

Higher Education in the Post-Colony: Market or Bureaucracy?

Dr. Syed Amir Shah¹, Dr. Aurangzaib Alizai² & Dr. Muhammad Rahim³

¹Lecturer, Department of Political Sciences, University of Balochistan, Quetta,

Email: amir.polscience@um.uob.edu.pk

²Assistant Professor, Department of Gender and Development Study, University of Balochistan, Quetta,

Email: aurangzaib.alizai@gmail.com

³Lecturer, Department of Sociology, University of Balochistan, Quetta,

Email: rahim.sociology@um.uob.edu.pk

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Corresponding Author:

Dr. Syed Amir Shah

Email:

amir.polscience@um.uob.edu.pk

ABSTRACT

Human capital theory has been a big part of the story on education and development. On this account, universities have been credited with knowledge revolution and seen as an engine of economic growth. However, this understanding of the relationship between education and economic development does not fully account for the realities in many postcolonial contexts. This article tries to address this gap by arguing that in many instances, universities in postcolonial societies serve as training and certification institutions for those seeking employment in the growing administrative branch of the state. By making the University of Balochistan in Pakistan a case, the research shows a close functional coupling of the higher education institution with the administrative needs of the state, while the 'economic link' being meticulously absent.



Introduction

In Pakistan, the need to restructure national economy and transition from a so-called agrarian economy towards an economy which is based on knowledge-intensive high value goods and services prompted a large-scale higher education reform started in the beginning of twenty-first century (Shah & Jules; 2025). Informed by the ideas of knowledge-based economy, investment in the higher education sector was believed to enhance nation's economic competitiveness through knowledge revolution, thus, herald an era of economic prosperity at par with Asian tigers. Central to the higher education policy discourse were the models South Korea, Singapore, Taiwan, etc., as economic prosperity came to be attributed to the quality of their higher education institutions.

To facilitate the transition towards a knowledge economy, government replaced a University Grants Commission with a more centralized and much powerful Higher Education Commission in 2002. The funding for the universities were increased substantially. The subject of research was integrated in a centralized curriculum; M.Phil. and Ph.D. programs were launched in all public sector universities, and scholarships were made available for faculty members to study abroad for their higher degrees.

In University of Balochistan, the subject of research methodology started to be taught for the first time. The university also initiated masters (M.Phil.) and doctoral programs in various disciplines, enrolling hundreds of research students. To encourage faculty members to engage in research, an elaborate scheme of incentives was chalked out such as linking promotions to the higher degree, monetary rewards for research publication, supervision of research scholars, and doctoral allowance. University ranking system was also introduced to enable competition among the higher education institution in addition to partially linking universities' funding to their research output.

However, after more than two decades, the studies evaluating the output and the outcome of the reform efforts are almost non-existent. This study surveys the graduate alumni of the University of Balochistan to explore their job destinations and investigate the alignment between job and educational training. It uses a structured questionnaire to understand collect data from the university alumni. The next section explores the existing knowledge of the field, followed by methodology section. The key findings will highlight what data reveals about the questions being explored, which is followed by discussion and conclusion.

Review of Literature

The study of existing literature shows interesting debates about the output and outcomes of higher education sector. These debates range from the question of whether higher education is a privilege or a right just like a basic education. Associated with this question of 'right or privilege' is the debate over the economic utility of the universities and its benefit to the individual or larger society (Smethurst; 1995).. The view that universities benefit individual would lend itself to little public support while seeing universities as the provider of 'public good' would demand governmental support to the higher education sector. However, there seemed to be consensus in the literature about the role of higher education in the economic development of the nations (Carnoy; 2007, Kimenyi; 2011, Kruss et al; 2015). From the human capital perspective, studies show overwhelming evidence in favor of higher education sector about its role in the economic advancement of the nations and its enabling role in the development of knowledge-based economies.

Higher education is widely accepted as a key driver of economic development (Carnoy; 2007, Kimenyi; 2011). On this view, higher education is said to contribute to the development of human capital (Paulson; 2001). The evidence suggests that the advanced knowledge reflects in improved individual skills, which leads to increased productivity. The increased levels of production leads to higher household income, which ultimately is reflected in national economic growth (Becker; 2002, Schultz; 1970). Additionally, higher education sector also drives innovation and help disseminate technical and scientific knowledge (Brennan; 2014).

