

COSTONOMICS

Costs of Lost Talent in Pakistan



Pakistan has a long history of emigration with brain drain having emerged as a major issue, as talented individuals increasingly relocate abroad, owing to economic insecurity and restricted job possibilities. While emigration has advantages, it also has drawbacks, most notably the loss of qualified workers.



By 2020
around **6.3 million**
Pakistanis lived
abroad

representing an
increase from 2000
(UNDESA, 2023)

86%

Migration from
Pakistan has been
picking up pace in
recent years, with
(BE&OE, 2024)



862,625
people

having emigrated
in 2023 alone



832,339
People

in 2022

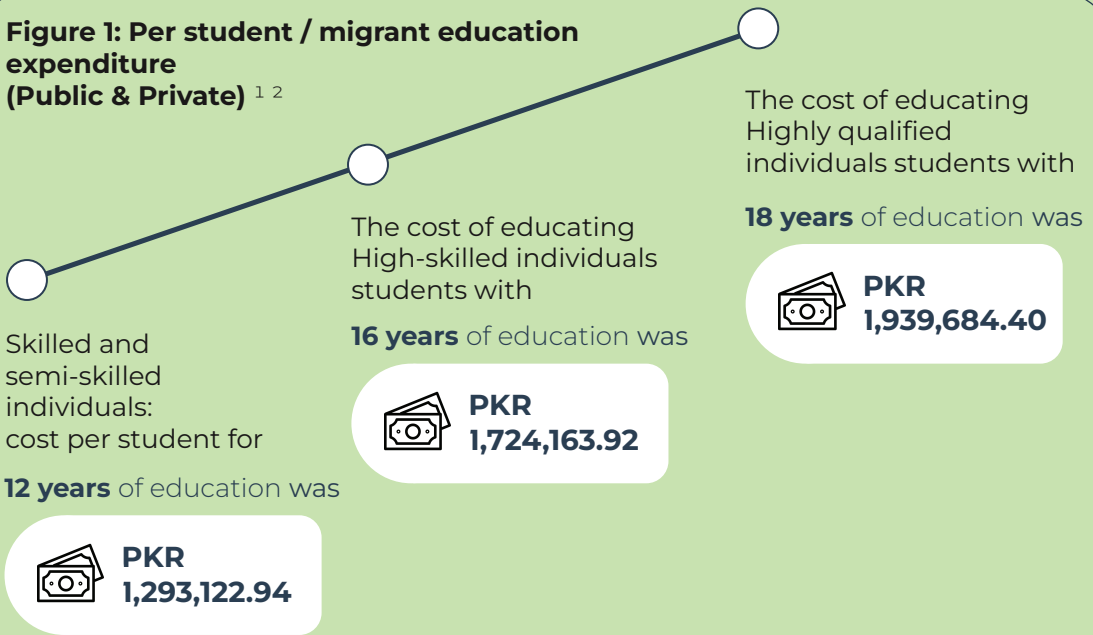
This trend is predominantly evident among highly skilled people who are pursuing education and seeking employment opportunities in countries like the United States, the United Kingdom, and Australia.

This study aims to explore the various dimensions of talent loss in Pakistan. First, it quantifies the economic impact by considering both explicit costs & implicit costs. Additionally, it examines the productivity loss in the origin country. Second, this study also provides insights on designing effective strategies to retain and utilize talented individuals within Pakistan.

Estimation Procedure

Per student expenditure, both public and household, varied dramatically across the three educational levels: 12 years of education (Intermediate), 16 years of education (Graduate), and 18 years (post-graduate).

Figure 1: Per student / migrant education expenditure (Public & Private) ^{1 2}



Explicit and Implicit Costs 4



of all emigrants, while **54%** go to the Gulf



44% were estimated to go to Western countries

per UNDESA data



Explicit cost of education:

Number of migrants × per student/migrant (public and private (household) expenditure on education)



Implicit cost of education:

Number of migrants × Cost per migrant (foregone income during schooling)

Productivity Loss

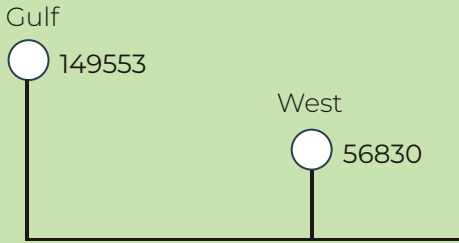
The productivity loss due to emigration from Pakistan is computed utilizing the ratio method based on the studies by Woetzel et al. (2016) and Radonjić & Bobić (2021). They argue that origin countries, on average, receive 8.7 percent of the GDP that migrants produce elsewhere, sent through remittances.

Figure 2. Cost of highly Qualified Emigrants

Source: Author calculations

Year 2014 - 2023

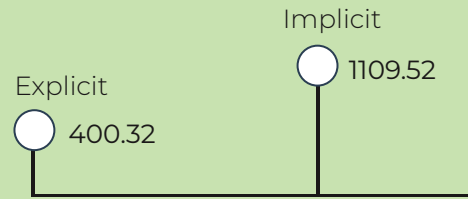
Highly Qualified Emigrants



Total: **206383**

Year 2014 - 2023

Cost in Billion (PKR)

