

## The Power of Micro-Level Data: Improving Precision in GCC Policy Design

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### Executive Summary

Data is becoming increasingly critical for shaping policy decisions within the Gulf Cooperation Council (GCC) countries. With the GCC nations aiming to establish themselves as global leaders, leveraging available data is essential for informed policy formulation. This policy note emphasizes the potential of micro-level data to enhance GCC policy design, with a specific focus on migration. The GCC countries have a substantial migrant population, making data accuracy vital. While the exact figures fluctuate, the region collectively hosts over 30 million migrant workers. Existing research primarily relies on descriptive studies and macro-level data, leading to inconsistencies and limited actionable insights for policymakers. The significant policy changes in the Gulf, including reforms in labor laws and nationalization policies, create an opportunity to explore their direct effects on various outcomes through causal inference. However, this requires access to micro-level data and the use of advanced research designs. To contribute to global migration research, the GCC should improve data transparency, make micro-level data available, and support research funding. The region can utilize experimental and quasi-experimental techniques to study the causal impact of policy reforms.

### Introduction

The Gulf Cooperation Council (GCC) countries include a significant percentage of migrants as a share of their populations. Depending on the data source and time period (e.g., World Bank's Development Indicators database or national data), Kuwait, Qatar, and the United Arab Emirates (UAE) consistently rank among the top 5 countries worldwide with a migrant population exceeding 70 percent. Bahrain and Oman also feature in the top 20 countries with a considerable share of migrants. The Kingdom of Saudi Arabia (KSA), which has the largest total population in the region (over 32 million), typically falls within the top 30 countries with 42% of its population composed of foreign nationals (Reuters, 2023).

Collectively, the GCC region hosts more than 30 million migrant workers (Sherman, 2022). The number of foreign nationals in the region is subject to change year on year, primarily influenced by economic factors such as the price of oil, infrastructure investments, and local labor market demand. Despite these fluctuations, the number of foreign nationals has shown a steady increase over the past decade. In the last decade alone, the number of foreign workers almost doubled (GLMM, 2023).

### Migration Research in the Gulf Region

The large presence of foreign nationals in the Gulf has triggered interest from the research community both in the region and overseas. An online database search of Google Scholar yields 16,400 articles about the Gulf region and migration. In 2013 that number was 965, while in 2022 it was 1,550 (the number of articles has grown from 1,270 in 2018 to 1,700 in 2021, slowed down to 1,550 in 2022 but at the time of writing is already at 858 for 2023). Statistics on published research articles on the intersection of the GCC countries and migration suggest a growing research area. It would be hard to examine the types of data and research

designs across all available papers, but a visual observation of several pages of the most relevant articles suggests the following research designs are the most common:

1. Literature review of existing studies
2. Descriptive studies using macro level data on trends
3. Mix-method survey data
4. Qualitative interview and focus groups data

Across various existing studies, several clear themes emerge. Firstly, there are notable inconsistencies in the statistical figures related to migration, such as the number of migrants, the proportion of migrants, and occupation data, among others. These inconsistencies arise not only due to the use of different definitions of variables but also different data collection efforts by local statistical agencies and international organizations such as the World Bank, International Labour Organization (ILO), International Organization for Migration (IOM), and United Nations Economic and Social Commission for Western Asia (ESCWA), among others.

Secondly, a significant majority of studies in the region are of a descriptive nature. Whether they review existing literature, utilize macro-level data, or rely on survey data, the outcomes usually present correlations and trends without adequately addressing crucial causal relationships (see examples at the end of the brief). Descriptive studies are still important and play a crucial role in identifying relationships but alone cannot support policy makers seeing actionable insights.

Even studies that collect survey data or conduct interviews and focus groups are not exempt from limitations. They often suffer from sample selection bias, meaning the observations they gather are not fully representative of the larger migrant population. Consequently, any findings drawn from such studies should be interpreted with caution.

