

## The impact of the Nitaqat programme on the Saudi labour market

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### Introduction

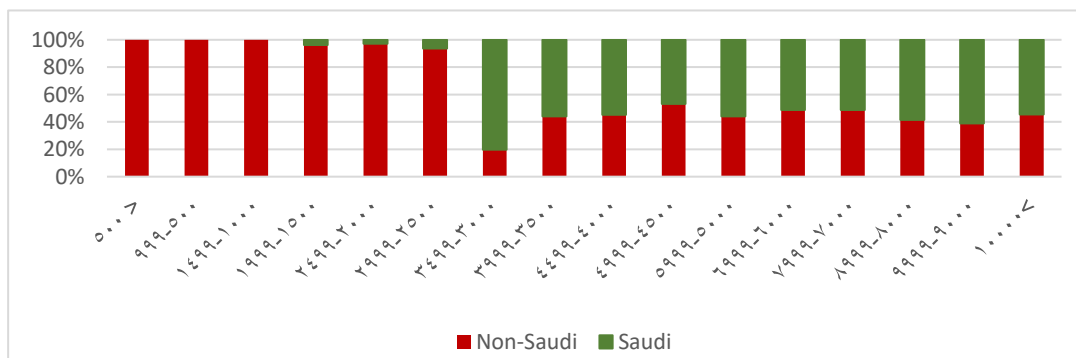
Several Gulf Cooperation Council (GCC), including Saudi Arabia, Bahrain, Qatar, Kuwait, Oman, and the United Arab Emirates, have greater immigrant populations, but Saudi Arabia stands out among them due to its distinctive economic structure. According to 2015 World Bank figures, the Saudi labour market is the fourth most popular location for immigrants to settle behind the US, Germany, and Russia. In comparison to those other countries, a large share of Saudi Arabia's workforce and population are immigrants. In fact, about 32% of all people in Saudi Arabia are immigrants, compared to roughly 8% in Russia, 14% in the US, and Germany. The total labour force of Saudi Arabia is made up of roughly 78% immigrants, compared to 15% in Russia, 28% in Germany, and 29% in the US.

Despite Saudi Arabia's economy growing and its reliance on oil as a major source of wealth, structural problems with the distribution of non-Saudi workers into lower

wage groups have made it difficult for the labor market to generate adequate jobs for Saudi nationals. Saudis typically work between 3,000 and 3,500 SR, while non-Saudis typically work less than 3,000 SR, as seen in Figure 1. The worker distribution for both groups appears to be convergent after 3,500 SR. Nearly 400,000 individuals held occupations that paid over 10,000 SR. This may imply two issues on the labour market: segregation, dependency.

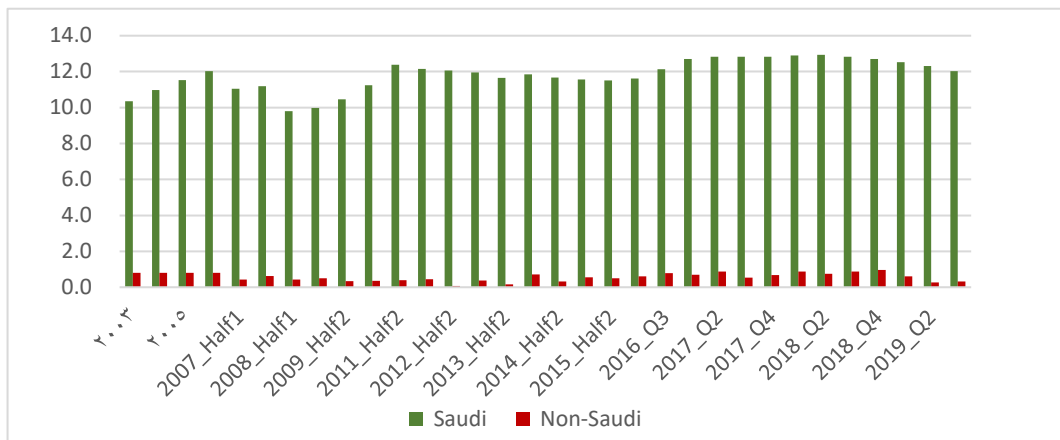
Another issue that has plagued Saudi Arabia's labour market is the high percentage of unemployment among Saudi workers. For several years, the unemployment rate among Saudis reached 12%, whereas it was just 2% for non-Saudis (see Figure 2). Be aware that Saudi women have a greater jobless rate than Saudi men. For instance, the unemployment rate in Saudi Arabia was 12% overall, 30.8% for Saudi women, and 5.8% for Saudi men in the third quarter of 2019. This ratio was generally 0.3% for non-Saudis. 0.2% for men who are not Saudi Arabian and 1% for women.

