

Pakistan Labour Market Dynamics: The Way Forward for Unemployment, Informal Employment, And Interventions to Promote Efficiency and Growth of the Labour Market

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Abstract

Pakistan labour market dynamics are characterised by multiple challenges and contradictions that continuously elevate joblessness, widespread informalization of employment and poor structural efficiencies. Using the latest available empirical data, 2018- 2026, this article examines labor market dynamics. Empirical research findings reveal an unemployment rise from 5.8% in 2018 to almost 6.9% as of 2024, and youth unemployment lies between the 11.8-22% range. Informal labour markets continue to dominate employment at 72.5%, causing massive effects on women and other vulnerable workers. There are still prominent gender disparities accentuated by low female LFPR participation, while almost three in four men are actively engaged in the labour force. Skills gaps are critical, only over 60% of the young worker derive from informal training systems, resulting in low productivity and inadequate formal sector absorption. Sectoral dynamics reveal a decline in agriculture alongside increased exceptional expansion in services. Policy analyses divulge weak implementation of existing interventions, making a case for in-depth reforms for efficiency and inclusive growth in TVET, constituting formalization and gender-inclusive programs and institutions.

Keywords: Sectoral dynamics, LFPR participation, Unemployment, Dominance, TVET

Introduction

The Pakistan labour market is at the Proverbial crossroads, entrenched with long-standing structural issues that hinder economic growth and human development. A country of over 240 million people and a mean age of approximately 23 years, Pakistan has one of the world's largest youth bulges, which presents a demographic dividend opportunity. However, it is affected by a "daunting" employment challenge. An estimated 61.04

million make up the nation's total labour force, with unemployment rates oscillating from 5.8-7%; approximately 3.48 million are currently unemployed.

The informalization involves more than 72% of labour force a degraded form of employment without income, without no protection and low productivity all at once [4]. Even our current youth unemployment is an issue, 11.8-22% against far lower adult unemployment [5,6]. At least 1.2 million people have started working at an annual rate, new entrants into the job market (demographic pressures) exceed new employment [7].

Gender gap is also an issue. The present study contributes to a profound diagnosis of, the Unemployment problem in Pakistan, informal employment, labor market non inefficiencies, Employment-Growth inter relation and Public policy. Building on new empirical evidence, it aims to produce policy recommendations based on the evidence that can help improve labour market efficiency and boost inclusive economic growth.

Literature Review

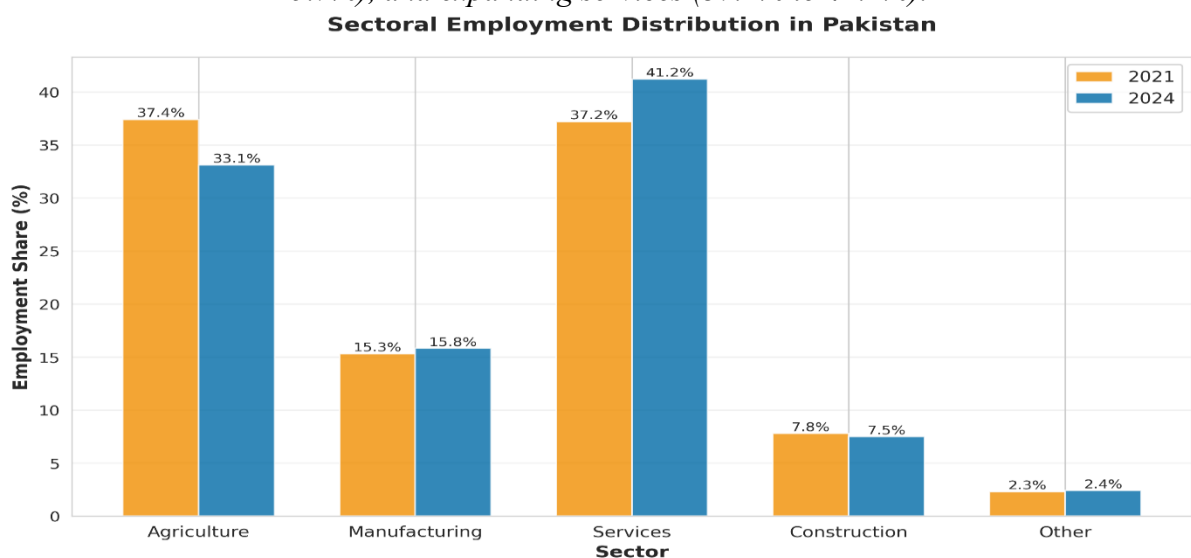
New Pakistani literature on the labour markets emphasizes a mix of structural, institutional and policy drivers of the labour demand process. Diagnosis studies concentrate on long standing unemployment issues by diagnosing it in terms of macro economic instability, constrains in private investments, poor performance of exports and low level job creation despite growth of the economy [11]. Empirical time-series econometric studies reveal that inflation, foreign direct investment, government expenditure and private investment account for the major exogenous cause of unemployment with great magnitude but lesser than anticipated [13], [14].

