

**Reverse immigration effects for expatriates in Oman during the COVID-19
pandemic shock**

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Abstract

The COVID-19 pandemic produced dramatic aftershocks throughout the global labor markets with rapid changes in differential employment opportunities. Labor market disruptions were sparked by the pandemic in Oman, where expatriates live and work. For the first time, the analysis investigates certain hypotheses relevant to the Aspirations-Capabilities framework and whether this hypothesis survives the pandemic exogenous shock. More specifically, testing this hypothesis, the analysis investigates whether the COVID-19 pandemic shock has a negative impact on expatriates in the host country, as long as it identifies heterogeneous effects among different ethnic groups. The analysis uses data from Datastream and investigates the sudden drop of ethnic expatriates in Oman using ordinal least squares and instrumental variable estimations. A steeper decline in expatriates' employment rate reflects a disproportionately adverse impact that the initial phase of the COVID-19 pandemic had on immigrant employment. The findings identify substantial ethnic differences when reverse immigratory effects are exhibited.

Keywords: Reverse immigration effects; expatriates; Oman; COVID-19 pandemic shock

JEL Classification: F22; J10; J61; C22

Introduction

In crisis events, immigrant workers are among the hardest hit and most vulnerable to displacement, unemployment, and income loss. This work highlights the understudied aspect of repatriation, which unpacked through the present data analysis. Conflicts, social unrest, natural disasters and economic crises are considered immigration disruptions to the regular labor immigration patterns (Bylander, 2018), with the pandemic being no different from a natural disruptor (Liao, 2020) and human mobility restrictions in response to COVID-19, throwing immigrants into disorder (Dommaraju, 2020). Expatriates have been associated with executive assignments (Negandhi and Estafen, 1965; Borrmann, 1968). Immigrant workers face adverse impacts, such as long working hours, isolation, poor quality of living standards,

social discrimination, and mental pressures. Their dependents at home faced financial strains due to the reduced cash flow from their working relatives. Moreover, immigrant workers were in constant fear of being sent back to their home countries due to the impact of COVID-19 in their host countries (Karim et al., 2020). To curb COVID-19 transmission, most countries where immigrant workers work had enforced lockdowns, which had shrunk working hours and job opportunities. Past researchers had early identified that expatriates were satisfied only where their international assignment or travel was presented with options for their career development, job enrichment experience and the presence of a supportive family (Kim and Tung, 2013), and relocation motives were the desire for financial reasons (Lett and Smith, 2009).

With these prospects gone due to the pandemic, the environment where employees are assigned had become seriously adverse, if not hostile. In the past, countries had seen the positive effects of immigration in boosting economic prosperity in the host country (Morley, 2006), skill endowment and productivity (Borjas, 1994). Since there is a lack of consensus on how expatriates should be defined, the work uses the conception of McNulty and Brewster (2017). They critically conceptualized expatriates as International Business Travellers (IBTs) and commuters, virtual workers, assigned employees, self-initiated labor seekers, migrants (skilled and unskilled), and sojourners (retirees and students). The present study draws the attention to Oman, a Persian Gulf country, and explores some early effects of reverse immigration. Looking at expatriate data that include what the above definitions tend to capture, and identify that despite reverse effects, these are demonstrated differences between ethnic groups. This gives us an early insight that possible reverse effects in immigratory flows (often induced by exogenous shocks) should not be examined in aggregate alone, and expatriate populations manifest different dynamics depending on the ethnic background, the social networks or even the bilateral agreements between countries.

The Aspirations-Capabilities framework aspires to capture how macroeconomic factors influence the ideas (e.g., expectations) and resources (e.g., financial or human) conducive to migrate or to stay. The present article investigates, for the first time in the literature, a set of hypotheses to test the Aspirations-Capabilities framework and whether this hypothesis survives the robustness of the pandemic exogenous shock. Testing this relevant hypothesis, the analysis explores whether the COVID-19 pandemic shock negatively impacts expatriates in the host country, as long as it identifies heterogeneous effects across different ethnic groups. The focus on Oman will deviate from the common research focused solely on a source country and a host

country where the major concern is the reasons individuals choose to migrate from a less developed to a more developed country (Karamera et al., 2000; Serlenga and Shin, 2021) and, instead focus on the exogenous effect of the COVID-19 shock on ethnic expatriates in the host country.

The case of Oman

During the COVID-19 pandemic in Oman,¹ the employment rate for natives and expatriates declined. Specifically, the number of expatriates in Oman reported a dramatic decline (see Figure 1). Governments in the Persian Gulf considered the immigration levels too high and expressed the desire to lower them by restricting the inflows of expatriates competing with nationals (Al-Ali, 2008).