Figure 1: worker's distribution among wage categories.



Source: General Institution for Social Insurance, 2015, p. 87

Figure2: Saudi and non-Saudi unemployment rate.



Source: The researcher’s collection from several files published by GaStat. Non-Saudi follows the secondary axis.

This was the rationale of imposing Nitaqat programme to labour Saudi market. The programme set a quota to classified firms into four zones (nitaqat): red and yellow represent non-localised firms (with a proportion of Saudi workers that is seen as insufficient), while firms with an acceptable proportion of Saudi workers called localised firms are represented by green and platinum. This classification used to reward localised firms and penalise non-localised firms.

### Overview

Three literatures were linked in this research – affirmative action Nitaqat quotas, Oaxaca decomposition, and the earning functions – to address the impact of Nitaqat on the wages and wage gap between Saudi and Non-Saudi. Unlike other policies, Nitaqat is designed to enhance the employment of Saudis who received double wages compared to non-Saudis on average and who suffered from a high unemployment rate. Thus, the quota policy (Nitaqat) could produce an undesirable consequence for the target group (Saudis). This means, rather than improving Saudi employees' pay and unemployment rates, the quota could have an adverse effect. On other word, Nitaqat could be not guarantee high incomes and employment rates for Saudi. However, Nitaqat contributed to a marginally

small rise in Saudi employment (Peck, 2014). This might be not actual employments. By that I meant, Saudi do not actually have a job, employers will enlist Saudis (such as students, elderly, or disabled) and pay them (for instance, 1500 SR) in order to meet the quota requirement. Before the fees for non-Saudi were revealed, both the employee and the company benefited from this Nitaqat escape strategy. But after these new direct costs, it became somewhat more expensive for the employers who relied on the fictitious Saudisation to meet quota requirements. As a result, the costs levied against the non-Saudi group indirectly helped the Saudi group recover from their fictitious Saudisation.

Due to introducing the quotas being in favour of the population who earns higher on average (Saudi), the effect on their wages can be opposite of what is anticipated (an increase in wages). This can be explained by two reasons: **First**, the position of the majority of non-Saudi workers appears to challenging the compensating-differentials theory given that non-Saudis are more frequently employed in low-paying positions that are also linked to undesirable job characteristics like dangerous working conditions, long hours, and remote locations. This suggests that the risk of layoffs resulting from Nitaqat may have a similar unfavourable association. **Second**, the

concentration of the worker distribution at the bottom of the pay scale enhances the likelihood of Saudi replacement there (see Figure 1 above).

Accordingly, the wage gap between the two groups could decrease or increase depending on the workers' responses to the layoff risk stemming from the Nitaqat and workers' redistribution by firms. Therefore, considering the wage gap reduction as an aim of Nitaqat could be challenging. The reaction would be in three scenarios: **First**, if more Saudis were employed in high-paying positions, the average wage of Saudis would rise. To close the wage difference, non-Saudi wages would need to rise by a bigger proportion, which would be expensive for the businesses. **Second**, if Saudis worked in low-paid positions (or at least at or near the quota's minimum salary), Saudi average salaries would fall. This might correspond to a rise in non-Saudi salaries. This may indicate that the strategy has a greater positive impact on non-Saudis than on Saudis. **In the third scenario**, the average wage would fall for both categories, with Saudi Arabia's average wage reduction being greater in order to reduce the wage difference. Thus, if the Nitaqat program were linked to a suitable substitute toward the Saudi minimum wage or increased both groups' average wages, even though it would be expensive if linked to non-Saudi workers of comparable quality, the achievement of its purpose of closing the wage gap might be suggested.

