

# Labor Sector Efficiency and Diversification in the Middle East

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## Introduction

This poster aims to expand on our past research involving labor markets in the Middle East. Previously, we analyzed the importance of female labor force participation, the variety of sectors in the labor force, and the overall make-up of the labor force. We found that countries with high rates of female participation were better off economically. We also found that countries with a diverse labor force had stronger economies. Our goal for this poster is to see whether there is a correlation between the different labor sectors and the overall GDP per capita for each country. The three labor sectors we will analyze include industry, services, and agriculture. The countries of analysis include Saudi Arabia, Qatar, the United Arab Emirates, Sudan, and Yemen.

## Research Question and Hypothesis

**Research Question:** How does diversification of sector employment in Middle Eastern labor forces affect the overall efficiency & development of the economy?

**Hypothesis:** We believe that countries with diversified sector labor, specifically countries with high proportions of service-based labor, will perform at higher levels than countries with less diversification. We believe that this statement will be reflected in GDP per capita and other economic metrics.

## Country Selection

Saudi Arabia:

- GDP Per Capita: \$28,894.26
- HDI: 0.875

Qatar:

- GDP Per Capita: \$87,482.42
- HDI: 0.855

United Arab Emirates:

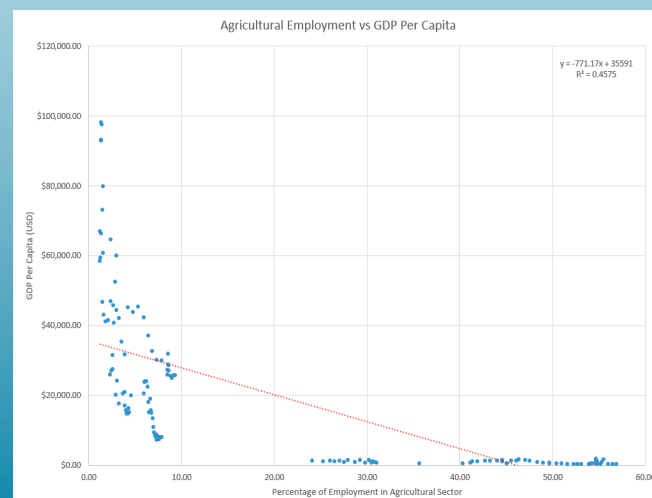
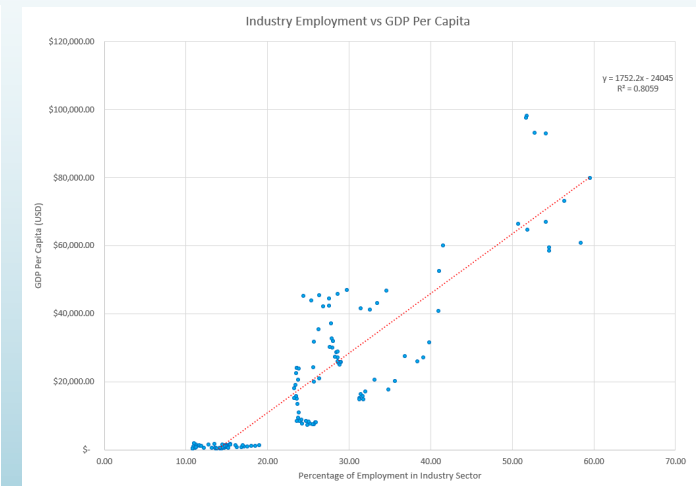
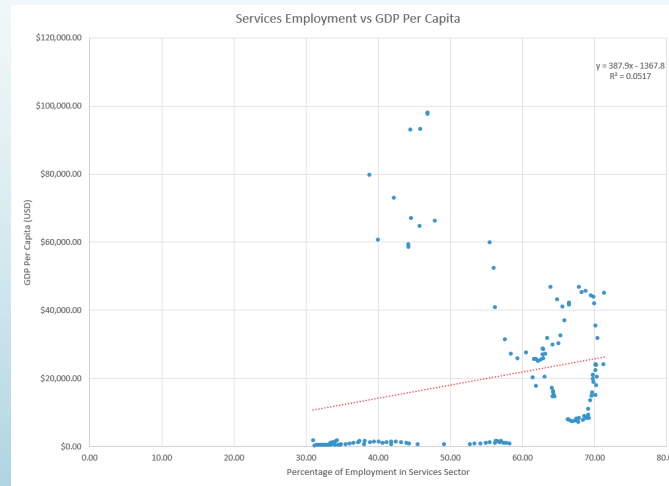
- GDP Per Capita: \$52,976.81
- HDI: 0.911

Sudan:

- GDP Per Capita: \$2,272.49
- HDI: 0.516

Yemen:

- GDP Per Capita: \$533.37
- HDI: 0.455



## Analysis

After generating graphs to test our hypothesis, we reached a few key findings. We found a slight positive correlation between services employment and GDP per capita. Though we predicted a positive correlation between these two variables, we anticipated a stronger slope value. Much of this can be explained by some of our country selection. Countries such as Yemen and Sudan had lower GDP per capita values, which ultimately drove our values down. We found a strong, positive correlation between industry employment and GDP per capita. This was much higher than we had estimated. This is primarily due to the high profitability that comes from oil fracking, which is conducted in many of these countries. Lastly when looking at the correlation of the agricultural sector employment and the GDP we saw a negative correlation, which was expected. We saw a higher amount of GDP per capita in points that had a lower amount of employment in agriculture.

## Conclusion

Overall, there were a few interesting findings. The question that we were looking into was the impact that diversification of employment sectors would have on GDP per capita. In the middle east having strong employment levels in services and industry have been the best factors of GDP. Agriculture is the one sector where the lower amounts of employees correlates to the higher GDP. This helps to draw some conclusions with the original hypothesis claiming that countries with higher levels of employment sector will lead to higher GDP. After analyzing the finding from the graph, the hypothesis was only partly correct. In the middle east some of the highest performing areas had a higher involved industry sector. While having a balance in service and industry will likely be correlated to the highest GDP. The middle east does have some points that can cause the points to skew, the middle east is some of the leaders in the exportation of oil which can lead to a higher amount of reliance in the industry sectors. Recently however, some of the middle eastern countries have been looking into way to expand their reach and diversify their market.