In summary, the existing studies on migration in the region face challenges in terms of inconsistent statistical data and limitations in addressing causal relationships. Descriptive approaches dominate, leading to inconsistent outcomes and restricted benefit, and even more in-depth studies relying on surveys or interviews can fall victim to sample selection bias. For policymakers to make informed decisions, it is essential to address these issues and seek more comprehensive and accurate data along with studies that explore causal relationships in migration dynamics. Such studies take advantage of a change to identify comparison groups allowing policy makers to identify the impact of a policy change.

### Lots of Changes

As the region invests in information and communication technology along with improving the skills of the

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<sup>1</sup> The search was conducted on July 31, 2023, and the search query used is: ("Gulf Cooperation Council" OR "GCC Countries") AND ("Foreign National" OR "Migrant" OR "Expatriate" OR "Contract Worker" OR "Immigration") working papers.

<sup>2</sup> We leave this for future research like the work of Al-Marzouqi and Arabi (2022) which quantifies the total research output of the GCC countries.

national labor force, the governments of GCC countries are actively making changes to their local resident policies. The GCC countries have embarked on ambitious reforms in different areas including labor law, labor markets, employment and workforce, and the healthcare system (Abousleiman, 2023). One of the significant changes is related to the Kafala sponsorship system, which historically controlled the labor market opportunities for foreign workers. Under the new policies, migrant workers now have more freedom to quit or change jobs and leave the country without needing explicit approval from their sponsors (Sherman, 2022). However, it is important to note that these mobility opportunities may not apply to all migrant workers, as restrictions still exist based on their occupation and skill level and hence their impact might be minimal.

Other changes include the nationalization policies that GCC governments are pursuing. For example, Clemens (2022) takes advantage of a change in legal requirements to giving hiring preference to nationals (similar in nature to the nationalization policies in the Gulf) to examine the impact of seasonal visa restrictions on employment of locals.

Additionally, there have been other policy changes in the region. Highly skilled foreign workers are now eligible for long-term visas, such as the 10-year Golden Visa (in the UAE), which provides them with more stability and the possibility to pursue permanent residency, similar to the Green Card system in the United States (Rahman, 2019). Furthermore, foreign nationals are now allowed to own real estate property in the region, as seen in the latest resolutions in [Saudi Arabia](#) and [Qatar](#).

These policy changes present a unique opportunity for the region to investigate the direct effects of these reforms through causal inference. To achieve this, access to micro-level data is essential. In addition, it is crucial to incorporate experimental research designs. Currently, a search on Google Scholar yields 42 articles that use "Randomized Control Trial" in the search query defined above, and 170 articles if "Quasi Experimental" is included. However, upon closer examination, most of the articles merely mention these terms in the text without having conducted experimental or quasi-experimental designs. This suggests that the actual number of articles using experimental designs in the Gulf region related to migration issues is much lower. Out of the 16,400 articles in the search results, this indicates that only 1% of migration research articles online incorporate causal inference techniques.

### Moving Forward

The Gulf region has the highest share of migrants out of the total population than any other region. The region is also going through several legal and employment reforms. These changes create comparison groups allowing researchers to depict the causal impact to further shape the migration policy discourse. The Gulf region has an opportunity and an interest to contribute to the research on migration at the global level. A decade ago, [Clemens \(2013\)](#) argued for the region to “Seize the Spotlight” and this is another call for the region to lead research on labor migration. To do so, we propose important necessary steps to allow local academic institutions, Gulf think tanks, and other regional research institutes the ability to conduct high level research on migration.

The local governments should identify and clearly market one source of data dissemination to hopefully eliminate data discrepancies not just across studies, but also over time and by country. The GCC countries have already established several data portals to convey the region’s commitment to data transparency. To list just a few, examples include [Bayanat](#) in the United Arab Emirates, the Saudi [Open Data Portal](#), and the

[Qatar Open Data Portal](#), with the ability for developers to download data using API. While these efforts are welcomed, more is needed to allow the region to contribute resources to the regional and international research community. The available data on current open data portals are often outdated. Also, such data frequently lacks clear metadata information to help users define data parameters. Finally, data is almost always at the macro level which does not allow researchers to identify meaningful relationships.