This policy was evaluated in the literature and gained huge attention because it restricted employers' choices of labour, increasing their operating costs. Keep in mind that employers, according to the rewards and penalties associated with Nitaqat classification of firms' status (localised and non-localised), will choose the best combination of workers' groups and capital to minimise their costs and satisfy the required quota percentage. Accordingly, the workers in both groups are under direct or indirect layoff risk according to the status of the firms they belong to. Non-Saudis would be under direct layoff risk at non-localised firms, unlike their peers in localised

firms who are exposed to indirect layoff risk. Similarly, Saudis are exposed to indirect risk in both firms' statuses because employers reallocate Saudis themselves to satisfy the Nitaqat criteria, which would influence their wages.

Therefore, unlike other studies, we evaluated the effect of Nitaqat on wages through the interaction of the employees with this policy through our simple framework. We expect a negative relationship between wage and layoff risk, unlike the hedonic wage literature assumption, although especially that literature provided evidence of the possibility of reverse hedonic wages (Theodossiou & Vasileiou, 2007). Unlike the finding of the previous studies, Nitaqat could successfully decrease the average wage gap between the two groups because of the decrease of one group's wages at least or both groups if the layoff risks were appreciated. This reduction of the wage gap could harm at least one group's welfare. Thus, the success of this policy is associated with an increase in the target group's (Saudis) welfare not reducing the wage gap between the two groups. This is empirically applied using Oaxaca decomposition as a standard tool to evaluate the wage gap between the respective means of two groups group's mean. We used two separate cross-sections, 2013 and 2017 to investigate the salary disparity between Saudis and non-Saudis while taking into account a firm's position (localized or non-localized) in accordance with Nitaqat which will likely increase unemployment risk, which will prompt workers to react to changes in the layoff risk, and this, in turn, will have an impact on the average wage gap, according to the research, which also estimates the contribution of Nitaqat to this gap in the Saudi labour market. The following questions have so been the focus of the work.

- I. What causes the salary difference between Saudis and other workers?
- II. Is this gap the product of employee attributes or discrimination?
- III. How can the Nitaqat program help close the wage gap that is currently present? Has it grown wider or smaller? Are

Saudi wages as a target group changing at all? Do wages rise or fall?

- IV. Do businesses' attitudes regarding the wage gap alter depending on which colour band they fall into? If so, do localized businesses have a smaller wage gap than those that aren't?
- V. Does Nitaqat's wage increase or drop enhance or lessen the risk of layoffs? Is this adjustment the same for both firm statuses?

### Chapter- by- chapter Summary

We provide a chapter-by-chapter summary of our findings. We presented some significant data on the Saudi labor market related to Nitaqat in the first chapter. Because of how employees react to the policy and how they are distributed throughout the various occupational categories, we show that Nitaqat may produce unfavorable outcomes for the earnings of at least one group. In order to comprehend how Nitaqat affected salaries, various concerns needed to be scientifically addressed.

**In chapter 2,** Unlike other literature where quota principle applied for enhancing the groups that have higher unemployment and lower salaries, Saudis experienced higher unemployment and higher wages. Additionally, Nitaqat is linked to other regulations that might have an impact on the distribution and danger of layoffs among employees. Therefore, given that quotas are typically connected in the literature with an increase in the wages of the disadvantaged group (such as women) or both groups but a smaller percentage for the original group, we anticipated that Nitaqat quotas could have counterintuitive results on wages where the quota policy is linked to a narrowing of the pay gap. Therefore, if the gap shrank as a result of Nitaqat, this will be linked to a decline in the welfare of Saudi workers. Additionally, we discovered that neither theoretically nor empirically, the literature did not pay much attention to explaining the income disparity between native Saudis and immigrants.

