Pearson

Lost in Transition:

Fixing Saudi Arabia's SAR 62 billion 'learn-to-earn' skills gap

The Slow Down of the Learning to Earning Pipeline

Overview: The Skills Gap in the Kingdom

The Kingdom of Saudi Arabia is a country on the cusp of global transformation. With 70% of its population under the age of 35,[1] it is a nation defined by youth driven economy—standing at the threshold of unprecedented change. The opportunity before the Kingdom is massive and untapped but unlocking it requires a bold new approach to career learning and upskilling at scale.

The need for upskilling has never been more urgent in the Kingdom. Saudi nationals are striving for greater prosperity, but inefficient career transitions are costing the economy SAR 62 billion annually—about 1.34% of GDP. When non-Saudi workers are included, the drain on GDP rises to SAR 196 billion (4.2% of GDP).

When you look more closely at those numbers, an even more concerning trend emerges in the Kingdom. While the Kingdom invests in building a highly educated workforce, the transition from education into the labor market is slow. Like many places in the world-including the US and UK-the "learning-to-earning" model is broken.

Our analysis shows that young people-the heart of the emerging Saudi workforce are particularly affected by inefficient career transitions. Our analysis finds they face lengthy job search periods- nearly 40 weeks for high school and university graduates- and mismatches in the skills needed for work. The population of 20–24 year olds will rise from 2.69 million in 2025 to 3.22 million by 2030.[2] In a youth-based economy, these are troubling signals for the future, with difficulties among 20–24–year-olds potentially amplifying already sensitive labor market dynamics.

The Critical Transition Points In the Saudi Labor Market

To understand the potential earnings losses from gaps in learning paths in Saudi Arabia, we focused on three of the major transition points in an individual's work cycle: moving from school or college to work; involuntary job losses across the population owing to redundancies and layoffs; and displacement caused by automation and disruption.

1. The transition from education to work
Students in Saudi Arabia can undergo the transition from education to work at various stages: when completing high school and directly entering the workforce, or later in life when graduating from university or other third-level institutions. In addition, some students leave before completing high school in year 12.

2. The transition from one job to another
We focused on involuntary job separations such as redundancies and discharges, where individuals are least likely to be prepared for their next role. Here we focus on involuntary job separations.

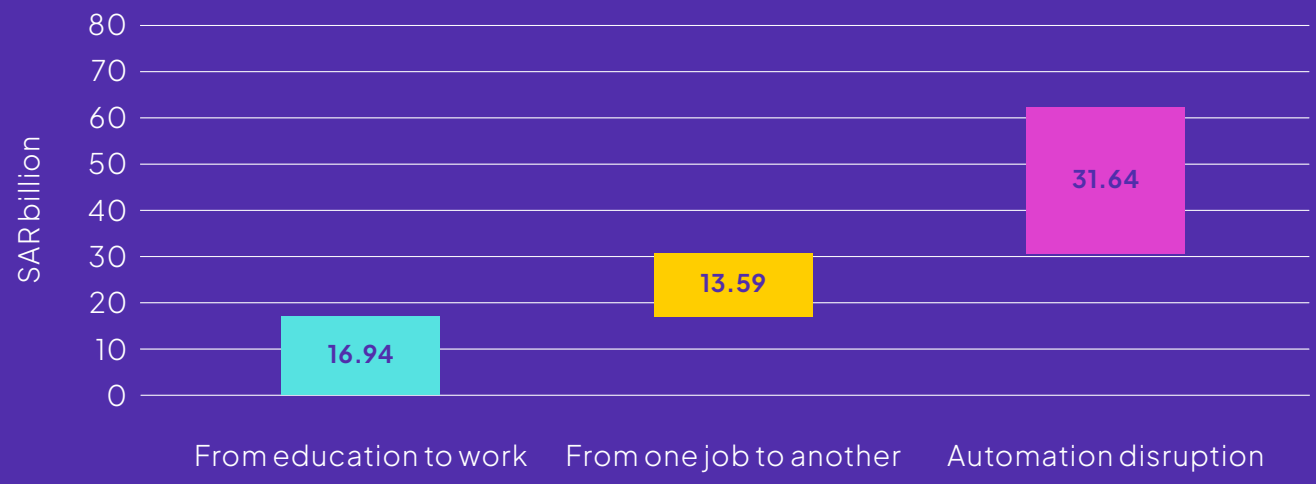
3. The transition due to automation disruption
This measure looks at the potential future reskilling cost as individuals need to find another role because a significant portion of their tasks have been automated. We use an OECD methodology to identify the roles that will see the greatest impact from automation-related technology in the future, and our Faethm database, which tracks emerging and trending skills and occupations, for the wages of occupations affected by automation. By impact, we mean jobs where a large proportion of tasks could potentially be completed by some form of technology.

Findings

Based on this approach, we estimate potential annual transition losses of circa SAR 62 billion for KSA's economy, representing about 1.34% of KSA's annual GDP in 2024, when figures are calculated for Saudi nationals.