In more recent times, higher education is said to be the key driver of knowledge-based economy (George; 2006). This is evident in the economic development of many south-east Asian countries popularly known as Asian tigers. In these countries, knowledge became a critical factor in the production process, hence, resulted in healthy growth in the GDP of these countries (Kuc; 2008). This contribution to economy is attributed to higher education sector as it equips individuals with advanced skills, promoting technological advancements, and generating positive externalities that benefit society at large, such as reduced poverty, improved social welfare, and increased competitiveness in global markets (Bertolin; 2018). However, the relationship between higher education sector and economy is not straight forward but a complex one. This relationship is influenced by myriad of factors like quality of education, alignment with labor market needs, and policy frameworks.

Human capital theory also aligns with the knowledge economy framework, where tertiary institutions drive innovation and competitiveness by using knowledge as a factor in production process. A modern university is described as having triple helix model, which underscores symbiotic relationships between universities, industry, and government (Etzkowitz, H., & Zhou, C. (2017). Similarly, research produced in these institutions are the cornerstone for accelerated technological development (Rogers; 1986). It has also been acknowledged that there is also a spillover effect generated by higher education institutions like reducing societal inequalities, improving social welfare, and producing other positive externalities.

Empirical studies consistently demonstrate positive correlations between higher education and economic growth (Hanushek; 2016). In fact, the economic return for the tertiary education is noted to be the highest if compared to the primary and secondary education. Study conducted by the world bank (2025) records the return on higher education at 17% against the 7% return on the secondary education. The return on tertiary education was more salient in Sub-Sahara Africa where it was recorded at 21 percent. Hence, the literature affirms higher education's pivotal role in economic development through human capital, innovation, and externalities

However, in the postcolonial context of Pakistan, the issue of tertiary education's role in the economic development of the nation remains relatively unexplored. From anecdotal evidence and personal experience, higher education primarily functions as a certificate issuing authority for those who are interested in taking roles in various government services, most notably the teaching and administrative jobs inside public sector. This is the critical issue which requires further exploration and scientific understanding.

This study focuses on the question of universities' output and outcome in the context of Pakistan. The research specifically focuses on the University of Balochistan to investigate graduate's market destination. The study is guided by the questions of which jobs do the graduates of university of Balochistan take-up after entering the job market, are their jobs aligned with the training educational training they obtained, and has their education got any impact on their skill's improvement and family income.

Methodology

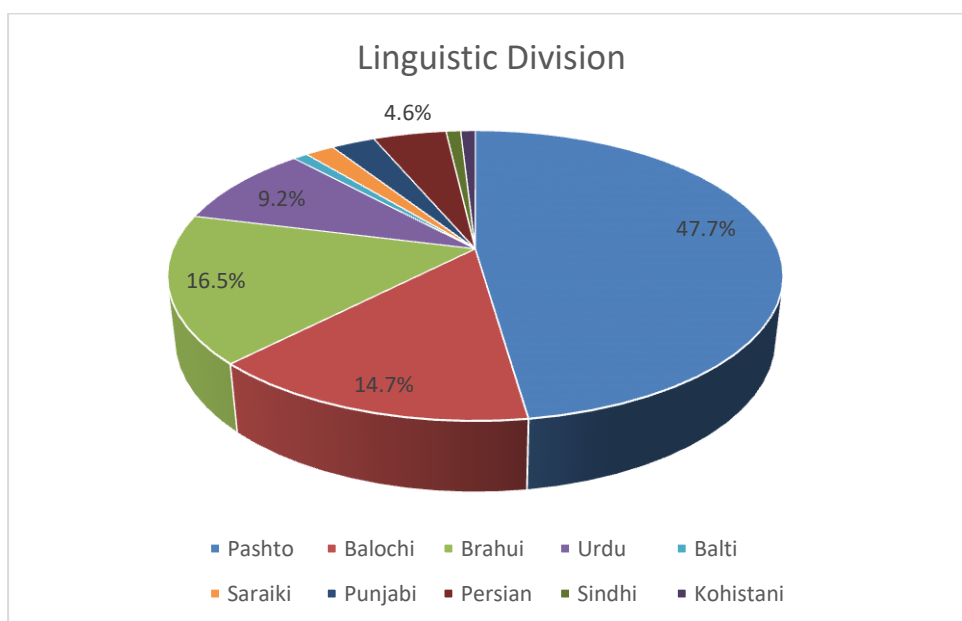
The findings of this study are based on the primary data collected through a survey. A structured questionnaire was designed using Google Forms and sent via emails to the research participants. The population consists of the alumni of the University of Balochistan who had completed their M.Phil. degree between 2017 and 2021. The total number of questionnaires sent were 1236, with two reminders. The responses received, excluding the partially filled questionnaires, were 109 with the response rate of 8.8 percent. Data was collected anonymously.

