, many positions are low-wage and insecure, offering few long-term prospects. Despite these contributions, important methodological and empirical gaps remain. First, much of the literature relies on cross-sectional or pooled panel data ([Brautigam, 2021](#); [Chen, 2012](#)), which fail to capture the dynamic, time-dependent nature of the FDI-employment relationship. Factors such as feedback effects, investment lags, and macroeconomic shocks can substantially alter outcomes over time. Second, many studies aggregate FDI from multiple source countries, obscuring the distinct characteristics and impacts of Chinese capital, which follows different institutional and operational models ([Gelalcha, 2025](#); [Mishra, 2018](#)). Third, few investigations directly address Ethiopia's volatile macroeconomic

environment, which is shaped by policy changes, currency fluctuations, and political instability, all of which can generate structural breaks in the FDI-employment nexus. To address these limitations, this study employs the ARDL bounds testing methodology. ARDL is particularly suitable for developing economies such as Ethiopia, where small datasets, mixed integration orders, and limited statistical resources often constrain the use of traditional time-series techniques. The approach captures both short-run and long-run dynamics, enabling a comprehensive analysis of how Chinese FDI affects employment over different time horizons. By isolating Chinese FDI from other sources, this research offers a clearer understanding of its causal effects on Ethiopia's labour market.

Methodology of the Study

Research Design

This research utilises an exploratory design to investigate the role of Chinese FDI in shaping employment opportunities within Ethiopia. The exploratory approach facilitates the examination of relatively underexplored phenomena, enabling the identification of underlying patterns and contextual dynamics. In addition, a descriptive framework is applied to systematically detail the employment effects of Chinese FDI in comparison with those associated with other foreign investment sources in the Ethiopian context.

Data Sources and Data Collecting Methods

The study utilises secondary data obtained from multiple institutions, including the World Bank (WB), the National Bank of Ethiopia (NBE), the Ministry of Finance and Economic Development (MoFED), the Institute for Economics and Peace (IEP), the Ethiopian Investment Commission (EIC), and the Central Statistical Authority (CSA) of Ethiopia. The time-series dataset spans the period from 1991 to 2023 and serves as the basis for inferential analysis using the ARDL model to assess the contribution of Chinese FDI to employment in Ethiopia. The cointegration analysis further identifies additional determinants of employment, representing covariates associated with Chinese FDI within the Ethiopian context. Owing to data constraints, the descriptive component focuses on a comparison of the principal FDI sources and their respective employment contributions over the period 2002-2023, with data drawn from the Ethiopian Investment Commission.

Table 1: Variable Definitions and Measurements.

No.	Variable Name	Definition	Measurement Unit	Expected Sign	Data Sources
1	EMP	Employment Rate	The percentage of the labour force employed.	Dependent Variable	CSA
2	CFDI	Chinese Foreign Direct Investment	Chinese Foreign Direct Investment as a ratio of total FDI to Ethiopia.	Positive	EIC
3	GPI	Global Peace Index	It ranges from 0 to 5, with lower scores indicating higher levels of peace.	Negative	IEP
4	PCI	Per Capita Income	Total real GDP divided by total population.	Positive	MoFED, WB
5	REMIT	Remittance	It is measured in billions of US dollars.	Positive	NBE
6	OPEN	Trade Openness	It is measured as a sum of exports and imports as percentage of GDP.	Positive	MoFED, NBE
7	CPI	Consumer Price Index	Average change in the prices of consumer goods.	Positive	CSA

Data Analysis Method

The researcher employed both descriptive statistics and inferential analysis, utilising Microsoft Excel and Stata-17

software, respectively. The secondary data were systematically organised within an Excel spreadsheet to facilitate subsequent analysis. Descriptive statistics were applied to conduct a comparative evaluation of Chinese

investments relative to other major FDI source countries. To examine the effects of FDI across the relevant variables, the ARDL model was employed, incorporating cointegration analysis with bounds testing. This approach enables the identification of relationships and potential gaps between dependent and independent variables. Ensuring the stability of the variables under investigation also aids in minimising speculative bias and enhancing the robustness of the findings.