Informal sector was well researched. Informal employment is believed to account as much as 72-73% of the labour force and develop as a consequence of regulatory burdens, structures taxation, capricious access to formal credit and SME domination outside face of it [15], [16]. Factors influencing formal and informal employment. It is well established in the literature that the factors that influence formal and informal employment include education, age, work experience, and marital status, aspects relating to the household [17].

Youth Unemployment

It has become a defining issue. Scientific evidence suggests that Pakistan's education system has a general

Figure 2: Sectoral shifts showing decline in agriculture (37.4% to 33.1%), stable industry (25.4% to 25.7%), and expanding services (37.2% to 41.2%).



surplus of graduates, whereas there is a scarcity of technical and scientific skills 18. Despite the “Skilling Pakistan” initiative, the ‘TVET sector’ faces the problem of archaic curricula, under-provision of tools and equipment, as well as linkages with industries and lack of capacities [19], [20]. experienced teachers, first-line sales managers) and those that require little or no formal education (power production technician), as well as shortages from other ones, including ICT professionals [10].

The professional world also appreciates a good fit and candidates which aren't already tied-up are unlikely to be considered very closely [10].

Third, limitations of the TVET system hinder young people from becoming employable. Tech The proportion of 16–25 year olds with technical qualifications is just 6% [19]. Fewer than 60% of young workers graduate from informal training systems, with partially trained workers and inadequate supply of unskilled labor that requires absorption into the formal job market [19]. Capacity Overcapacity Redundancy / duplication Learning system The TVET received obsolete curriculum, insufficient learning materials, ineffective linkage with business sector and the inability to expand (20).

Gender Disparities in Pakistan Labor Market (2024)

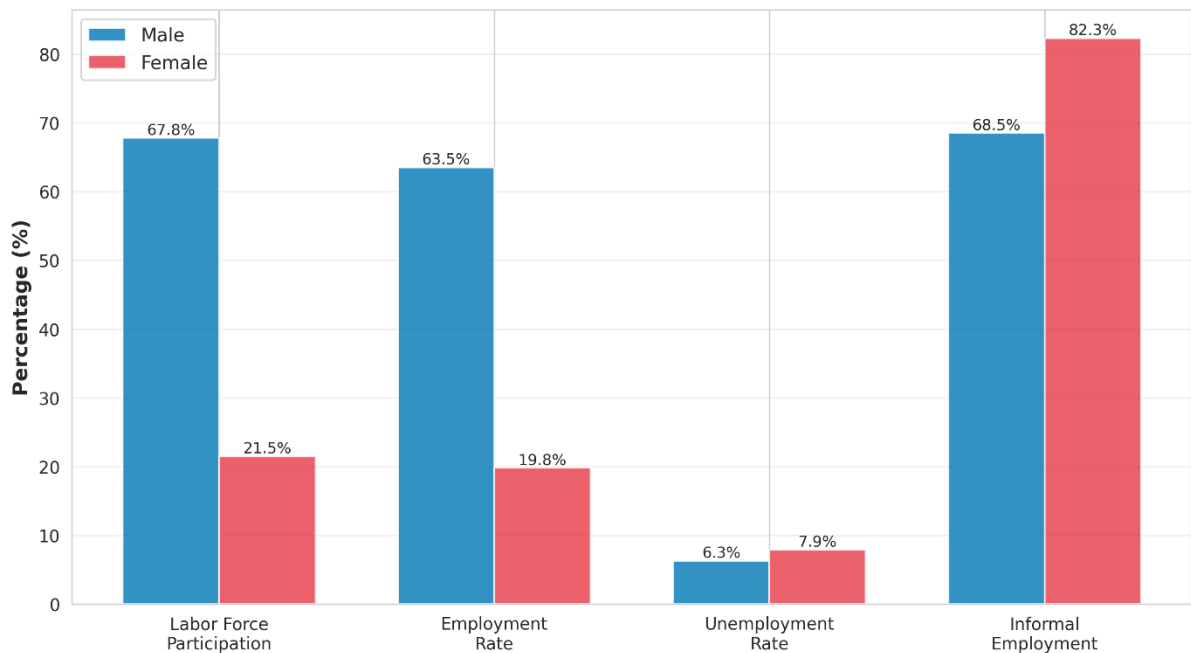


Figure 3: Unemployment rates follow educational levels, with the total unemployment rate for graduates at 20% vs. 5% for the unskilled.