The rationale for selecting the University of Balochistan was its historical importance. It is the oldest and the largest institution of the Pakistani province of Balochistan. In wake of higher education reforms in the country, the institution integrated the courses of research methodology into its curriculum for the first time in 2001. Concomitantly, M.Phil. and Ph.D. programs were also initiated to transition from a teaching to a research institution. The key driver behind the reform efforts was the institution of the knowledge economy, thus, making the University of Balochistan a unique blend where the historical influences confront the modern ideology.

Key Findings

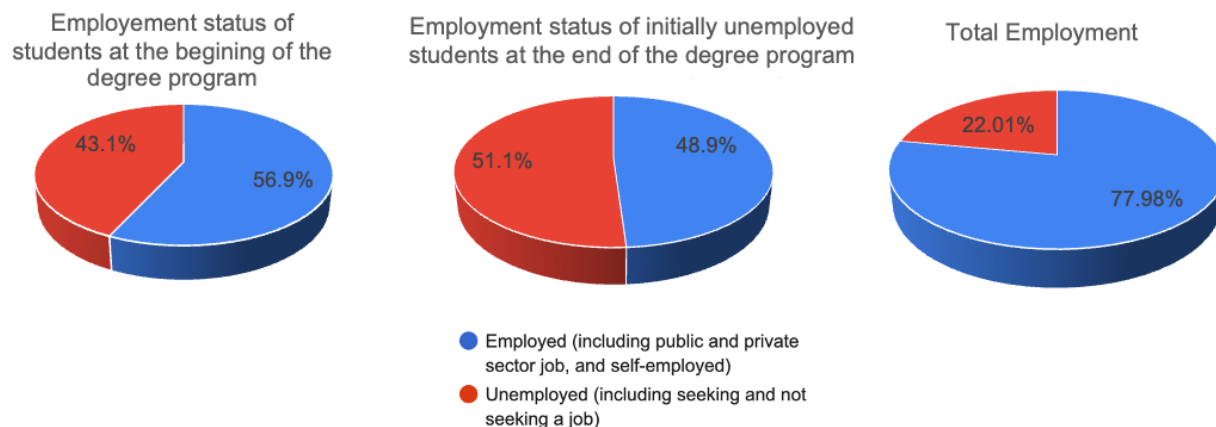
On the gender dimension, 39 out of 109 respondents were female, 69 were male, while 1 respondent preferred not to disclose their gender identity. The data shows a linguistic diversity among the research participants. In total, 52 respondents noted Pashto to be the language spoken at home, followed 18 Brahui, 16 Balochi, 10 Urdu and 5 Persian speaking respondents. The ethnic composition of the data shows that the majority of the participants belong to ethnic Pashtun group, followed by Baloch (both Balochi and Brahui speaking), Urdu speaking and Hazara ethnic group.

Figure 1



On the dimension of respondents' employment status, data reveals that at the time of admission, the majority of the graduate students were already employed. At the beginning of program, 62 respondents were employed, while, out of 47 initially unemployed respondents, 23 got jobs at the end of the degree program. Thus, the overall employment among the graduate students at the completion of the degree program was 78 percent.

Figure 2



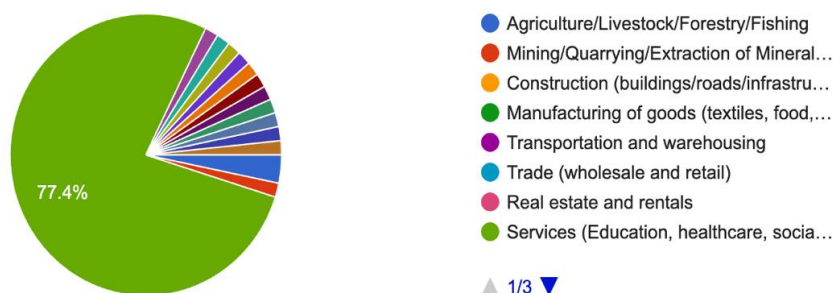
On the ethnic dimension, employment among the largest group of respondents i.e., Pashtuns stood at 76.9%, followed Baloch (76.4%), and Urdu-speaking (70%). The employment rate among the ethnic Punjabis stood at 100%, however, due to a small number of Punjabi respondents, caution needs to be taken while interpreting the data. Looking from the perspective of gender, the employment among the female respondent was noted as 75 percent, while among the male participant, the employment stood at 78 percent.

