

## Who will be hired: Saudis or Expats?

### *Diagnosing the effects of sectoral contractions and expansions in Saudization levels in a simulated computational environment*

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#### KEY INSIGHTS

- Researchers developed a model that, among other outputs, helps understand how changes in the relative size of sectors influence Saudization.
- Economic growth or contraction can impact Saudi and foreign workforces differently, depending on the sector.
- If the construction sector shrinks, Saudization levels may increase within construction businesses if a greater proportion of expat workers leave the sector relative to Saudis. However, Saudization levels may decrease in the overall economy.
- Expansion of retail and wholesale businesses could increase Saudization within that sector, but not in the overall economy since it constitutes a smaller share of the overall economy.

#### WHO GETS HIRED WHEN A SECTOR EXPANDS OR CONTRACTS - SAUDIS OR EXPATS?

Saudi Arabia's aim to diversify the economy necessitates private sector expansion. Expansion can be achieved by easing business regulations or stimulating private investment, among other strategies. Growth increases demand for workers, potentially increasing Saudization, another priority issue for Saudi Arabia.

A research team sought to explore how sector expansions or contractions influence Saudization levels over a three-year period. The team focused on two of the larger sectors in Saudi Arabia in terms of the number employees: construction, and wholesale and retail.

The researchers developed an agent-based model (ABM) to simulate changes in Saudization levels as a result of changes in the size of different sectors. After developing an initial prototype model and validating its inner

workings, the researchers used GOSI employment data to check its external validity with real world data, giving researchers confidence that the model's outcomes apply to Saudi Arabia. They then used the model to simulate changes in Saudization based on different degrees of contraction and expansion in each sector.

Researchers found that contraction of the construction sector could increase Saudization within the sector. If the workforce decreased by 300 percent, Saudization would increase by about 0.1 percent relative to no change in the sector's size. Saudization would increase by about 0.4 percent if five times as many firms reduced their workforce. Expat workers may transition to other sectors or leave the labor market altogether, leaving a greater relative level of Saudi workers in the sector, and thereby increasing Saudization levels (Figure 1).

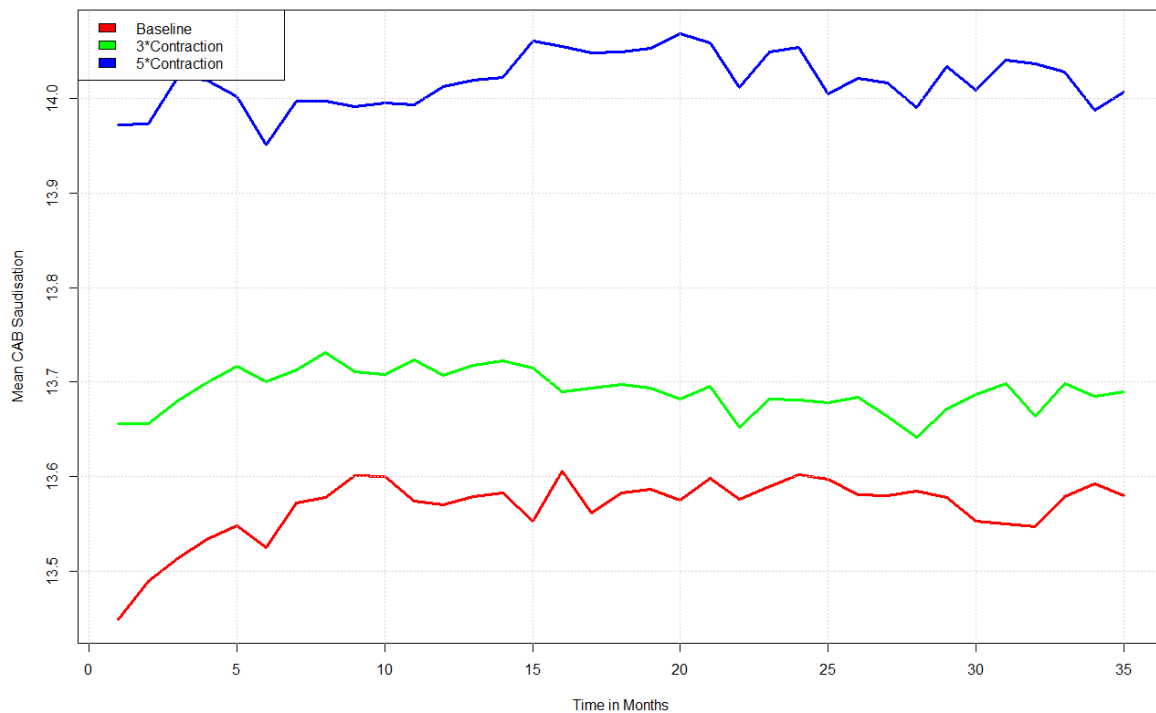
**Figure 1 | Effects of Contraction of the Construction Sector on the Sector's Saudization**



However, because the construction sector is such a large segment of the Saudi economy, overall Saudization of the Saudi economy

would slightly decrease relative to no change in the size of the sector (Figure 2).