Regional variations are pronounced. Balochistan tops among youth unemployment rates, which shows absence of economic opportunities, infrastructure scarcity and fear provided by the security [6]. The reforms also take long to permeate into the urban setting which anyhow even boasts a lower youth unemployment compared to rural areas but has more educated and semi-educated migrants taking themselves out of formality to find Their Sweat Drenched And Hopeless Future 725 better taproots given its restricting potential to be nebulous (Adam & Freyberg, 2000).

3.3 Gender Disparities in Employment

Pakistan is one of the most gender unequal countries in terms of labour market. Ratio of labour force in females is 21.5 per cent, which is far below the male labour force of 67.8, giving a gender divide of

approximately 46 degrees [4]. This is related to a variety of barriers, including normative constraints, lack of access to education services, poor-quality childcare facilities, discriminatory hiring policies, and concerns about safety [9], [22], [23].

There are many pluses and minuses to working women. The lack of employment is far greater among women (9% compared to 5%), indicating a larger job deficit [4]. A large majority of those involved in ‘informal/poor quality jobs’ are women, concentrated in agriculture, home-based work, and low-skill services [8], [9]. A significant percentage of women are in precarious employment, including contributing family workers or own-account workers without written contracts, social protection, or labour rights [9].

Formal vs Informal Employment in Pakistan (2024)

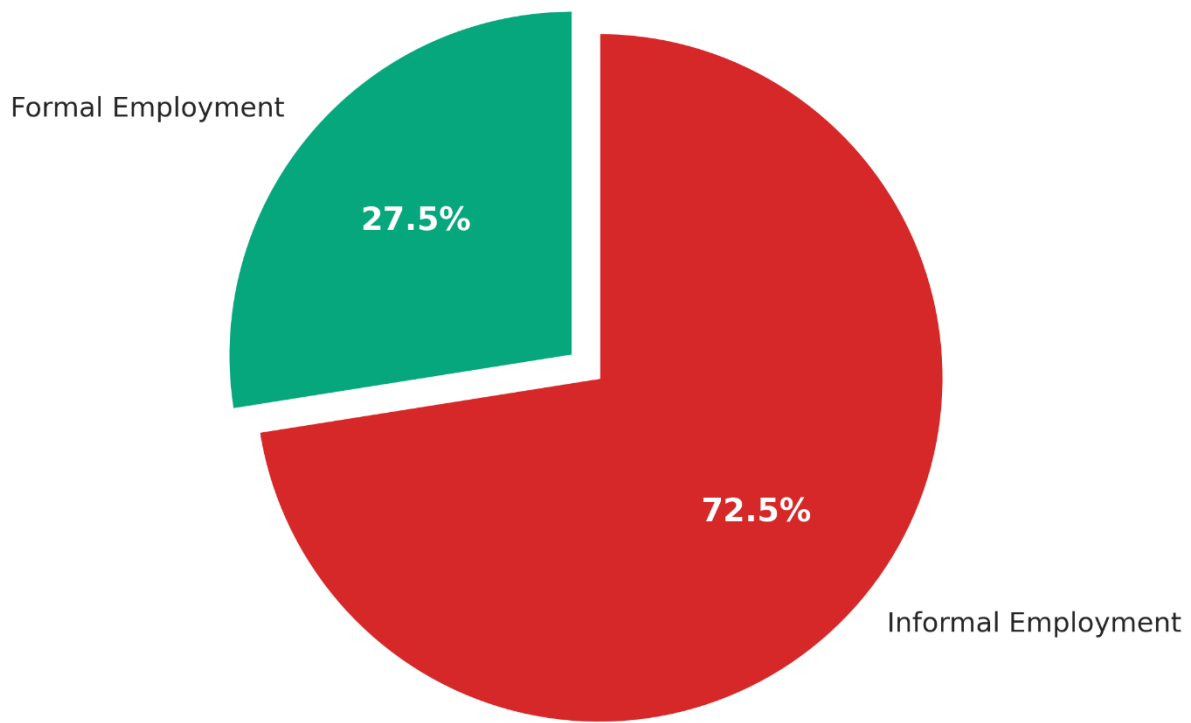


Figure4: Stark differences in gender as the male labour force is at 67.8%, whereas for females it's 21.5, while female unemployment sits at 9 against the male counterpart of 5%.

The branches are clearly segregated by gender. Rural women are predominantly engaged in agriculture and work as unpaid family workers; in contrast, urban women are involved in various activities such as manufacturing (particularly textiles), education, healthcare, and domestic service [8]. The expansion of job opportunities in services has not helped women greatly either, as a large proportion continue to work in low-quality service industry jobs that do not lead to career progression [21]. The gender pay gap persists as women receive much less money for equivalent work as a result of direct discrimination and occupational segregation [22].