Model Specifications

This study utilises the ARDL approach to model the relationship between the employment rate and its potential macroeconomic determinants, specifically Chinese FDI (ICFDI), per capita income (pci), Global Peace Index (gpi), remittance inflows (lremit), trade openness (open), and inflation (cpi). The ARDL model is particularly appropriate for examining both short- and long-run dynamics when the variables are integrated of order zero [I(0)], order one [I(1)], or a combination of both, but not of order two [I(2)] (Pesaran et al., 2001; Shin & Pesaran, 1999). Accordingly, the ARDL specification for this study can be expressed as:

$$\begin{aligned} emp_t = & \alpha + \sum_{i=1}^p \beta_i emp_{t-i} + \sum_{j=0}^q \gamma_j ICFDI_{t-j} + \\ & \sum_{k=0}^r \delta_k gpi_{t-k} + \sum_{l=0}^s \omega_l pci_{t-l} + \sum_{m=0}^t \theta_m lremit_{t-m} + \\ & \sum_{n=0}^u \lambda_n open_{t-n} + \sum_{p=0}^z \psi_p cpi_{t-p} + \varepsilon_t \quad (1) \end{aligned}$$

The ARDL model can be further extended to incorporate an Error Correction Model (ECM), which facilitates the examination of the adjustment process towards long-run equilibrium:

$$\begin{aligned} \Delta emp_t = & \alpha + \sum_{i=1}^p \beta_i \Delta emp_{t-i} + \sum_{j=0}^q \gamma_j \Delta ICFDI_{t-j} + \\ & \sum_{k=0}^r \delta_k \Delta gpi_{t-k} + \sum_{l=0}^s \omega_l \Delta pci_{t-l} + \sum_{m=0}^t \theta_m \Delta lremit_{t-m} + \\ & \sum_{n=0}^u \lambda_n \Delta open_{t-n} + \sum_{p=0}^z \psi_p \Delta cpi_{t-p} + \lambda ECT_{t-1} + \varepsilon_t \quad (2) \end{aligned}$$

Where:

- emp_t : The employment rate is the main dependent variable with which short-run and long-run determinants are being analysed.
- emp_{t-i} : i^{th} lagged value of emp_t .
- $ICFDI_t$: Chinese Foreign Direct Investment as a ratio of total FDI, often expressed in log form to handle skewness and to reflect the elastic relationship between FDI and employment.
- gpi_t : The GPI reflects the peacefulness of a country, which could influence both employment opportunities and economic stability.
- pci_t : Per capita income, which is commonly used to reflect economic development and its potential impact on employment.
- $remit_t$: Remittance, which can be a source of income and investment in the domestic economy, potentially influencing employment dynamics.
- $open_t$: Trade openness, which is the degree of integration of the economy into global trade, affecting the labour market through both competition and potential growth.
- cpi_t : Consumer Price Index (CPI), a common proxy for inflation, which could have both direct and indirect effects on employment through price stability and economic uncertainty.
- ECT_{t-1} : Error correction term between short- and long-run dynamics.
- ε_t : Error term (disturbance term).

The ARDL framework analyses both short- and long-term dynamics. Lagged independent variables (ICFDI, pci, gpi, lremit, open, cpi) capture short-run effects on employment, while long-run coefficients are derived via the ECM, which indicates the speed of adjustment to equilibrium. ARDL requires that no series be I(2), tests for

cointegration using bounds testing, and careful lag selection through criteria such as LR, FPE, AIC, SIC, and HQ to avoid overfitting. The ARDL methodology offers several advantages, including flexibility in handling variables of mixed integration orders and providing reliable long-run estimates even with small sample sizes (Elian et al., 2020). Nevertheless, limitations exist. The model assumes the absence of structural breaks, which could bias long-run relationships. To mitigate this risk, data preceding 1991 were excluded to account for political transitions and conflict. Model performance may also decline if any variable is I(2), if lag lengths are inadequately specified, or if multicollinearity is present among regressors, potentially distorting both short- and long-run coefficient estimates. The dataset employed in this study is free from these issues, ensuring the robustness of the results.

Diagnostic Tests

Unit root testing was conducted using the Augmented Dickey-Fuller (ADF) procedure to assess the stationarity of the variables. Prior to estimation, the maximum lag length was selected based on the AIC to ensure model appropriateness. Following the regression analysis, several post-estimation diagnostic tests were performed to validate the model. These included the Jarque-Bera test to examine normality, the cumulative sum of squares of residuals to assess model stability, the Lagrange Multiplier (LM) test for detecting autocorrelation, White's test for heteroscedasticity, and the bounds test to confirm the presence of cointegration among the variables.