SAR 62 billion
annual transition losses

Figure 1: Annual earnings losses to KSA economy, by transition point (SAR)



Automation disruption represents the most important area of transition losses, accounting for half of the potential total annual losses. Automation technologies—such as robotic process automation, large-language-model chatbots, agentic AI models and autonomous mobile robotics—require individuals to reskill for changed or completely new tasks. Saudi Arabia's share of employment at high risk of automation is 23%, mainly driven by its share of employment in construction (8%).

The other two transition points—education to work and unemployment-to-job movement following a period of redundancy—are estimated to result in earnings losses of broadly similar magnitude to one another. **But, the education-to-job transition as we will explore further, is a key concern due to the increasing prevalence of youth unemployment in Saudi Arabia.**

Unemployment amongst the 15–24 age group, while declining in recent years, remains high at 14.8% in Q1 2025 (relative to 5.4% for the 25–54 age group).[3] There are also significant gender differentials, with the male youth unemployment rate at 11.6% compared with 20.7% for female youth.[4]

While the job-to-job transition accounts for the smallest share of earnings losses among the three pathways, it remains significant, particularly in the context of Vision 2030 and the government's ambition to create a more dynamic labour market.

Reducing the reskilling time for workers **affected by automation disruption by 20%,** could yield **additional employee earnings of SAR 6.3 billion.**

Additional context

The dual nature of the Saudi labour market

An important factor in interpreting these results is the structure of the Saudi labour market, which differs markedly from many other economies. Saudi citizens account for only 23% of total employment, with the remaining 77% made up of non-Saudi workers, many employed on variable-length contracts. According to the Q1 2025 Labour Market Statistics report, total employment stands at 17.6 million people: 4.05 million Saudi nationals—29% of whom work in the civil service and the remainder in the private sector—and 13.6 million non-Saudis, almost 30% of whom are domestic workers.[5]

Because this report aims to understand the earnings losses that most directly affect Saudi nationals, our core estimates use Saudi-only employment data. However, applying the same methodology to the entire workforce, including both Saudi and non-Saudi workers, changes the picture significantly. Using total employment of 17.6 million and the economy-wide share of employment at high risk of automation (28.5%) yields an estimated automation-related loss of SAR 196 billion—equivalent to 4.2% of GDP.

Estimated **annual losses amount to SAR 62 billion** (1.34% of GDP for Saudi nationals) and **SAR 196 billion** (4.2% of GDP for the total workforce).

A Deep Dive on the Top Three Labor Market Friction Points

The Broken Pathway for Saudi Youth

One of the most pressing labor challenges plagues young Saudis: the education-to-work pathway. While tertiary education enrolment is high (73.8% gross enrolment in 2024)[6,7] and Saudi Arabia continues to invest heavily in building a highly educated workforce, **the transition from education into the labor market remains slow and inefficient.**

Young people face lengthy job search periods:

- High school completers: around 40 weeks average search time—and only 41% of graduates are employed before or within 12 months of graduation. While there is nodirect data available for secondary school graduates, this is directionally correct, with evidence suggesting even longer waits as employers prefer candidates with technical qualifications.
- Bachelor's graduates: average waiting time to secure a job after graduation was around 39 weeks (~9 months).[8]
- Postgraduate graduates: even Master's and PhD holders face search times of 39–48 weeks.[9]

Although youth unemployment has been declining, it remains notable at 14.8% for ages 15–24, with female youth unemployment at 20.7%.[10] These figures highlight ongoing opportunities to further support young people as they enter the workforce.

This persistent friction suggests that there is room to strengthen the alignment between education and workplace needs. For example, while demand for high-skilled workers in technology, healthcare, and engineering has surged since the launch of Vision 2030, only 30% of engineering and technology graduates are currently deemed fully qualified for private sector positions.[11] Similarly, vocational education and training (TVET) has demonstrated its potential to raise both wages and employment mobility, but uptake varies by gender, and some graduates experience a mismatch between their field of study and the roles they pursue.[12]

These insights point to the value of adapting both formal education and vocational training curricula to better reflect labor market requirements and expanding programs that provide early work experience.

Looking more closely at graduate employment outcomes, it is clear that transition frictions are not uniform—they vary by gender and field of study. Female graduates now account for 61% of the total, yet only 29% of women were employed within one year of graduation, compared to 58% of men.[13] Notably, significant progress has been made in recent years: the employment-to-population ratio for women in Saudi Arabia has risen from 25.8% in 2021 to 31.2% in 2024—a major step toward Vision 2030's gender targets.

By continuing to address these transition frictions— through closer alignment of education and labor market needs, expanded early work experience opportunities, and improved job matching—Saudi Arabia can further empower its growing cohort of young people to thrive in a dynamic, future-ready economy.