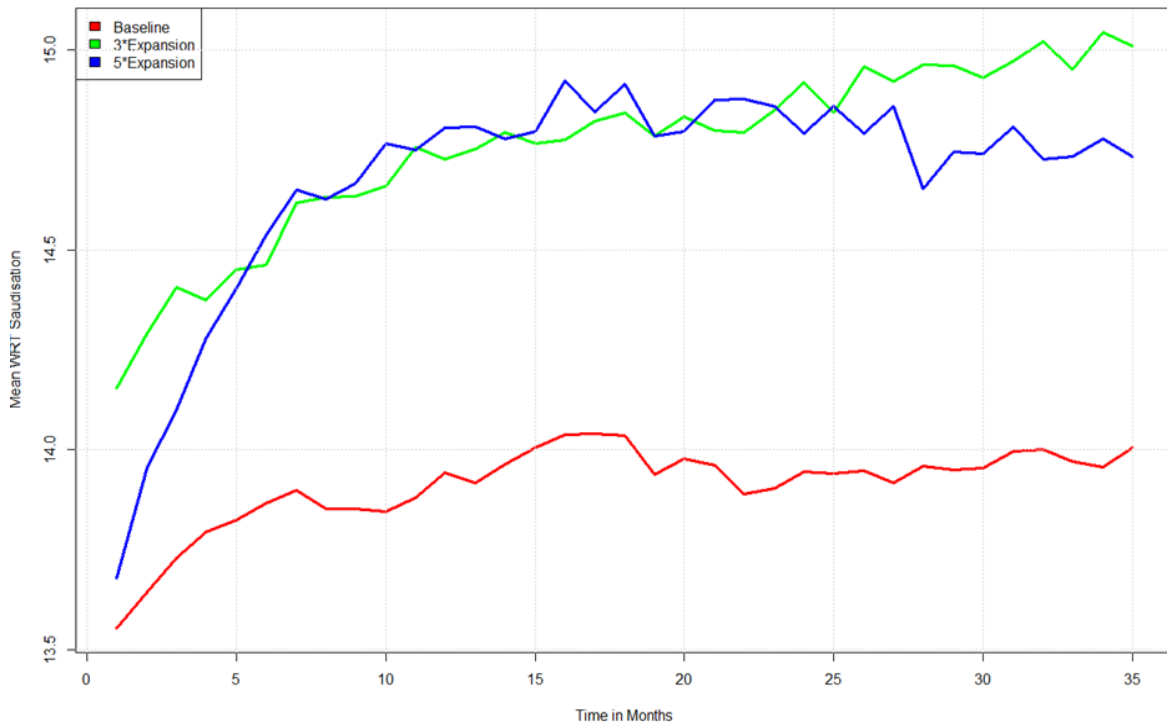
**Figure 2 | Effects of Contraction of the Construction Sector on Overall Saudization of the Economy**



In addition, the model predicts that an expansion in the wholesale and retail trade sector could also increase Saudization levels in that sector, with more Saudi workers entering relative to expat workers. However, there would likely be a limit on how much Saudization would increase. A sector expansion of 300 percent had

the same increase in Saudization of 1 percent as an expansion of 500 percent. Expansion in this sector did not have a significant effect on Saudization levels in the overall economy, likely because the sector constitutes a smaller segment of the overall economy.

**Figure 3 | Effects of Expansion of the Wholesale and Retail Trade Sector on the sector’s Saudization**



### How can policymakers use this information?

The ABM model can be used to generate hypotheses of what effect different labor market policies, and resulting sectoral expansions or contractions, might have on Saudization levels. Policymakers should carefully consider the spillover effects that

changes in one sector can have in other sectors, as well as their long-term impacts. Policies aimed at growth may have a ceiling in terms of impact or on the time horizon in which they can promote desired policy change.

## RESEARCH TEAM

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