Results and Discussion

Results of Descriptive Statistics

Table 2 presents descriptive statistics on FDI projects in Ethiopia, disaggregated by six principal investing countries over the past two decades (2002-2023). The dataset includes the number of approved projects, total capital investment (in thousands of Ethiopian Birr), total employment generated, and derived metrics such as capital per project and the capital-labour ratio. Unless indicated otherwise, all figures represent aggregate totals. Collectively, these six countries account for 92.7% of total FDI projects, 95.5% of total capital investment, and 92% of total employment created by FDI in Ethiopia during the 20-year period. The data reveal divergent investment strategies at the country level, ranging from high-volume, labour-intensive projects (e.g., China and India) to low-volume, capital-intensive approaches (e.g., Britain and Saudi Arabia), with significant implications for employment creation and sectoral development. China emerges as the dominant investor in Ethiopia, with the largest capital inflow of 394.9 billion Ethiopian Birr and the most substantial employment impact, generating 1,018,947 jobs across 3,442 projects over the two decades. Despite its substantial employment generation, China ranks fifth in capital per project, reflecting a strategic emphasis on large-scale, labour-intensive industries, particularly in manufacturing and infrastructure, which require both skilled and unskilled labour. Saudi Arabia ranks second in terms of employment impact and capital intensity. Although it undertook only 250 projects, it generated 157,968 jobs, yielding a high employment-to-investment ratio. This pattern suggests that Saudi investments, primarily concentrated in mechanised agriculture and agro-processing, are comparatively capital intensive (see Table 2).

Table 2: Labour Market Impact of Major FDI Source Countries in Ethiopia (2002-2023).

Country	Number of Projects	Capital' In Birr	Total Employment	Rank in Total Employment	Capita per Project	Capital-Labour Ratio Rank
China	3442	394,875,802	1,018,947	1	114,722.78	5
Saudi Arabia	250	64,149,613	157,968	2	256,598.45	2
India	370	36,116,517	131,280	3	97,612.21	6
USA	760	101,395,012	112,807	4	133,414.49	4
Turkey	419	63,652,619	111,161	5	151,915.56	3
Britain	405	146,344,055	50,928	6	361,343.35	1
Total	5646	844,204,508.7	1,719,495			
	92.7%	95.5%	92%			

Source: Ethiopia Investment Commission Report (2002-2023).

India, despite registering the lowest capital inflow among the six countries at 36.1 billion Birr, ranks third in employment creation, generating 131,280 jobs. This reflects India's focus on labour-intensive sectors such as textiles, pharmaceuticals, and small-scale manufacturing. The USA and Turkey contribute comparably to employment, producing 112,807 and 111,161 jobs, respectively. In contrast, Britain, although investing a substantial 146.3 billion Birr, ranks lowest in employment creation with only 50,928 jobs and exhibits the highest capital intensity. British FDI is predominantly directed towards capital-intensive sectors, including finance, telecommunications, and consultancy, which inherently generate limited employment. This pattern contrasts markedly with China, whose investments are closely aligned with Ethiopia's industrialisation strategy, encompassing large-scale manufacturing facilities and infrastructure development (see Table 2).

Results of Inferential Statistics

Diagnostic Tests Results

The stationarity tests, conducted using both the ADF and Phillips-Perron procedures, indicate that all variables became stationary after first differencing, except for CPI and FDI. The outcomes of the bounds cointegration test and ECM estimation within the ARDL framework are sensitive to the lag structure of the endogenous variables, highlighting the need to determine the optimal lag length prior to conducting vector error correction and cointegration analyses. Multiple selection criteria were applied to identify the appropriate lag order, including LR, FPE, AIC, SIC, and HQ. Five out of six criteria suggested a lag length of four, which was consequently adopted for this study. Post-estimation diagnostics confirmed that the ARDL model is stable, residuals are normally distributed, and variance is homoscedastic. Detailed results are available upon request.

Table 3: ARDL Bounds Test for Cointegration.