3.4 Regional Variations

The regional inequalities also reflect the skewed pattern of economic development in Pakistan. The urban

unemployment rate was 7.23% higher than the rural counterpart, due to a higher labour force participation rate, a larger share of educated jobseekers, and the fact that open unemployment is more widespread urbanwise than underemployment in rural areas [6]. Rural areas, on the other hand, suffer from underemployment and the seasonality of agricultural work, with little formal-sector extension.

Provincial variations are significant. Unemployment, especially among youth, is highest in Balochistan due to limited industrialisation, resource constraints, and security issues [6]. As the largest in both population and economy, Punjab also has a larger share of jobs and sheds the largest number of them. Sindh, where Karachi is located, has high levels of urban unemployment and even more overwhelming informality. In KPK, the state of security and a feeble industrial base, with its reliance on remittances from abroad, is alarming.

The Informal Employment Sector

4.1 Size and Characteristics

Informal sector employment, on the other hand, presents a series of distinctive features. There is no conventional employment contract, no social security coverage (insurance and provision for retirement and unemployment benefits), and, in many cases, no protection present in labour legislation. Income is typically low and intermittent, and employment is insecure and subject to economic downturns. Conditions of work are generally below the standards set for industrial safety and occupational health (industrial safety/occupational hygiene), access to formal credit is limited, and skill acquisition for personal development/career progression is still described as low [15], [16].

Youth Unemployment by Education Level in Pakistan (2024)

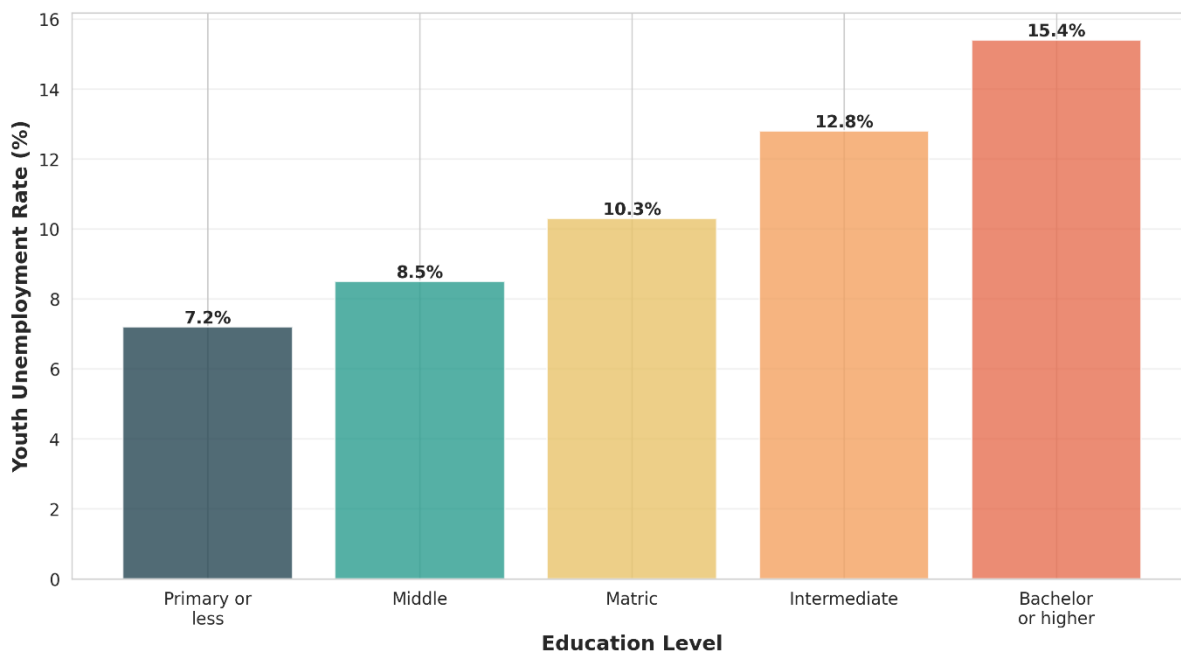


Figure 5: The informal work is high with 72.5 per cent of total work, and the remaining is only 27.5 per cent.

There is all sorts of diversity in the informal economy, from the absolute poorest who work outside of any formal business practice to new growth initiatives, which are difficult partly due to regulatory conditions that are constraining.