[Insert Figure 1 about here]

The oil revenue euphoria of the 60s and 70s began in Oman with ambitious development projects that necessitated the availability of a skilled workforce, which Oman did not have and needed to attract. Foreign workers have transformed the oil and gas sector's infrastructure and local labor needs. Omanisation falls under labor localization, where recruitment and development of local labor aim to reduce dependence upon expatriate flows (Waxin and Bateman, 2016).² However, these localization programmes were unsuccessful as businesses have struggled to conform (Ryan, 2016). Ministerial statements about the need for indigenization of the labor force had increased as unemployment among nationals increased (Barrington and Lewis, 2021; Musalmy, 2021). The immigration flow of expatriates in the Persian Gulf region is not a new phenomenon (Haak-Saheem and Brewster, 2017). The countries have successfully attracted foreign direct investments and specialized talent via the international labor market, forming local organizational hierarchies where locals ran the companies. A high number of blue-collar workers were from Asia. The main countries sending immigrants to the Persian Gulf include India, Pakistan, Bangladesh, the Philippines, Sri Lanka, and Indonesia. For many of these countries, immigration to the Persian Gulf has come as the only solution to fight low economic development and pressure for jobs for new entrants.

¹ As in other Persian Gulf countries such as Kuwait, Saudi Arabia, and United Arab Emirates (UAE).

² Ethnically in Emirates, Indians are beginning to witness an exodus of long-term expatriates (Menon and Vadakepat, 2020) because of diminishing job security, bleak re-employment opportunities, including salary cuts, backlogs of payments, paused or cancelled employment contracts and resultant flights of workers, which resulted in a growing apprehension about their foreign residency.

The majority of employees in the private sector are foreign expatriates, while the public sector remained the prime employer of nationals across the Persian Gulf states ([Al Waqfi and Forstenlechner, 2014](#)). Many expatriates are mainly economically driven, following attractive such as salary packages and no income tax. They left their countries to escape unemployment, while their families at home depended on annual remittance transfers.

The government of Oman had initiated an operation known as Omanisation ([Ministry of Endowment and Religious Affairs, n.d.](#)), which included allotted subsidies to companies for replacing expatriates with trained Omanis. It was initially started in 1988 and took effect by the first Omanisation laws in 1994 passed by the Ministry of Social Affairs and labor. The laws aimed to impose quotas on nationals in various private sectors ([Mashood et al., 2009](#)). In 1997 a monitoring committee was formed in charge of implementing the quotas. Companies that pass their quotas are awarded a green card, which gives them access to preferential treatment by the Ministry. Despite governmental efforts, the most deterring obstacles to Omanisation in the private sector were low compensation, limited benefits, and lack of awareness of employment opportunities ([Al-Lamki, 1998](#)). Most prospective Omani employees are unhappy with the private sector's salaries, retirement plans, social security, and educational assistance. At the same time, vacations are limited, sick leave is restricted, and they have to work for long hours.

Expatriate Theory

So far, the literature on migration has focused on people who migrate, with prominent scholars calling for an age of migration ([Castles et al., 2014](#)) and people who choose to stay ([Schewel, 2020](#)). [De Haas \(2021\)](#) reframes the arising dichotomy that migratory agency (moving or staying) is the capability to choose where to stay and is what calls the Aspirations-Capabilities framework. An attempt to integrate current knowledge splits into acquiescent preferences and the capability to move through constraints, which can be political ([Massey et al., 1993](#)) or related to financial constraints ([Van Hear, 2014](#)), which can be hazardous for households' survival strategies in order to minimize associated economic risks and enhance capital accumulation. Social networks reduce the economic and psychological costs of making the trip and build transnational communities ([Boyd, 1989](#); [Hagan, 1998](#)), often demanding recurrent trips ([Parrado and Cerrutti, 2003](#)). Immigration decisions are not made isolated by individual actors but by larger units (households) that collectively maximize income and minimize the risk associated with market failures in the source country ([Stark and Levhari, 1982](#); [Stark and](#)

Bloom, 1985; Katz and Stark, 1986). Risk diversification is applied when economic conditions deteriorate in the home country, and immigrant remittances in the host country can support households bank in the immigrants' home country. Push and pull models of immigration have been criticized for overlooking intangible elements of individuals' expectations, with Fisher and Malmberg (2001) reporting that settled people do not move, while risk can change the prospects of staying at home or moving elsewhere (Czaika, 2015).