The GCC governments need to consider making micro level data available. Such data is already being collected through the national ID program or through different institutions that collect microlevel data through either the census or individual research efforts (such as the Social & Economic Survey Research Institute ([SESRI](#)) in Qatar and the Qatar Foundation). The [Economic Research Forum](#) (ERF) in Egypt is a pioneer in collecting and disseminating [micro-level research](#) in the Middle East region. Collaboration opportunities exist between different institutions in the region on issues related to research.

Large and representative micro-level data can raise concerns for governments, particularly regarding security and individual identification. However, there are various ways to address these concerns. One approach (that is already available by different institutions around the region) is to make such data available through a proposal request system for researchers affiliated with local and regional research institutions.

Access to the data can also be provided on dedicated computer terminals at a specific location or through a secure virtual private network connection. These terminals restrict users from sharing data without prior consent from the data provider, ensuring data security. All research can be conducted at this physical location, minimizing or even eliminating data-related concerns. Such an approach though does highlight the need for consistent and supportive research funding.

Another important goal is to encourage future research to utilize advanced experimental and quasi-experimental techniques like regression discontinuity, difference-in-differences, and synthetic control methods, which leverage policy changes to establish control groups. The current policy reforms in the region offer unique opportunities to employ these methods and examine the causal impact of such reforms on various outcomes. For example, the lifting of the ban on women driving in Saudi Arabia on June 24, 2018, presents an ideal setting for a regression discontinuity research design to study the causal impact of the transportation reform. By using appropriate micro-level data and rich micro level data sets, researchers can investigate not only how this change affects transportation-related outcomes (e.g., number of driver licenses issued, insurance rates, car accidents, road fatalities) but also labor outcomes for Saudi women, such as labor force participation and entrepreneurial opportunities, labor market occupations for foreign nationals (e.g., what happened to the foreign private drivers?), and beyond.

The local nationalization policies provide an opportunity not just to study their impact on employment of locals (type of employment, length of employment) but also examine the effects on employers (influence on hiring decisions, profits, etc.), and any potential ramifications on education outcomes of locals (choice of majors, graduate school, etc.). A change in the required quota, or offering of financial incentives, or just changes in legal requirements by a certain date all allow the creation of comparison groups to study the effectiveness of the nationalization policies.

Furthermore, with the changes to residency visas allowing foreign workers the ability to stay longer, one can study their impact on investment decisions by foreigners (do they invest more locally? In real estate?

Open businesses and create jobs, etc?), remittance decisions (do they send less money abroad?), family decisions (do they reunite with extended family members? Fertility decisions, etc?) among others. Most of these changes occur over time so researchers can use pre and post time events to study the causal impact and inform policy makers of intended and unexpected consequences of such policies.

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The search was conducted on July 31, 2023, and the search query used is: ("Gulf Cooperation Council" OR "GCC Countries") AND ("Foreign National" OR "Migrant" OR "Expatriate" OR "Contract Worker" OR "Immigration"). The list includes published articles in refereed journals, book chapters, policy notes, graduate dissertations, and working papers.

We leave this for future research like the work of Al-Marzouqi and Arabi (2022) which quantifies the total research output of the GCC countries.



## About the Author



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GLMM Mission: The Gulf Labour Markets, Migration and Population (GLMM) programme is an international independent, non-partisan, non-profit programme hosted and supported by the Gulf Research Center (GRC, <https://www.grc.net>, Jeddah, Geneva, Cambridge). The programme provides data, analyses, and recommendations contributing to the improvement of understanding and management of Gulf labour migration, population, and labour markets, engaging with, and respecting the viewpoints of all stakeholders.

GLMM Activities: The Gulf Labour Markets, Migration, and Population Programme has a wide range of activities, including: collecting and elaborating data and documents; researching and analysing key issues; publishing various types of papers; and organising workshops, webinars, and panels.

GLMM Publications: The Gulf Labour Markets, Migration, and Population (GLMM) Programme produces an array of publications addressing all major issues in different formats: Factsheets, Policy Briefs, Explanatory Notes, Research Papers, and volumes.

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