*Table 1: Summary of the key feature on the literature*

Author	Data sources	Model applied	Key finding	Relevance
<b>Gottschalk 1978</b>	From 1969 to 1983. Over 300,000 employee form 1000 establishments in the USA.	This study used the first order condition for the estimation.	Mincer approach is more appropriate than the productivity function in wage estimation.	Including age on earning function. Cubic age could be used in wage function.
<b>Purnagunawan 2007</b>	Australian Income and laboured dynamic, household. 2 cross sectional data 2001, and 2004 cover 13,696 and 12,408 full time workers, respectively.	This study using OLS estimations. The instrumental variable IV method used as well when the ability variable added.	Additional schooling increases the wage to 6% in 2001 and 7% in 2004.	This study confirms the important of using a human capital variable on earning function such as schooling and experience.
<b>Fleischhauer 2007</b>	review study of the human capital theory.	Descriptive analysis.	Human capital theory could be adopted in wage gap research.	Education/ earning in logarithmic form can be reflected on Mincer equation.
<b>Arcidiacono 2004</b>	Higher Education Directory 1973–1974, Tripartite Application Data 1973–1974, HEGIS Finance Survey 1972–1973, and the ACE institutional characteristics File the 1972.	full information maximum likelihood to regress log earning on several variable such as grad on subject, gender major specification, and the SAT reflect ability with respect to major.	He two keys finding of the earning function are: educational major strongly affects earning. Moreover, major can explain the gender differences in earning.	However, it confirms the important of adding independent variable could measure the workers major on the earning function. This can capture the earning differences between two heterogenous groups as well.
<b>Blinder (1973)</b>	The data collected from Michigan survey research centre 1967.	He used two of second procedure. First wage function reduced form, and second structure	He found that third of the differential of white gender gap explained by their	This study inspires us to understand the basic of the decomposition approach. This initial