H0: No Levels Relationship F = 4.927 t = -4.967 Critical Values (0.1-0.01), F-Statistic, Case 3							
	[I_0]	[I_1]	[I_0]	[I_1]	[I_0]	[I_1]	[I_0]
	L_1	L_1	L_05	L_05	L_025	L_025	L_01
k_6	2.12	3.23	2.45	3.61	2.75	3.99	3.15
	4.43						
Critical Values (0.1-0.01), T-Statistic, Case 3							
	[I_0]	[I_1]	[I_0]	[I_1]	[I_0]	[I_1]	[I_0]
	L_1	L_1	L_05	L_05	L_025	L_025	L_01
k_6	-2.57	-4.04	-2.86	-4.38	-3.13	-4.66	-3.43
							-4.99

Source: Authors Own Computation by STATA 2024.

Cointegration analysis is essential when variables exhibit mixed integration orders, such as a combination of I(0) and I(1). The ARDL approach, as outlined by Pesaran et al. (2001), is particularly suitable in such contexts, as it allows simultaneous estimation of short-run dynamics and long-run relationships without pre-testing for the order of integration, provided that no variable is I(2) or higher. Within this framework, cointegration is assessed using the bounds testing procedure. The bounds test provides critical value thresholds: a lower bound corresponding to I(0) variables and an upper bound for I(1) variables. If the F-statistic exceeds the upper bound, the null hypothesis of no cointegration is rejected, indicating a long-run relationship. If the F-statistic falls below the lower bound, the null cannot be rejected, suggesting no cointegration. Values between the bounds yield inconclusive results. As shown in Table 3, the F-statistic of 4.927 exceeds all critical values at different significance levels, confirming a long-run cointegrated relationship between employment and Chinese FDI inflows in Ethiopia.

Long-Run Relationships

Three variables—ICFDI, pci, and cpi—are statistically significant at the 5% significance level in the long run. The results presented in Table 4 indicate that ICFDI exerts a significant and positive long-run effect on employment in Ethiopia. The regression coefficient for ICFDI is positive and significant (0.011), implying that a 1% increase in ICFDI corresponds to a 1.13% ($p < 0.01$) rise in the employment rate or a reduction in the unemployment rate. This underscores the pivotal role of ICFDI in job creation, establishing it as a key driver of labour market expansion in Ethiopia. The prominence of ICFDI in Ethiopia's industrial sector, particularly in manufacturing, construction, and infrastructure, has been instrumental in promoting employment growth. In contrast to capital-intensive western FDI, ICFDI is labour-intensive, absorbing a larger number of Ethiopian workers per unit of investment. Moreover, Chinese investments in industrial parks such as Hawassa and Dukem have generated substantial employment opportunities, especially in the textile and leather sectors.

Table 4: Long-Run Results of ARDL Regression.

Variables	Coefficient	Std. err.	P>t	[95% Conf. Interval]	
ADJ	-0.7527	0.15153	0.003	-1.1235	-0.3819
lnCFDI	0.0113	0.00163	0.000	0.0074	0.0154
lnPCI	-0.0634	0.01328	0.003	-0.0959	-0.0309
GPI	-0.0119	0.00573	0.083	-0.0259	0.0021
Remittance	-0.0015	0.00589	0.809	-0.0159	0.0129
Trade Openness	0.1439	0.07261	0.095	-0.0337	0.3216
CPI	0.0012	0.00026	0.003	0.0006	0.0018

Source: Authors Own Computation by STATA 2024.

Beyond direct employment, ICFDI stimulates indirect job creation by supporting supply chains and service sectors: (Geda et al., 2009; Miao et al., 2021). While long-run FDI-growth effects are generally positive, short-run impacts may be negative or insignificant (Geiger et al., 2012; Nahidi & Badri, 2014; Weldegebriel, 2018). ARDL results Table 4 show that pci has a significant negative long-run effect on employment (-0.063, $p < 0.01$), likely reflecting uneven growth, capital-intensive public projects, sectoral automation, and a mismatch between workforce skills and expanding sectors, consistent with Pflüger et al. (2013) and Rizvi & Nishat (2009). The CPI coefficient in Table 4 demonstrates a statistically significant and positive long-run effect on employment in Ethiopia, with a small coefficient of 0.0012 ($p < 0.01$). This suggests that controlled inflation may moderately enhance employment if long-run stability is maintained, even in contexts of high short-term inflation. Controlled inflation can stimulate economic activity, support job creation, reduce real wage pressures, and enhance labour demand, while indirectly fostering economic expansion through more competitive

export industries. These results align with Kang (2022), Khaliq & Noy (2007), Mkombe et al. (2021), and Ndikumana et al. (2008). The speed of adjustment, a key parameter in ARDL, is -0.75, indicating a stable (magnitude between 0 and 1) and convergent (negative coefficient) model. This implies that 75% of disequilibria are corrected annually, with the system attaining long-run equilibrium in approximately 1.33 years. The model's goodness of fit is reflected in an adjusted R^2 of 0.9202, indicating that 92.02% of variations in employment are explained by the independent variables included in the model.