4.2 Distribution by sector and the informal sector

The informal economy exists in some sectors. Agriculture remains the predominant sector, and most are not

employed in the formal sector; most are own-account (self-employed) and/or tenant farmers or agricultural wage workers [4]. 41% of the employment structure consists of the tertiary sector, with high informality in retail trade, transportation, personal services, and residential accommodation [25]. Casual workers are employed in large numbers as daily wage labourers on an ad hoc basis without being regularised [15].

The preference for informality is widespread in microenterprises and home-based work. The informal and home-based work is especially prevalent in the textile and garment sector, where much of the labour relies on networks of subcontracting, with a significant proportion performed by women [16]. Job creation- makes 30-40% of GDP and employs approximately 80% of the non-agricultural workforce [26]. But most SMEs are informal or semi-formal. SMEs have been heavily hit by the pandemic, forcing 48% of them to lay off employees during lock down periods [26].

Own account and contributing family workers contribute the largest share of informal employment, which is vulnerable. These are the workers who work outside standard employment relationships, social protection, and regular income, therefore facing a greater risk of poverty and economic insecurity.

4.3 Drivers of Informality

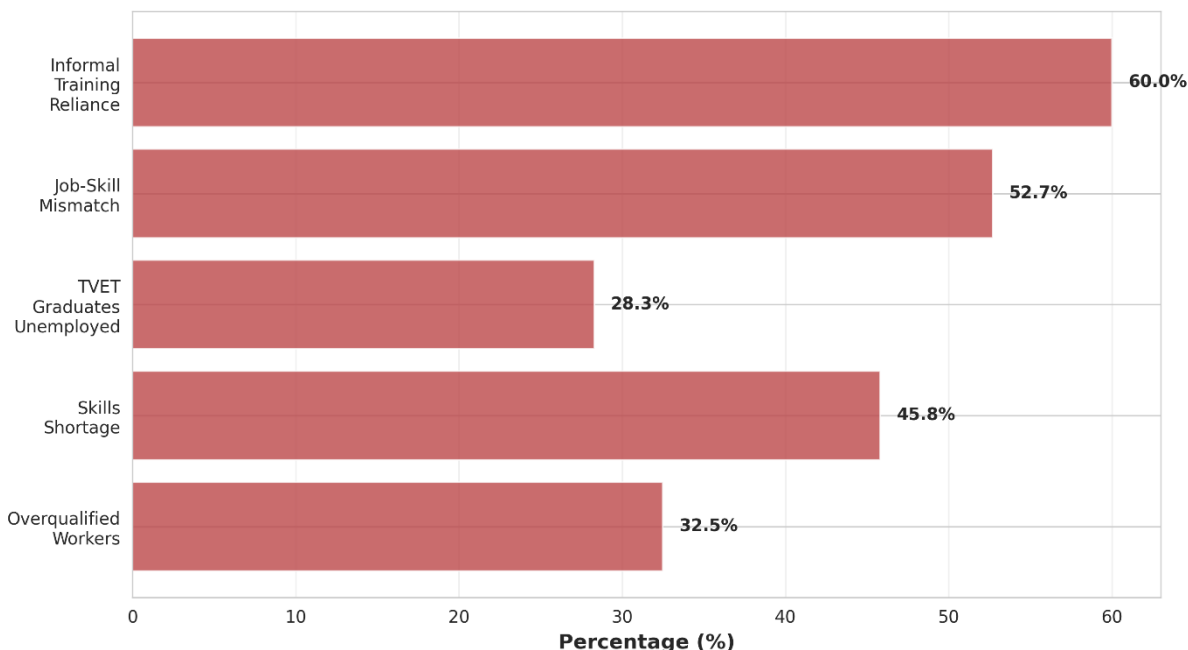
There is little opportunity for formal credit, so businesses grow more slowly than they should and have little incentive to operate formally. Informal-sector businesses do not own any property to use as collateral; they also lack financial records and therefore do not have a credit history that can be leveraged by the formal financial sector, which charges very high interest rates.

. Insufficient labour inspection, corruption, and political economy factors contribute to low enforcement of minimum wage legislation, social protection regulations, and occupational health [15].

Labour Market Inefficiencies and Challenges

5.1 Skill Mismatch and the Supply of Education

Skills Mismatch Indicators in Pakistan Labor Market



worker.

Figure 6: Skills mismatch trends: an excess of general graduates and a deficit in technical fields (especially ICT), pointing to the need for a perfect 'fit' between qualifications and skills.

This disconnect is also perpetuated by the education system. Pakistan's education system produces a large pool of academic graduates, but not the “near-mid skill” workers that are in demand. However, the emphasis of memorisation (rather than critical thinking, problem solving and application of knowledge) does not prepare graduates for the working world [18]. The capacity constraint in the TVET sector has exacerbated the skills deficit. Reforms in this regard have been launched since 2006 as “Skilling Pakistan”, but hardly 6% have acquired a technical certificate at the formal level, which is far below that of regional countries [19]. Approximately 60% of the youths come out from informal training streams as most of them are unskilled or semi-skilled workforce [19].