Author	Data sources	Model applied	Key finding	Relevance
	The research conducted in the United States US	estimates of wage. He used OLS in both procedures.	attribute and 40% of the white/ black gap refer to discrimination.	paper used the three-fold decomposition approach.
<b>Oaxaca 1999</b>	The study benefit from mailing a survey among university and college facilities 1989 in the US. The participants were 2624 male and 892 females.	He applied to specification once using the PhD holder as a reference group and once non advance degree as a reference group.	Main finding that unexplained part changed with the reference category choice. when PhD is the reference, the constant 0.037 and .219 otherwise.	This study gives us an inspiration to propose a solution of the identification problem.
<b>Yun 2005</b>	Theoretical article	He followed suits (1984) for OLS. Total categories divided by number of categories including the reference (b1+b2+b3/4)	He found that applying normalised regression approach give a fixed value for each category and solve the identification issue.	It outwardly fixed, require fix base categories at the split regression. Moreover, the summation for one variable is variant, accordingly.
<b>Griffin 1992</b>	Firm level data from New York stock Exchange (NYSE), US, 1980. This data collected for EEO-1 report, affirmative action policy.	Theoretical and empirical study.  The model estimates the cost function and inputs elasticities.	The elasticity of labour demand is low and lower substitutable relation between inputs factors. Firms cost increased 6.5% on average.	This study inspires us in terms of the multi-supply effect where firms dealt with the input factors (black/white) under this policy as separate inputs.
<b>Kee 1995</b>	The study used quality of live survey (QLS), Netherlands. native counts 1275, Antilleans formed 109, Surinamese counts 216, Turks counts 627, and 283 were Moroccans.	Oaxaca decomposition methodology was used with selection biased approach to capture other family income sources.	He found that Moroccans explained part indicate that there were advantage groups, and their wage could exceed native if there were similar characteristic.	Give us overview on applied Oaxaca decomposition. Inspire us to search behind workers origins.
<b>Lehmer et al. 2011</b>	Data collected from German federal employment Agency registration (BEH), 1995-2000. This covered 80% from Germany labour market.	Oaxaca decomposition was used for several European countries.	All immigrant: from European countries were receive lower than Germany. The gap shows heterogeneity among European group	We agree that immigrant would have lower wage than native depending on their background. This implies there is unobserved variable make all unexplained part high in some immigrants.
<b>Longhi et al. 2012</b>	British labour force survey (LFS). The data start from the 2ed quarter 2002 to 3 <sup>rd</sup> of 2009.	Generalised Oaxaca decomposition was used. The study distinguishes between first and second generation for Pakistanis and Indian with respect religions. This yield 6 <sup>th</sup> minorities groups. The reference groups is British white Christian.	That result was varying among the minorities groups. However, second generation received higher wage compared to first generation although the explained gap through characteristic was not improved in some minority's groups.	This study inspire us to start our theoretical analyse through the utility function as consumption would be essential factor could explained the native- immigrant gap. The heterogeneity on the utility function caused the heterogeneity on received wage.
<b>Frank et al. 2013</b>	The data sources is the report of the annual earning 2002, Canada.	Oaxaca decomposition.	Immigrant were disadvantage in ethic and demographic characteristic. They were advantage in terms of human capital.	Using a groups of variable as one attribute was a good strategy to follow. We follow this strategy.
<b>Smith &amp; Fernandez 2017</b>	The US data collect from International Assessment of Adult Competencies, 2016	Multinomial logistic regression for occupation	Immigrant located on the two bottom categories of wage scale.	This result agreed to search behind the substituted relation when use quota policy.

Author	Data sources	Model applied	Key finding	Relevance
Massey et al. 1993	Theoretical review stud.	Review and appraisal theories of international migration	That consumption considers an appropriate unite for immigrant research.	Including consumption could explain substantial amount of the wage gap when immigrant considered.
Jann 2008	Stata command file	Develop Oaxaca decomposition commands	Useful tool to perform Oaxaca.	Help use to perform the empirical part.
Scicchitano et al., 2019	Survey of quality of workers, 2015, Italy. 15000 observation	Oaxaca decomposition OLS and quantile	There is a negative relation between job security and wage.	We agree that layoff risk could decrease wages.
Bratsberg et al 2014	Administrative registration data, Norway. From 1993 to 2006.	Basic estimation was used OLS for earning function and the labour elasticity.	They found that labour origin is important dimension in the labour market.	Disaggregate supply by origin. Agree with our multi-supply idea

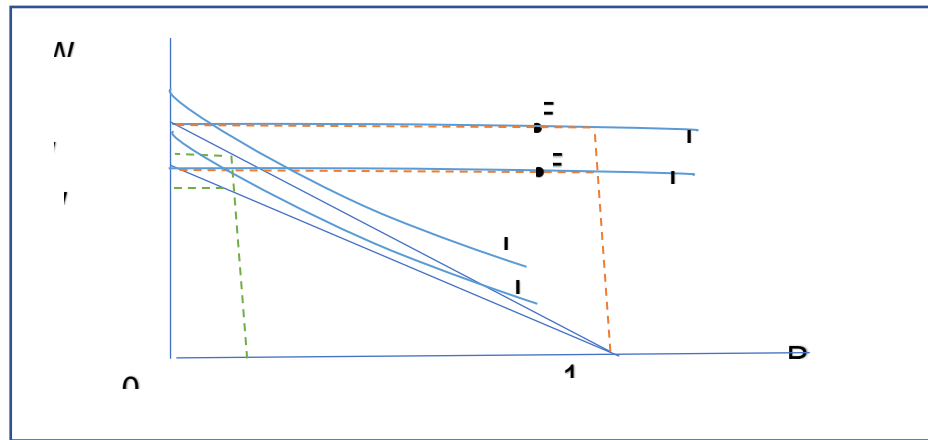
**In chapter 3**, The research benefits from the use of two different data cross-sections for the years 2013 and 2017. This was offered by the MLSD, but was subject to restrictions imposed by the privacy policies banned us from having more variables and tracking individual's IDs. Although there were few variables in the data, there were many of observations. Despite this limitation, we were still able to identify the crucial variables for forecasting earnings functions that are necessary for estimating our models.