Table 1:

Ethnicity	Total Number	Employed	Percent
Pashtun	52	40	76.9
Baloch	34	26	76.4
Urdu-Speaking	10	7	70
Persian	5	3	60
Punjabi	3	3	100
Gender			
Female	40	30	75
Male	68	53	77.9

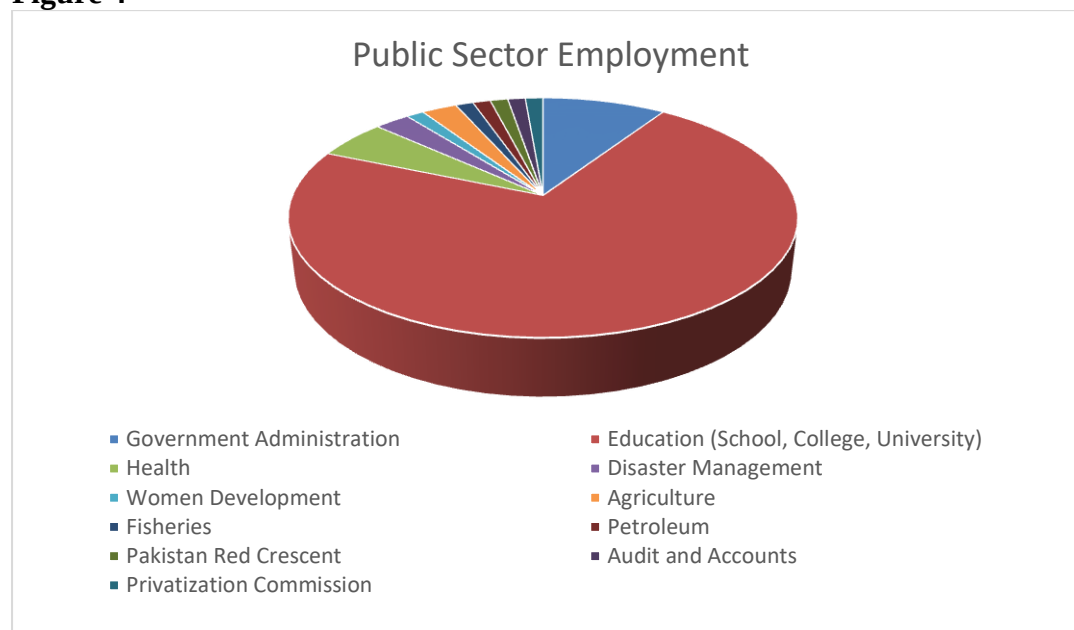
On the dimension of industry, services sector emerges as the dominant employer of the graduates. More than 70 percent of the graduates belonged to the services sector, which includes education, healthcare provision and other social services. The presence of other industries is almost non-existent. For example, agriculture sector emerges as the second largest employer of the university graduates, however, in terms of total employment, less than 4 percent graduates are associated with this sector.