Challenges There are several challenges in the provision of TVET, such as an irrelevant curriculum which does not conform to industry demands and technological changes. The quality and relevance-improving competence-based system has not yet been effectively implemented [19].

The mismatch has important results. This is a major factor contributing to youth unemployment, particularly for educated youth who do not have qualifications which are market oriented. It is dragging on the growth of productivity, because businesses cannot find skilled labour to use new technologies. This would limit Pakistan to investing in the global market for skill-based goods and services. And it is a cultural waste of education [10], [18].

5.2 Low Labor Productivity

Labour productivity is very low in Pakistan according to global yardsticks, which constrains economic growth and higher wages. The low productivity is due to low level of capital, poor infrastructure, skills base, technological backwardness and production inefficiency. Unproductive informal sector of small holders with low capital and technology prevails as an aggregate low productivity [15].

Productivity in agriculture is particularly low, with yields well below potential and regional average levels. Small size of land holdings, inadequate access to improved inputs and technology, dwindling natural resources in terms of irrigation facilities, changes in water availability and climate change impacts productivity [25]. The absence of modern machines, technology and equipment, no investments in new machinery and equipment, power breakdown, halt in production, infrastructure gap (especially transport/logistics), inability to take advantage of the advanced methods of production have all reduced industrial productivity [24].

Services sector productivity varies widely. While some service sectors may be high-productivity (telecommunications, banking, IT services), the bulk of service-sector employment is in low-productivity areas such as small retail trades, unorganised transportation, or personal services [25]. Labour Productivity and low wage growth. Low labour productivity limits the growth of wages, constrains Pakistan's ability to compete internationally, diminishes the quality of jobs created by the economy and holds back the government's revenue generation [15].

5.3 Weak Institutional Frameworks

Frail labor market institutions hinder efficiency and equity. Labour market institutions include employment services, labour regulation and enforcement rules, social protection systems, collective bargaining arrangements, and training structures. Employment services are underdeveloped. Still far from complete is the task of building relevant Public Employment Exchanges with sub-standard coverage suitable to obsolete job-matching technology, and fragile employer contact networks. The lack of well-functioning public and private employment services leads to matching mainly through informal intermediation, which in turn creates inefficiency and inequality [3].

There is limited collective bargaining and union organization. Trade union density is very low and concentrated in the public sector and large formal-sector enterprises. Collective agents and bargaining cover only a small segment of the working population, particularly in the informal economy [15]. Technical

colleges have a serious capacity and quality gap. Fragmentation across agencies in governance, and disconnect between training providers and industry, together with insufficient funding, hinder system functioning [20].

Employment and Economic Growth Nexus

Econometric analyses yield mixed findings. Some studies show a negative association between unemployment and GDP growth, and that growth is reducing the rate of unemployment, but at low elasticity [13], [14]. Other studies in Ethiopia also indicated that the macroeconomic variables, GDP growth, FDI, government expenditure, and private investment had had limited or less significant long-run effects on unemployment as expected compared to other developing countries [13].

Export performance has disappointed in terms of job creation. Empirical evidence reveals that employment opportunities can not be generated through exports as expected, due to export concentration and a low level of globalisation in global value chains in Pakistan [13]. FDI is found to be biased towards capital-intensive sectors (keeping aside the employment effect) by intervening sub-optimally [13]. Low private investment - It has the self-explanatory and immediate impact of slowing down employment creation, which is suppressed due to macroeconomic instability, power shortages, security problems and unfavourable business environment [13].

Structural transformation to more labour-intensive and high-productivity activities, a better business environment that generates private investment, export diversification into labour-intensive manufactures and modern services, and macroeconomic stability providing assurance of continuing growth have all been identified as elaborations of the growth-job nexus [11], [12]. The demography dividend equation will apply only if employment generation is very high [7].

Policy Interventions and Recommendations

7.1 Current Policy and Its Effectiveness

Pakistan is one of those countries that have adopted the labour market policies with mixed outcomes. The 2006 “Skilling Pakistan” initiative aimed at revamping the TVET system, restructuring institutions, redesigning curricula and upscaling capacity. Recent reforms, including the NAVTTC and CBTSs, are commendable but have limited coverage. reviewed that only 6% of youth are trained in formal technical skills in Nigeria, as it is still bedeviled by quality, relevance and scale challenges.