However, we found that the datasets need to be improved, especially where it contains large omissions. Fortunately, the missing data was following the missing at random MAR mechanism, which was expected where the missingness was found when it was not mandatory to provide them, especially for non-Saudis. Additionally, the data reflected the differences in the wage distribution regarding the research scope (Saudis and non-Saudis) where non-Saudis were distributed intensively below the lowest category of Saudi wages. As expected, we found the sample was heterogonous between the two groups and among non-Saudis implied for segregation.

**In chapter 4**, The impact of Nitaqat is theoretically investigated using our frameworks. We began by looking at the utility function for workers, which may be maximized by wage and consumption subject to the possibility of layoffs risk brought on by Nitaqat. The modern research theory and the

hedonic wage theory were two theories that our framework made use of. This framework was distinguished compared to previous works in the literature where the researchers looked at the firms' respond using profit maximization or cost minimization while we looked at the employees' respond (see figure 4). We discovered that the salary discrepancy between Saudis and non-Saudis can be explained by the current research theory (through consumption) and the hedonic wage theory (through layoff risk). Then, we used Oaxaca decomposition approach, an empirical method, to assess the contribution of consumption and Nitaqat to the explanation of the pay disparity. We then exploited Oaxaca decomposition to address the effect of layoff risk (Nitaqat variable) on explaining the compositional differences (see Equation 5.44). We assumed that the negative sign of the coefficient of interest implied that the Saudi worker had a higher average wage because of the direct effect of Nitaqat. On the contrary, the unexplained part implies an indirect effect of Nitaqat on average wages. We display the model specification we used, as well. Moreover, we developed a new strategy to fix the identification issue of the unexplained part of the Oaxaca decomposition. This strategy is a calculation method depending on distributing the constant on categorical coefficients after we considered the omitted category. However, this finding needs to be enhanced in terms of finding the associated standard errors.

Figure 3: Workers' wage choices under risk



Source: Researcher's original work, look at the thesis for full derivation of the framework.

**Chapter 5** provided the empirical finding that the wage gap was explained by the higher Saudi characteristics in educational qualifications, occupations, quota policies, and consumptions in both years. This result is consistent with theoretical and empirical views, such as human capital theory (Becker, 2010; Collard, 1972), and empirically, such as in (Longhi et al., 2012). Moreover, the gap resulted from segregations in occupations which was supported by some empirical evidence (Lehmer & Ludsteck, 2011; Smith & Fernandez, 2017). In 2017, the occupations had less influence to explain the disparity, which points to the possibility of Saudis' experience glass ceiling under Nitaqat2. Additionally, the contemporary immigrant idea was able to account for the difference (via consumption) by more than 20% in both years. The influence of layoff risk (a Nitaqat variable) on explaining the compositional differences was then addressed using Oaxaca decomposition (see the equation).

Because of Nitaqat's direct impact, we assumed that the coefficient of interest's negative sign indicated that the Saudi worker's average income was higher. On the other hand, the unexplained portion suggests that Nitaqat has a secondary impact on average salaries. Similar to this, the hedonic wage hypothesis was successful in using Nitaqat variables to explain the compositional variations of the gap by 3% in 2013 and 9% in 2017. This suggests that Nitaqat indicator, with an increase of 6% from 2013, contributed to the widening of the gap's compositional disparities in 2017.