Figure 3



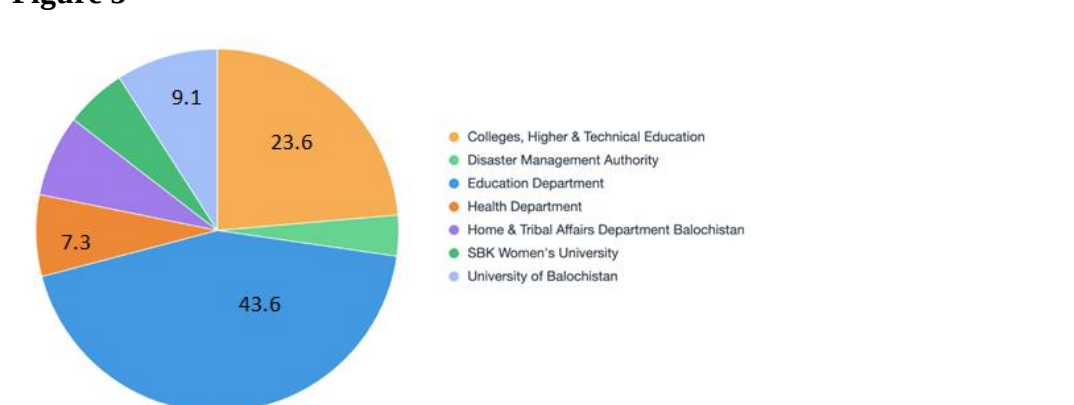
The distribution of jobs among the employed graduates is highly skewed in favor of public sector. Out of 85 employed graduates, 73 (86%) worked at various government departments, while only 12 (14%) of the respondents noted to be working in the private sector. Within the public sector, services sector is the dominant form of employment. The data shows that the overwhelming number of participants work in the government departments which are directly or indirectly related to the provision of education. These departments include primary education, secondary education, colleges, universities, and education administration. In total, 54 (72%) of the respondents were associated with a teaching profession, who were employed at school, colleges, and university level of education. The second largest group, i.e., 7 respondents (9.3%) was working in government administration, followed by health department (5.3%), agriculture department (2.6%), and disaster management (2.6%).

Figure 4



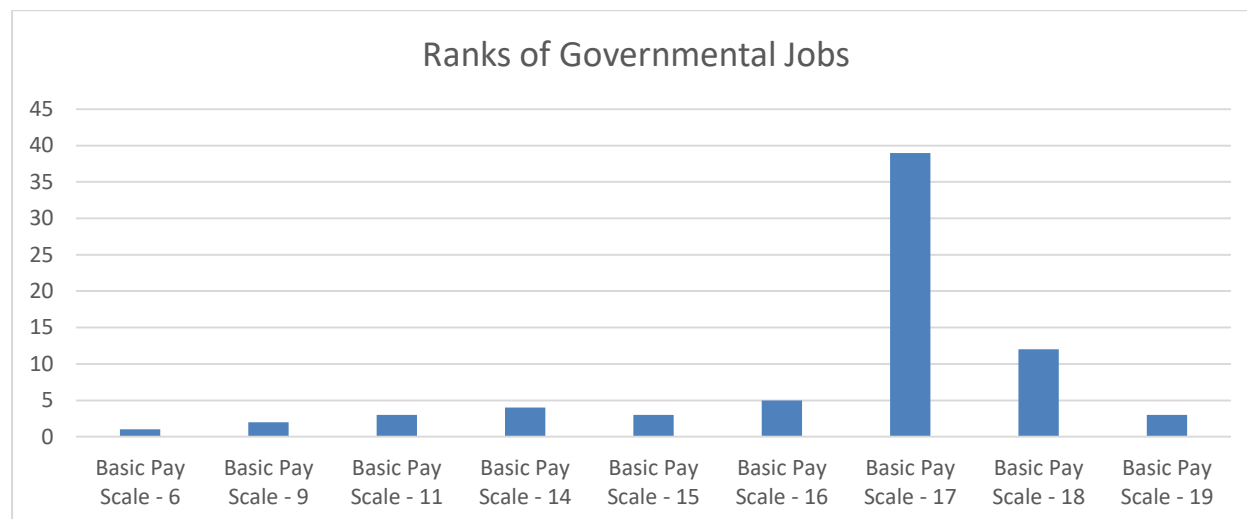
Further disaggregating the data on 'education sector' dimension reveals that the education department of government of Balochistan is the largest employer of the university graduates. According to the data, 43.6 percent of the respondents noted their employer as provincial education department. This is followed by the Colleges, Higher and Technical Education department of the government of Balochistan. The University of Balochistan emerged as the third largest employer of the graduates in the services sector.

Figure 5



According to the government service structure, the data on the Basic Pay Scale (BPS) of the respondents shows that the largest group of the research participants were working in the BPS-17. Out of 73 respondents working in public sector, 39 were employed in the BPS-17, followed by 12 in BPS-18, and 5 in BPS-16. Corroborating with the previous data on the breakup of services sector, the BPS grades show that majority of the respondents are secondary school teachers, and college and university lecturers.