This paper tests the capability hypothesis of the Aspirations-Capability framework on immigration. Unemployment is by itself a factor of mobility and immobility. That suggests that immigration is caused by a geographic difference in the supply and demand of labor, thus causing workers to move. The literature has explored how individuals are motivated to move from low-wage to high-wage countries (Harris and Todaro, 1970; Todaro, 1969). At the same time, higher earnings or job opportunities in origin countries are accompanied by declines in the propensity to emigrate. Immigration is a costly move (Ravenstein, 1885; Lewis, 1954), and only a rise in income in the origin country will reduce immigration (Roy, 1951; Bojras, 1987). With COVID-19 making the cost move importantly high, these flows decline and reverse as foreign workers' demand is evaporated.

The model of Bojras (1989) and the survey by Greenwood (1975) suggest that the choice of a country for immigration purposes depends on the host country's characteristics. Karemera et al. (2000) find that migration is negatively related to unemployment (or positively to employment) in the destination country. The country's destination income is negatively related to immigration (Clark et al., 2007), while high country risks and conflicts can positively affect migration (Docquier, 2018). Bylander (2018) and Dommaraju (2020) have articulated that every pandemic works as a shock and causes disruptions in migratory flows. It can be assumed the COVID-19 pandemic will exert similar shocks to intentions to stay. Thus, the following hypothesis is tested:

***H₁**: The COVID-19 pandemic has a negative effect on expatriate levels in the host country.*

It is also interesting to see how the Aspirations-Capabilities framework is universal and persists in testing multiculturalism or different ethnic minorities in the host country. For receiving countries, immigration is considered that most certainly would lead to the settlement or the formation of ethnic communities due to the social nature of the migration process (Castles, 2000). However, immigrants come to arrive from different cultural backgrounds and can carry

with them different traditions and speak different languages. Cultural diversity does not necessarily indicate equality between ethnic groups, and certain groups might benefit over others (Castles, 2002). Thus, it is hypothesized that different ethnic groups will receive differently the pandemic shock in their host country.

H₂: The COVID-19 pandemic positively affects expatriate levels in every ethnic group in the host country.

Migration determinants

Researchers have identified that economic growth per worker is higher in economies more open to international immigration (Chen and Fang, 2013). Studying the nexus between immigration and growth and how ethnic immigration affects the economic performance of countries of destination has been a very active research topic (De Haan, 1999; Alesina and Ferrara, 2005; Ager and Brückner, 2013; Gören, 2014; Bove and Elia, 2017). So much has been the interest that the link between economic growth and immigration has not been studied only for the host country but also for the source country, often linked with the positive effects of brain drain (Rodriguez, 1975; Mountford, 1997; Chen, 2006). To this end, this variable is a valuable addition to the estimation model. The underlying idea is a boost to labor productivity, making businesses or countries more competitive in the international markets.

H₃: Higher production positively affects expatriate levels in the host country.

Apart from the growth effects, inflation usually impacts by reducing wages as the labor pool increases and employers have more options to tap from. Immigration coupled with the host country's labor supply elasticity can put downward pressure on inflation (thus flattening the Phillips Curve), a channel introduced by Bentolila et al. (2008). Furlanetto and Robstad (2019) study the effects of immigration in Norway which positively impact inflation because of the exchange rate depreciation due to remittances. Lach (2007) identifies that immigrants in Israel reduce products' prices due to the increased aggregate demand, higher price elasticities and lower search costs over natives. In the same orientation, Cortes (2008) posits that the decrease in prices of goods and services is attributed to immigrants' orientation to low-valued aggregate demand.

H₄: Inflation positively affects expatriate levels in the host country.

In addition to growth and inflation, employment is considered an additional variable. In economic theory, immigrants are generally motivated by the returns (or opportunities) expected with their decision to move. Individuals choose to immigrate if the expected benefits' present value exceeds their move's accrued costs (Sjaastad, 1962; Pessino, 1991). The higher the unemployment rate, the more intensifying the search process for individuals to immigrate (DaVanzo, 1978; Goss and Schoening, 1984; Karemera et al., 2000; Di Pietro, 2005). The decision to immigrate is governed by the differential of income at home, and host destination (Harris and Todaro, 1970; Todaro, 1969; Pissarides and McMaster, 1990), where immigrants can access employment opportunities through the small business sector (Barrett and Burgess, 2008) since the immigrant workers are often offering employers with the flexibility for working longer hours than domestic workers (Lee, 1999).

H₅: Higher employment has a positive effect on expatriate levels in the host country

Regarding the final variable, immigrants are also faced with economic shocks and are the first pushed to move as they are constantly searching for stability (Weiner, 1992; Ramos, 2020). Conflict, instability, and environmental degradation continue to displace immigrants from their home countries, searching for regional stability (Widgren, 1990). At times of political and economic uncertainty, immigrants wish for stability and settlement for themselves and their families (Pratsinakis et al., 2020).