In 2013 and 2017, the occupation explained the discrepancy by 6% and 13%, respectively. This larger percentage is consistent with the findings of (Bertrand et al., 2014; 2019) and suggests that the quota has a relatively limited direct impact on the gap. However, businesses' resistance in both years resulted in a redistribution of Saudi workers among occupations, which had an indirect negative impact on Nitaqat.

Generally, we discovered that applying Nitaqat successfully reduced the difference, which was consistent with a drop in Saudi Arabia's average pay. As a result, Nitaqat caused a reduction in Saudi welfare. This outcome was confirmed by the pooled earnings function, which showed that Saudi salaries fell by almost 30% over the course of the two years. This suggests that Saudis benefited from

$$\begin{array}{l}
 \left. \begin{array}{l}
 \text{Explained Gap} \\
 \text{due to individual characteristics } \sum \beta_s (\bar{h}_s - \bar{h}_f) \\
 \text{due to job characteristics } \sum y_s (\bar{z}_s - \bar{z}_f) \\
 \text{due to nitaqat risk } \rho_s (\bar{R}_s - \bar{R}_f) \\
 \text{Unexplained Gap} \\
 \text{due to individual characteristics } \sum (\beta_s - \beta_f) \bar{h}_f \\
 \text{due to job characteristics } \sum (y_s - y_f) \bar{z}_f \\
 \text{due to nitaqat risk } (\rho_{sb} - \rho_{fb}) \bar{R}_f \\
 \text{due to intercept } (\alpha_s - \alpha_f)
 \end{array} \right\} \text{wage}_{gap}
 \end{array}$$

the segregation that was in place in 2013, and that Nitaqat allowed for the redistribution of Saudi workers to lower occupation strata.

However, a significant portion of the gap in both years was explained by the unexplained component, which was consistent with some research findings (Hayfron, 2002; Lehmer & Ludsteck, 2011). It was discovered that by enhancing non-Saudi worker qualities, the gap may be closed. The variability of the pay structures between the two groups, however, prevented the gap from closing (via the intercept), suggesting that the variations in the starting salaries for the two groups were caused by unobserved factors like the wages in the sending nations. As a result, the outcome was different when it came to the origins of non-Saudis; unlike other origins, the constant of workers from high background countries was larger than that of Saudis.

Other research results backed up this conclusion (Kee, 1995; Lehmer & Ludsteck, 2011; Longhi et al., 2012).

Additionally, in 2013 and 2017, workers in localized enterprises earned 11% and 36% more than their counterparts in non-localized firms, respectively. However, in non-localized enterprises compared to localized firms in 2013, the disparity between Saudis and non-Saudis was greater, but it was lower in 2017. This suggests that because the layoff risk varied depending on the business status, the two groups reacted to it in different ways. The disparity across Saudis, however, demonstrated variability in their responses between the two years due to the differences in the two years' policies, such as the introduction of SANED (the unemployment benefit).

In contrast to 2013, when they followed the theoretically anticipated outcome, they followed the hedonic wage response in 2017 similarly to (Pinheiro & Visschers, 2015). The replies of non-Saudis, however, did not differ significantly from those of their peers in non-localized enterprises, with non-Saudis in localized firms earning 7% and 10% more over the course of two years, respectively. This could imply a double negative for non-Saudis in non-localized enterprises, which is at odds with how this phrase has been employed for

female immigrant groups in other research (Boyd, 1984; Hayfron, 2002). It appears that Nitaqat created heterogeneity in the likelihood of being laid off, having diverse effects for both groups both supporting and contradicting the hedonic response.

The bigger discrepancy in non-localized enterprises suggests that Saudis requested higher compensation in 2013, while not being at risk of layoff. The literature supports this finding as the antithesis of the hedonic wage see (Theodossiou & Vasileiou, 2007). Non-Saudis, on the other hand, behaved in opposition to the hedonic wage in both years, earning more when the risk of deportation was lower in localized enterprises and less when it was higher in non-localized firms.