Short-Run Dynamics

In the short run, ICFDI, pci, and lremit are statistically significant at the 5% level. Contrary to the long-run findings, short-run analysis indicates that ICFDI exerts a negative effect on employment in Ethiopia. This is reflected in the coefficient of -0.0077 ($p < 0.01$) for the current period (D1) and -0.0042 ($p < 0.05$) for the one-period lagged difference (LD), as presented in Table 5.

Table 5: Short-Run Results of ARDL Regression.

Variables	D.emp	Coeff.	Std. err.	T	P>t	[95% Conf. Interval]	
EMP	LD.	-0.2383	0.179	-1.33	0.232	-0.6764	0.1998
	L2D.	-0.2858	0.192	-1.49	0.188	-0.7563	0.1846
LNCFDI	D1.	-0.0077	0.001	-4.24	0.005	-0.0122	-0.0033
	LD.	-0.0042	0.001	-3.21	0.018	-0.0073	-0.0010
LNPCI	D1.	0.05871	0.034	1.70	0.141	-0.0260	0.1434
	LD.	-0.0133	0.018	-0.71	0.505	-0.0592	0.0326
GPI	D1.	-0.0384	0.018	-2.12	0.078	-0.0826	0.0058
	LD.	-0.0055	0.004	-1.30	0.243	-0.0159	0.0049
LNREM	D1.	-0.0033	0.003	-0.96	0.375	-0.0118	0.0052
	LD.	-0.0033	0.003	-1.06	0.331	-0.0108	0.0043
TRADE OPENNESS	D1.	-0.0052	0.003	-1.72	0.136	-0.0126	0.0022
	LD.	-0.0074	0.002	-3.27	0.017	-0.0129	-0.0019
CPI	D1.	-0.0460	0.042	-1.09	0.319	-0.1498	0.0577
	LD.	-0.0009	0.0002	-3.84	0.009	-0.0014	-0.0003
_cons	D1.	-0.0005	0.0001	-2.96	0.025	-0.0008	-8E-050
	LD.	-0.0002	0.0001	-2.07	0.084	-0.0005	3.9E-05
_cons		1.37819	0.270	5.10	0.002	0.7168	2.0396

Source: Authors Own Computation by STATA 2024.

The findings indicate that while ICFDI is generally regarded as a driver of economic growth, its immediate effects on employment can be disruptive. The negative short-run impact can be attributed to several factors. Initially, ICFDI inflows often impose adjustment costs as foreign firms modernize production processes and introduce advanced technologies, which may displace existing workers in labour-intensive sectors. This transition from traditional methods to capital-intensive operations can temporarily reduce employment levels. Furthermore, short-term jobs created by ICFDI may require specific skills that the current workforce lacks, leading to a skills mismatch and exacerbating unemployment. These dynamics highlight the temporal lag between the inflow of ICFDI and its full absorption into the local labour market (Cheng, 2024; Muse et al.,

2021). Another factor contributing to the short-run negative effect is the initial tendency of ICFDI to target sectors with low immediate employment potential, such as resource extraction or capital-intensive industries during the earlier period (1990s). However, data from 2002-2023 indicate that Chinese investments have increasingly shifted towards labour-intensive sectors (see Table 2). Additionally, intensified competition from foreign firms can crowd out domestic businesses, causing layoffs and closures, reinforcing the need for policies that mitigate short-term adverse effects (Nahidi et al., 2014). Remittances exhibit a statistically significant but negative short-run impact on employment, particularly in their lagged effect (LD lremit: coefficient = -0.0074, $p = 0.017$) (see Table 5). This negative association can be explained by the potential disincentive for labour