H₆: Higher political stability has a positive effect on expatriate levels in the host country

Data and methodology.

Data have been collected by the DataStream, a subscription data-sharing portal, to access Oman's Sultanate data. The data cover the period from February 2013 to February 2021. In terms of the modelling approach, the following equation has been used to serve the empirical goal of the paper:

$$\begin{aligned} \log(\text{Expatriates}_t) & \\ &= a + \beta_1 \log(Y_t) + \beta_2 \log(P_t) + \beta_3 \log(\text{Riskability}_t) + \beta_4(\text{DCOVID} - 19) \\ &+ \varepsilon_t \end{aligned} \quad (1)$$

where a is the constant term, Y_t denotes a real-economy variable, such as industrial production or employment, Riskability_t is an index measuring the country's political stability, and $\text{DCOVID} - 19$ is a dummy variable that takes one during the pandemic periods and zeroes otherwise. The empirical analysis will provide the estimates in relevance to the β_4 coefficient that identifies the pandemic event's impact on the expatriates in Oman. The explanatory variables are employment, inflation, industrial production and stability risk. [Table 1](#) reports specific summary statistics. [Figure 2](#) below depicts the model run above with all the hypotheses for testing.

[Insert [Table 1](#) about here]

[Insert [Figure 2](#) about here]

Empirical results

First, the empirical analysis investigates the presence of stationarity across all variables included in equation (1). [Table 2](#) reports the General Least Squared (GLS) test, recommended by [Elliott et al.](#) (1996). They illustrate the presence of a unit root in the levels across all the variables under consideration. The unit root disappears when the first differences are considered.

Next, the GLS test may provide biased and spurious results due to the absence of information about structural breakpoints in the series. To this end, this part of the analysis applies the [Zivot and Andrews](#) (2002) test. They consider a model that tests the stationarity properties of the variables in the presence of a structural breakpoint when there is a one-time change in the intercept and the trend of the variables under study. The null hypothesis of the unit root break date indicates that the series is not stationary. The test fixes all points as potential for time breaks and provides an estimation through regression analysis for all possible breakpoints successively. The evidence, reported in [Table 2](#), discloses that all the series show a unit root at their level, while they are found to be integrated at one (I(1)). This entails that the series is stationary in their first differences. Simultaneously, the breakpoint coincides with April 2020, associated with the month when Oman experienced an important increase in the Covid-19 confirmed cases. Hence, for the ends of the regression analysis, a dummy variable

(DCOVID19) is explicitly introduced that takes values of one from April 2020 to September 2020 and zero otherwise.

[Insert Table 2 about here]

In the following step of the empirical analysis, [Table 3](#) reports ordinary least squares (OLS) and instrumental variable (IV) estimation results using both industrial production and employment as alternative controls (Panels A and B, respectively). Simultaneously, the dependent variable is total expatriates, and all variables (except the dummy) are expressed in logarithms.

Focusing on the primary driver, the DCOVID19 dummy, the results document that following the burst of the pandemic confirmed cases, the number of total expatriates reported a positive link with the COVID-19 pandemic, thus rejecting the first hypothesis ([H₁](#)) and the prior literature that external shocks affect expatriate levels ([Bylander, 2018](#); [Dommaraju, 2020](#)). The results receive robust support in both panels. Regarding the remaining controls, the estimates highlight that both inflation and risk stability positively impact total expatriates, according to hypotheses four ([H₄](#)) and six ([H₆](#)). At the same time, higher industrial production and employment motivate immigrants to remain in the host country, i.e., Oman, thus accepting hypothesis number three ([H₃](#)) and hypothesis number five ([H₅](#)). Finally, the Sargan test accepts the null hypothesis in diagnostics, indicating that the instruments used are exogenous and valid.

[Insert Table 3 about here]

In the final step of the empirical analysis, the above regressions are repeated, but this time considering ethnicity's role explicitly across the expatriates' groups. More specifically, the results presented in [Tables 4, 5 and 6](#) and focusing on the variable of primary interest, i.e., the DCOVID19 dummy, provide evidence that in the cases of expatriates from Bangladesh, India, Pakistan and Nepal ([Figure 3](#)), the pandemic motivates immigrants to leave the country for their homelands. This aligns with the second hypothesis ([H₂](#)) that the external shock affects migration supporting [Bylander \(2018\)](#) and [Dommaraju \(2020\)](#) while rejecting [Castles \(2000\)](#) and [Fisher and Malmberg \(2001\)](#), who claim that settled people do not migrate. The ethnic differences support [Castles \(2002\)](#) on the difference between ethnic groups.