Youth employment programs come and go there was the Prime Minister's Youth Programme for loans to start businesses and skills training. However, each of these interventions has only reached a small number of beneficiaries, suffered challenges in roll-out and delivery, and no systematic impact assessment. The absence of clear youth employment policies, including through education and skills programmes that facilitate entrepreneurship and placement facilities, undermines the impact [5], [6].

There are women-only programmes as well, the most prominent of these being the Benazir Income Support Programme (cash transfers to poor women), the micro-finance loan programme that largely targets female entrepreneurs, and those for the promotion of education for females. They’ve strengthened, but not reknit the fabric of women’s labor market job and work quality. Structural barriers like social norms and physical or mobility constraints persist, as do discrimination in the provision of services [9], [22], [23].

Focus on formalisation has included simplified business registration, tax breaks for small companies, and efforts to broaden the coverage of the social protection system. But the black economy remains dominant, indicating poor progress in formalization policy. Barriers, such as regulatory tax burdens, lack of credit, and weak enforcement of labor regulation effectively ensure that informality thrives [15], [16]. In contrast, labor market information systems are poor and few employment services exist, whereas social protection is largely restricted to formal sector workers [3], [27].

Conclusion

The labour situation in Pakistan, as is in most other third-world countries, is characterised by a number of structural constraints to both national development and social integration. A general unemployment of 6-7%, along with a youth unemployment of 11.8-22%, as well as an informal sector that is about 72.5% percent of the total working force, demonstrates serious structural weaknesses in generating decent jobs. The gender dichotomy, with less than 21.5 per cent participation of women in economic work, contradicts human development potential on a massive scale. Job seekers and employers faced skills mismatches - some 60 per cent of the job-seekers were composed of young workers from informal training sources while employers reported shortages in specialized human capital: a fundamental disjunct between education delivery and markets on local supply side.

Of course, these Challenges are interconnected and positive feedback each to the other. Low skills result in low productivity and in the informality that then does not allow wages to rise nor for the formal sector. Weak institutions do not have the capacity to enforce regulations, provide social protection or effectively deliver employment services. The consequences are severe. Poverty is also exacerbated by employment and underemployment, where many millions of people live in a precarious way in the informal economy without any security. Social instability, frustration, and emigration are the effects of youth unemployment or the wasting of human potential and money on education. Poverty and household welfare of women are sustained as a result of gender bias. This chronic low productivity has become a drag on the country in its competition within world markets and in efforts to draw foreign direct investment (FDI). The informal economy is huge and drags down the tax take, hence the resources the government has to invest in public services and infrastructure.

But Pakistan is also a land of vast opportunity. If properly educated and skilled, that vast youth population could become an engine for growth — a demographic dividend. And at a time when quality can be improved, the services industry is a prospective employer. The China-Pakistan Economic Corridor could also have been an infrastructure investment, industrial development and job creation opportunity if our labour was more prepared. IT services, e-commerce, and digital platforms create jobs through the ripple effect, whether or not there is a skills gap.

The Pakistani response is a set of many policies and programs, some of which are poorly implemented due to resource constraints, capacity problems, coordination failures and political economy dynamics. Monitoring the drive for compliance and monitoring would provide course corrections. The stakes are high. A good response to the problems of the labour market would lead to faster growth, making for a lower poverty incidence, lesser social unrest and an opportunity for Pakistan to make full use of its demographic dividend. It would be a failure, with unemployment still here and informality and inequality on such a scale that the fulfilment of economic growth and social harmony would be very expensive.

References

- [1] Begum, R. Employment generation challenges and strategies for Pakistan: A diagnostic analysis.
- [2] Sheikh, M. R., et al. (2020). An Empirical Analysis of the Determinants of Employment Status in District Multan (Pakistan). *Review of Applied Management and Social Sciences*, 3(1). <https://doi.org/10.47067/RAMSS.V3I1.20>
- [3] Cho, Y., et al. (2020). Pakistan Jobs Diagnostic: Promoting Access to Quality Jobs for All. World Bank Group.
- [4] Faisal, M. (2018). How much, the level and different streams of education, effects individual earnings and what could be its public policy implications for Pakistan.
- [5] Bari, F., et al. Investigating the Relationship between Youth Unemployment and Macroeconomic Policies in Pakistan.
- [6] Gulzar, S., et al. (2024). Youth Employment Challenges and Opportunities in Pakistan: An Econometric