participation created by remittance inflows, as households may rely on these funds as an alternative income source, reducing engagement in employment or entrepreneurial activities. Moreover, remittances are often directed towards consumption rather than productive investment in the short term, limiting their capacity to generate employment. These findings suggest the importance of channelling remittance flows into productive uses, such as skill development or business creation, to enhance their economic impact (Chanie, 2017; Mkombe et al., 2021; Pinn et al., 2011). The short-run analysis of CPI indicates a significant but negative impact on employment, with the current-period first difference (D1: CPI) coefficient at -0.0009 ($p = 0.009$) and the one-period lagged difference (LD: CPI) coefficient at -0.0005 ($p = 0.025$) (see Table 5). Although the magnitudes are small, they suggest that inflation negatively affects employment in the short term. This effect arises from several economic mechanisms. Prolonged high inflation, as experienced in Ethiopia over the past decade, creates uncertainty that may deter investment. It also erodes household purchasing power, suppressing consumer demand and prompting businesses to scale back production and hiring. Additionally, rising prices increase labour costs, potentially leading employers to reduce workforce size or postpone hiring (Eser et al., 2020; Mishkin, 2015; Nahidi et al., 2014). These dynamics align with prior evidence indicating that inflation reduces real incomes and constrains employment growth (Dendere, 2020; Nahidi et al., 2014; Nguyen et al., 2020).

In the short run, pci , gpi , and $open$ are not statistically significant at the 5% level. This lack of immediate significance may reflect the time lag required for these variables to affect employment. For instance, the neutrality of $open$ could result from the protracted and complex adjustment processes through which trade liberalization impacts the labour market. While trade openness may expand markets and create opportunities in export-oriented sectors, it can simultaneously expose domestic industries to competition, leading to job losses in less competitive areas. The insignificance in the short run suggests that the benefits of $open$ may materialize only after a longer adjustment period. Policymakers can address these dynamics by supporting sectors vulnerable to global competition through subsidies, infrastructure improvements, and skill development initiatives (Ndikumana et al., 2008; Nguyen et al., 2020).

Limitations and Directions for Future Research

This study utilised inferential analysis with a three-decade longitudinal dataset to examine the impact of Chinese ICFDI on employment in Ethiopia. Constraints in data availability precluded the inclusion of FDIs from other principal source countries, such as Saudi Arabia and India, in the inferential modelling, as consistent time-series data were missing for certain years within the study period. To address this limitation, a complementary comparative assessment was conducted using descriptive statistics over two decades of available data. Future investigations could extend this framework by incorporating ICFDI flows from additional major partner countries, contingent upon the availability of disaggregated and consistent time-series data, either for Ethiopia or for analogous developing economies. Incorporating such data would facilitate a more comprehensive evaluation of employment dynamics and allow comparative analysis of the relative impact of ICFDI across different source countries.

Conclusion and Recommendations

Over the past two decades, China has become the dominant source of ICFDI in Ethiopia, accounting for approximately 46.77% of total inflows during this period. This substantial investment has significantly contributed to employment generation, particularly in manufacturing, construction, energy, and infrastructure sectors. Chinese investments have created over one million jobs, surpassing the employment contributions of other major investors, including the USA, Turkey, Britain, India, and Saudi Arabia. Unlike Western FDIs, which typically target capital-intensive sectors with limited job creation, Chinese firms focus on labour-intensive industries requiring both skilled and unskilled labour. The inferential analysis indicates that ICFDI exerts a positive long-run effect on employment by absorbing labour, stimulating local supply chains, and promoting indirect employment. Nevertheless, the short-run effects may be disruptive, as technological adoption, capital-intensive phases, and initial reliance on imported inputs can lead to temporary job displacement.

The findings underscore the significance of political stability, per capita income, trade openness, remittances, and inflation-related policies in maximising the employment benefits of FDI. Although ICFDI demonstrates substantial long-run positive effects, its immediate impact is negative due to early-stage reliance on external inputs, limited local labour integration, and project implementation lags. Similarly, remittances negatively affect short-run employment, reflecting a potential withdrawal of households from the labour market as external income reduces participation incentives. To mitigate these short-run effects, policymakers should implement strategies that enhance domestic labour absorption, channel remittances into productive, employment-generating activities, and strengthen local participation in ICFDI projects through workforce development and integration into supply chains. The observed negative long-run relationship between per capita income and employment highlights the non-inclusive nature of economic growth, signalling the need for interventions that prioritise labour-intensive sectors and equitable income distribution. Moreover, the short-run adverse effect of inflation reinforces the importance of maintaining macroeconomic stability to safeguard employment creation.

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