Figure 6



Exploring the dimension of education and job alignment, the study found that the employability of the graduates of Social Sciences and Humanities is greater than the STEM graduates. Employment among the Social Science and Humanities graduates was 81.2 percent, while 74.4 percent for the STEM graduates. The study found no connection of STEM graduates with the high value manufacturing industry or knowledge intensive services. The overwhelming number (81.2 %) of STEM graduates were employed in the public sector, while only 18.7 were working in the private sector (see table 2). The figure for social science and humanities graduates is further skewed towards public sector i.e., 90.3 percent in public sector and only 9.6 percent working in the private industry. Education sector emerged as the largest employer of both STEM and social science graduates, which employed 68.7 percent and 69.2 percent of the graduates respectively. The table 3 shows the data of STEM graduates working in the private sector, along with their job titles.

Table 2

Academic Field	Employed	Public sector	Private Sector	Education Sector
STEM	74.4 %	81.2 %	18.7 %	68.7 %
Humanities and Social Sciences	81.2 %	90.3 %	9.6 %	69.2 %

Table 3

STEM Graduates in Non-Education Sectors	Number	Job Title
Sandak Copper and Gold Project	1	Assistant Geologist
Fisheries Department	1	Junior Clerk
Agricultural Statistics Department	1	Assistant Director

Privatization Commission	1	Technical Assistant
Institute of Hydrobiology	1	Scientist
Private Firm (Training and Consultancy)	1	Not Mentioned
Health Department	1	Pharmacist
Pharmaceutical Company	1	Pharmacist
Self Employed	1	Not Mentioned
Non-response	1	

Discussion

This study provides important empirical grounding for debates on the role of higher education in postcolonial societies. While the human capital approach often assumes a direct connection between advanced education and economic growth, the case of the University of Balochistan demonstrates a different reality. The evidence here shows that most graduates enter public sector jobs, particularly in education and government administration, rather than knowledge-intensive industries. This pattern suggests that higher education functions more as a certification mechanism for state employment than as a driver of industrial or technological advancement.

The data also complicates conventional assumptions about job alignment. For most graduates, the field of study has little direct relationship with the eventual place of employment. Whether in STEM or social sciences, the vast majority are absorbed into teaching and administrative roles, which indicates that education is valued primarily for its symbolic and credentialing function rather than for applied technical skills. The low employability of STEM graduates in high-value industries highlights a structural weakness: without industrialization or a robust private sector, the promise of a knowledge economy remains largely rhetorical.

Another notable point is the motivational pattern among graduates. Many were already employed in education when they enrolled in higher degrees, suggesting that the M.Phil. and Ph.D. programs are pursued less for skills development and more for securing promotions, allowances, or higher pay grades in government service. This trend points to a utilitarian orientation toward higher education, shaped by the institutional incentives of the state, rather than by entrepreneurial or research-driven aspirations.

The findings therefore underline the centrality of context in shaping the outcomes of higher education. In regions where industrial and private sector opportunities are limited, universities become tightly coupled with state bureaucratic needs. This coupling challenges the universality of human capital theory and calls for a more nuanced understanding of higher education's role in postcolonial settings. Instead of fueling economic growth directly, universities here reinforce the expansion of state bureaucracy and sustain the existing service-oriented economy.

Conclusion

In conclusion, this study highlights the divergence between global discourses on higher education and the lived realities of postcolonial contexts. At the University of Balochistan, higher education does not function as the engine of economic transformation imagined in policy reforms inspired by East Asian models. Instead, it primarily produces graduates who feed into the state's administrative and educational apparatus, with little evidence of direct contribution to industrial or technological sectors.

These findings carry several implications. First, they caution against uncritical application of human capital theory in contexts where structural economic conditions limit the scope of higher education's impact. Second, they suggest that policy reforms need to move beyond quantitative expansion of higher degrees and focus on aligning curricula with genuine economic opportunities. Without parallel investments in industrialization, private sector development, and research-industry linkages, higher education will remain decoupled from broader economic growth.

Finally, the study contributes to a wider theoretical debate by offering an alternative account of the university in the postcolony; one in which education serves the bureaucratic state rather than the marketplace. Recognizing this reality is essential for rethinking higher education policies in Pakistan and other postcolonial societies. By situating universities within their specific political and economic contexts, scholars and policymakers can better understand both the limits and the possibilities of higher education as an instrument of social and economic change.

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