- Analysis. *Review of Applied Management and Social Sciences*, 7(4). <https://doi.org/10.47067/ramss.v7i4.390>
- [7] Khan, M. A., et al. (2022). Asymmetries in the Labor Demand in Pakistan: Estimating Own and Cross Wage Elasticities Using Frictional Probit Model. *Montenegrin Journal of Economics*, 18(4). <https://doi.org/10.14254/1800-5845/2022.18-4.3>
- [8] Majid, N., & Siegmann, K. A. (2021). The effects of growth on women's employment in Pakistan. *Feminist Economics*, 27(3), 1-28. <https://doi.org/10.1080/13545701.2021.1942512>
- [9] Andlib, Z., et al. Women and vulnerable employment in the developing world: Evidence from Pakistan.
- [10] Matsuda, Y., et al. (2019). Labor Market Analysis Using Big Data: The Case of a Pakistani Online Job Portal. *Social Science Research Network*. <https://doi.org/10.1596/1813-9450-9063>
- [11] Hussain, M., et al. INTERDEPENDENCIES OF LABOUR MARKET DYNAMICS, WOMEN'S EMPOWERMENT, UNEMPLOYMENT RATES, AND FOREIGN POLICY ON ECONOMIC GROWTH.
- [12] Hussain, A., Zaman, K., & Zaman, S. (2025). The Persistent Challenge of Unemployment in Pakistan: A Quantitative Analysis of its Determinants. *Journal of Asian Development Studies*, 14(1), 321-345. <https://doi.org/10.62345/jads.2025.14.1.27>
- [13] Khan, M. A. (2020). Unemployment: A Missing Link. *Market Forces*, 15(2). <https://doi.org/10.51153/MF.V15I2.463>
- [14] Khan, M. A., et al. (2024). Macroeconomic determinants of unemployment in pakistan: some policy implications. *Journal of Social Sciences & Humanities*, 63(2). <https://doi.org/10.46568/jssh.v63i2.767>
- [15] Khan, I., et al. (2024). Evaluating the Real Determinants of Informal Economy: A Case Study of Pakistan. *Forman Journal of Economic Studies*, 20(10). <https://doi.org/10.32368/fjes.20242010>
- [16] Ayyoub, M., et al. (2019). What Determines Employment in the Formal and Informal Sectors of Pakistan? Primary Data Insights from Lahore. <https://doi.org/10.51239/NRJSS.V0I0.125>
- [17] Ayyoub, M., et al. (2019). What Determines Employment in the Formal and Informal Sectors of Pakistan? Primary Data Insights from Lahore. <https://doi.org/10.51239/NRJSS.V0I0.125>
- [18] Shakeel, M., et al. (2019). The Reaping Economic Benefits from Unemployment among White Collar Professionals in Pakistan. <https://doi.org/10.31580/JMIS.V1I2.891>
- [19] Chamadia, M. S., & Amin, N. (2018). Skilling for the future: evaluating post-reform status of "skilling pakistan" and identifying success factors for tvet improvement in the region. *Journal of Technical Education and Training*, 10(1). <https://doi.org/10.30880/JTET.2018.10.01.001>
- [20] Bano, S., et al. (2022). Emerging Challenges in Technical Vocational Education and Training of Pakistan in the Context of CPEC. *Economies*, 10(7), 153. <https://doi.org/10.3390/economies10070153>
- [21] Siegmann, K. A., et al. (2021). Empowering growth in Pakistan. *The Indian Journal of Labour Economics*, 64, 317-336. <https://doi.org/10.1007/S41027-021-00316-Y>
- [22] Ramirez-D'Oleo, D. (2023). Employment, Informal Sector Work, and Social Policy for Women of Pakistan. *Book Chapter*. https://doi.org/10.1007/978-3-031-32863-3_7
- [23] Khan, S., et al. (2023). Reducing Gender Gaps in Pakistan's Labor Market: Policy Options for Enhancing Women's Economic Empowerment. *Global Sociological Review*, 8(2), 320-335. [https://doi.org/10.31703/gsr.2023\(viii-ii\).31](https://doi.org/10.31703/gsr.2023(viii-ii).31)
- [24] Shakeel, M., et al. (2019). The Reaping Economic Benefits from Unemployment among White Collar Professionals in Pakistan. <https://doi.org/10.31580/JMIS.V1I2.891>
- [25] Nasir, Z. M., et al. (2021). Employment Diversification Patterns in Pakistan: Empirical Assessment Revisited. <https://doi.org/10.47067/READS.V7I1.323>
- [26] Amir, H., et al. (2020). Evolution of smes in pakistan and key challenges that hampers their expansion. *International Journal of Social Sciences*. <https://doi.org/10.5281/ZENODO.4021044>
- [27] Faridi, M. Z., et al. (2022). The Global Order and Pakistan in the Lens of Pre-Pandemic and Post-Pandemic Scenario. *Pakistan Journal of Humanities and Social Sciences*. <https://doi.org/10.52131/pjhss.2022.1001.0190>