**In chapter 6**, we discovered that, in contrast to the finite sample, where the explained component exhibits significant dissimilarity, using complete cases and employing inverse probability weighting (IPW) produced usually consistent results.

Additionally, we discovered that while using IPW, the results were sensitive to the weights chosen. The findings of using IPW for Oaxaca decomposition were dependent on the method employed, and they could be consistent with the entire cases in one method but inconsistent in another. In all situations, IPW was consistent with Omega methods, which were highest. We concluded that Oaxaca decomposition under the MAR mechanism could result in a similar result for using both Complete Cases CC and IPW in some IPW weights and some Oaxaca approaches.

## **Implications and recommendations**

We can offer some suggestions based on our findings. We advise enhancing the data collection approach that would enable forecasting using additional methodological tools. The Wages Protection Program, which was introduced in 2017, appears to be an effective plan to increase the quantity and quality of data. Additionally, we advise utilizing the information to guide the inspection trips planned by the MLSA.



In general, Nitaqat 1&2 ineffectively helped close the wage gap because it did so by lowering the average wages of both groups, with the Saudi average wage falling by twice as much. Nitaqat offered low-quality employment centered on the 3,000 SR per month federal minimum wage. To prevent Saudis from being replaced, we therefore do not advocate connecting Nitaqat to a particular wage but rather to jobs, in accordance with the structure of each occupation (worker redistribution among Saudis). Nitaqat seems to have a moderate impact on Saudi employment and a moderate impact on welfare, which may be related to the redistribution of workers and the size of the enterprises. Even though choosing a company size based on the number of employees led firm size redistribution, using a similar percentage in all administrative areas was a solid criterion. Therefore, to prevent firm redistribution, we advise combining other firm size metrics or utilizing a fixed proportion. However, adjusting the percentage in different regions might re-allocate the non-Saudi population and jobs to the cities that lower Population density.

The lack of a double negative problem among non-Saudi women suggests that Nitaqat offered low-quality jobs to Saudis in general and Saudi women in particular. Therefore, in light of the Nitaqat, additional study on the gender disparity is advised. Additionally, including non-Saudis in the program proportion could redistribute them as a substitute for the admission quota policy that is employed in some other nations. This would necessitate some information on those professions, such as a thorough analysis of their interactions (complements versus replacements) for capital versus labour and among labour (qualified versus less qualified). In other words, it's advised to comprehend the structural differences in the labour market

between workers in enterprises and the potential for automation.

In order to address the dumping impact that coincides with a systematic replacement program, it is also advisable to reconsider the recruitment rules and fee structures. For instance, based on the quantity of Saudis looking for work, suspending new visas in certain occupations. Linking the fees to these target professions in order to make them at least equal to the Saudi contribution to the GOSI would be the first step. Selected occupations would see an increase in the cost of non-Saudi labour as a result. Since there isn't a defined pay scale in the private sector, employers set non-linear prices for the nationalities where they made the most money. Therefore, we advise taking advantage of this non-linear pricing distribution in the complimentary occupations and raising the costs for non-Saudi workers in the replacement occupations. Prior to taking any action, further information is required. In some circumstances, it may be beneficial to use remittances as a sign of al-tasatur. It is necessary to propose certain proposals to the national anti-al-tasatur law that could sever ties between Saudi sponsors and unlicensed non-Saudi merchants. Legalizing the businesses would ensure that they were under legal control and would stop money from leaving the nation as the merchant's life cycle came to an end there.

Theoretically, we advised evaluating the impact of a variable's correlation with an index on the explained portion of the Oaxaca decomposition. Additionally, look into why the pooled technique results in a lower explained portion that is connected with the high heterogeneity of the reference group (the index). Additionally, we advocate additional IPW-based Oaxaca decomposition research. We advise future research to make use of Monte Carlo simulation.