Job-to-Job Transition In the Broader Population

The redundancy transition point highlights further rigidities. The General Authority for Statistics (GASTAT) is making significant efforts to improve data collection and understand the reasons behind job separations. Though the majority of job separations came from resignations, **around one third of job separations over the past year were "involuntary", where the termination was not instigated by the employee.**

For Saudi nationals, who are the focus of our modelling, the consequences are severe. Average monthly earnings stand at SAR 11,034, meaning that each month out of work represents a substantial loss of income. Displaced workers spend on average 11.3 months unemployed before re-entering the workforce. Around 40% remain out of work for more than a year, pointing to deep mismatches between the skills displaced workers hold and the roles available. These long spells of joblessness represent not only lost earnings but also erosion of skills.

Automation Disruption Across Sectors

While earlier sections highlighted the challenges of education-to-work transitions and labor market frictions, it is worth reiterating that automation disruption presents a distinct, forward—looking challenge—one that accounts for half of total transition losses. Automation is reshaping not just individual career pathways but entire sectors of the Saudi economy.

Using an OECD approach, we estimate that nearly one-quarter (23%) of Saudi nationals' jobs are at high risk of automation, concentrated in construction, production, transport, and maintenance. Construction, in particular, is central to Vision 2030's diversification strategy, yet many roles in this sector are susceptible to technological change. This underscores the important role automation will play in redefining key sectors as Saudi Arabia continues to diversify beyond oil.

Importantly, the jobs most at risk are not the lowest paid: average monthly wages in these roles are SAR 7,625, making the potential earnings losses significant. The main challenge lies in reskilling and preparing workers for new roles. Reskilling typically takes about 94 days—roughly three months—based on global benchmarks by the World Economic Forum. This lag represents months of foregone productivity at a time when workers must adapt to new technologies.

Unlike the first two transitions, which reflect current patterns in KSA's labor market, automation-driven transitions represent future risks—potential job changes and skill shifts likely to unfold over several years as automation technologies mature. Proactively addressing these challenges will be key to ensuring that Saudi Arabia's workforce remains resilient and ready for the opportunities ahead.

The Macroeconomic Picture

Our core estimates focus on individual earnings losses, i.e. the wages that workers forgo when transitions are slow or poorly supported. This is useful as it reflects the impact on people. We believe this is important because of the role that skills and employment play in an individual's wellbeing. However, these figures only capture part of the economic story. From a macroeconomic perspective, the loss —or potential opportunity—is even greater. Frictions in transition paths lead to losses in worker and firm productivity, as well as skills gaps and mismatches that further constrain economic growth.

Transition losses affect not just individuals, but overall productivity and growth. Reducing reskilling time for workers affected by automation by 20% could add SAR 6.3 billion in annual earnings.

The Collaboration Imperative

Delayed employment and involuntary job exits expose weaknesses in Saudi Arabia's ability to absorb displaced workers swiftly, while automation highlights the urgent need to reduce reskilling time and align training pathways with market demand. All transition points are characterized by long delays in re-entry—whether measured in months of unemployment or months of retraining—that suppress earnings and slow progress toward a more dynamic labor market. Addressing these frictions is central to achieving Vision 2030's goals.

Given the scale and scope of the challenges, progress requires not just efforts by individual students and workers, but also educators, businesses, institutions, and governments. Together, they must foster more effective learning that leads to faster skill development. They also need to collaborate to devise clear pathways that enable people to efficiently move into future careers faster than ever before.

Recommendations: Bridging the Learn-to-Earn Gap

To accelerate progress toward Vision 2030 and unlock the full potential of Saudi Arabia's workforce, we recommend a focused strategy built around five priorities:

1 Diagnose Skills Needs

Employers and educators should collaborate to precisely identify the roles and tasks most needed in the evolving economy. Mapping these requirements enables targeted skills development and helps students and workers understand where to focus their learning.

2 Shorten Transition Times

Accelerate education-to-work and job-to-job transitions by streamlining pathways, reducing barriers, and supporting faster entry into the workforce. This includes expanding access to internships, apprenticeships, and mentorships that provide early work experience.

3 Adapt Curricula and Training

Update both formal education and vocational training programs to reflect the skills and competencies required by employers, especially in high-growth sectors. Curricula should be responsive to labor market trends and technological change.

4 Expand Work Experience Opportunities

Increase opportunities for young people to gain practical experience through work placements, industry partnerships, and experiential learning. Early exposure to the workplace helps bridge the gap between education and employment.

5 Improve Labor Market Intelligence

Enhance the visibility of job openings and skills requirements by investing in labor market data platforms and intelligence tools. Better information supports more effective job matching and reduces mismatches between supply and demand.

By focusing on these priorities —diagnosing skills needs, shortening transition times, adapting curricula, expanding work experience, and improving labor market intelligence—Saudi Arabia can build dynamic, adaptable skilling pathways. This approach will help turn transition losses into opportunity and ensure that every citizen is equipped for the future of work.

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6 It is important to note that this enrolment measure may overstate immediate post-secondary participation, as it captures total enrolment in tertiary education regardless of age, expressed as a percentage of the population in the five-year age group following upper secondary education. In practice, this means it reflects a broader pool of students, not just those moving directly from high school into college.

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