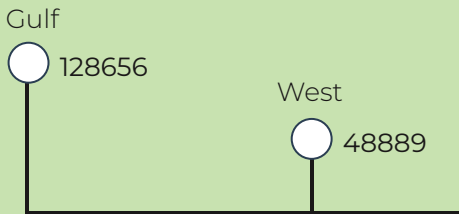


Total: **1509.83**

Figure 3. Cost of High-Skilled Emigrants

Year 2014 - 2023

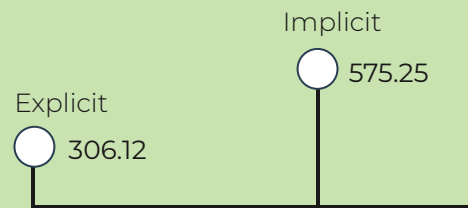
Highly Skilled Emigrants



Total: **177545**

Year 2014 - 2023

Cost in Billion (PKR)

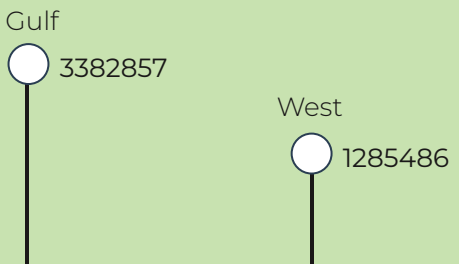


Total: **881.36**

Figure 4. Cost of skilled-semi-skilled emigrants

Year 2014 - 2023

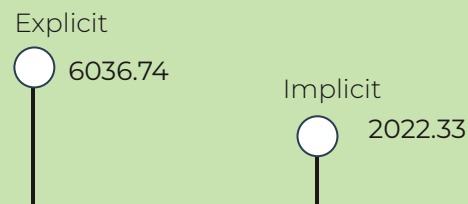
Skilled-Semi-skilled Emigrants



Total: **4668343**

Year 2014 - 2023

Cost in Billion (PKR)



Total: **8059.07**

Explicit + Implicit Cost (Total) - For Year 2023 (1499.32) billion PKR



Net effect of emigration: Accounting for 1.77 % of GDP in 2023, indicating a positive impact when considering the money emigrants send back home. Emigrants contributed approximately **8 % of GDP through remittances in 2023**



When incorporating productivity loss,⁷ the origin countries received, on average

8.7% of the GDP

that migrants produced elsewhere and sent through remittances.



Assuming a similar scenario for Pakistan, migrants' net contribution to the global GDP in 2023 is estimated at

286.49 billion USD ⁸

Subtracting remittances (27.3 billion USD in 2023) received (286.49-27.3= **259.19**)

Which accounts for

85% of Pakistan's GDP in 2023 ⁹

(303.43 billion USD) constituting a productivity loss

However, the cost to the country of origin becomes significantly high when productivity loss is considered. Immigrants often contribute to the GDP of destination countries through their work and productivity, resulting in considerable economic losses at origin countries.

Talent Retention Strategies ¹⁰

Objective: assess whether attracting Pakistani talent offers a cost advantage in comparison to hiring foreign citizens for similar roles in Pakistan.



Retaining Pakistani Experts

- ✓ Retain top-notch local talent
- ✓ Social Dividends by filling key shortages (eg. healthcare, education, etc)
- ✓ Higher innovation and productivity



Hiring Foreign Citizens

- ✗ High likelihood of attracting average talent
- ✗ Higher salaries compared to home country
- ✗ Risk premium for relocating to Pakistan

Overall, there is a net benefit to Pakistan of retaining Pakistani professionals over hiring foreign citizens for analogous positions.



Recommendation

Outflows of qualified people could impede Pakistan's economic, social, and scientific progress and development. Hence, there is an urgent need to retain, or rather incentivize talent return of qualified workforce and entrepreneurs.

A holistic strategy for managing emigration effectively such an approach should recognize the benefits of remittances while addressing potential long-term challenges, particularly concerning the loss of productivity.

1. Adjusted the per school year household expenditure on education, assuming nine months, for the number of enrolled children within a household, about 2.34 currently enrolled children per household in Pakistan
2. Using estimations being based on various editions of the Pakistan Economic Survey from 2014 to 2023
3. Household Integrated Economic Survey (HIES-2018-19) and the Global Education Monitoring Report (GEM 2021-22) by UNESCO
4. To quantify talent loss, we aggregate the number of individuals departing the country within the defined talent pool. We collectively refer to the highly qualified, highly skilled, and skilled as metrics for talent. Similarly, we also analyze distinguishing highly qualified, highly skilled, and skilled. Data for migrants was sourced from BE&OE data and UN-DESA International Migrant Stock dataset
5. Basic Pay Scale (BPS) table of 2022 to estimate the opportunity cost of education for emigrants with different qualifications or who fall in different skill set categories. Utilizing the minimum threshold of the BPS 18, 17, and 10 for highly qualified, high-skilled, and skilled / semi-skilled individuals, respectively. (As given in the BE&OE data)
6. Considering the individual's lost income for eight consecutive years, calculated as the total number of emigrants multiplied by the basic pay for grade 18 and further multiplied by 12 months and eight years (or 96 months) (see Table 2).
7. As shown in the studies by Woetzel et al. (2016) and Radonjić & Bobić (2021)
8. Assuming similar scenario for Pakistan
9. Subtracting remittances received ($286.49 - 27.3 = 259.19$) suggests that
10. Assumptions:
 - Pakistani experts match or exceed the skills of foreign citizens, particularly in fields like economics.
 - Hiring foreign citizens in Pakistan includes their standard wage (WF) and a relocation risk premium (R).
 - Social capital (SCP) reduces the overall cost of hiring Pakistani professionals by leveraging their familiarity with local conditions, customs, and networks.