[Insert Figure 3 about here]

In contrast, in the cases of expatriates from Sri Lanka, Egypt and the Philippines ([Figure 4](#)), pandemic cases do not seem to discourage immigrants from staying in Oman. This is in

accordance with the second hypothesis (H_2) regarding the heterogeneity of expatriate decisions among ethnic groups. The above results receive robust support from both OLS and IV estimates, while the remaining controls exert the same effect on the number of expatriates as in Table 5; the estimates are in accordance with hypothesis three (H_3), where the literature supports the positive effects of expatriates on growth (De Haan, 1999; Alesina and Ferrara, 2005; Ager and Brückner, 2013; Chen and Fang, 2013; Gören, 2014; Bove and Elia, 2017). They are also consistent with hypothesis four (H_4), associated with the positive effects of inflation on expatriates (Furlanetto and Robstad, 2019), while not receiving support from Bentolila et al. (2008), Lach (2007) and Cortes (2008). The estimates are also in line with hypothesis five (H_5) and relevant to the positive effects of employment opportunities on expatriates (DaVanzo, 1978; Goss and Schoening, 1984; Karemera et al., 2000; Di Pietro, 2005; Barrett and Burgess, 2008). Finally, these estimates are consistent with hypothesis six (H_6), supporting the role of political stability (Widgren, 1990; Weiner, 1992; Pratsinakis et al., 2020; Ramos, 2020).

[Insert Table 4, 5 and 6 about here]

[Insert Figure 4 about here]

Discussion

Many authors begin to question the old paradigm of prioritizing the global and downplaying the national or local scale, with substantial disruptions on the global value chains with discussion for deglobalization arising again and arguing in favor of multi-polar globalization (Oldekop et al., 2020; Schwab and Malleret, 2020). The effect will propagate as family members and social networks are critical in influencing immigration decisions (Boyd, 1989). With the rise of opportunity costs (fewer job opportunities), the increase in transportation costs (higher moving expenses) and the developing psychological costs (difficulties keeping contacts), their family members will either have difficulties moving towards the host countries or even more return at the home country. This global trajectory might be reversing. In the past, expatriation involved moving of their own volition (Suutari and Brewster, 2000; Suutari and Taka, 2004; Bozionelos, 2009; Crowley-Henry, 2012; Doherty, 2013).

Tendency to immigrate has been influenced by favorable self-selection (supply) based on a higher level of ability, education and self-efficacy (Chiswick, 1999). Social relationships

influence the decision to move (Stark and Bloom, 1985). Since migratory decisions are not made in isolation but after discussions with families and relatives, it is expected that social relationships will influence decisions to return home and reverse the brain drain. Since immigrants use their social network with integrated immigrants to receive detailed information, this link was severely damaged after the pandemic. This research indicates that economic factors are important in determining immigration decisions, and COVID-19 is an exogenous factor that reduces the opportunities motivating employees to migrate or even stay in the host country.

Expatriates had lower employment rates than natives. The reversal occurred because the rate of job loss for expatriates rose relative to that of natives. Much research needs to be conducted to understand the consequences of the pandemic's labor market disruptions. This paper contributes to the literature by focusing on how the labor market shock affected expatriates and, in specific, affected differently ethnic expatriates (see Figures 2, 3 and 4). Historically, immigrants have had different employment rates than their native-born counterparts (Nekoei, 2013; Borjas, 2017). Besides, the findings highlight that reverse movement should not be seen alone as a homogenous exodus from the host countries without identifying ethnic differences among expatriates. Specific ethnic populations are expected to be less affected than others. Maybe the example found in Oman is not isolated; other countries might report similar results, and more investigation is required.

Global labor markets are undergoing an important transformation. Some viewed early on that globalization was on a pause (Petricevic and Teece, 2019) or reversed (Witt, 2019), with COVID-19 decreasing labor efficiencies in the global labor market (Farndale et al., 2021) and immigration becoming a defining feature of the international labor market with substantial implications to individual countries (Boucher and Cerna, 2014).

Policy Recommendations

Large-scale repatriation is a colossal challenge for source countries that will receive waves of returning expatriates and depend on states' capacities and what services they shall include. Some of them might be loan programs, insurance provisions, repatriation and reintegration education, skills training from their home countries, business accelerators, or a stand-off income from their host countries.

For the host countries, a potential solution would be the transformation of the labor market in which firms that need temporary workers are expected to announce vacancies, job

seekers could also participate (Haak-Saheem, 2020), and countries can issue temporary work permits and flexible visa schemes while encouraging digital nomad employees (Müller, 2016) to continue work remotely unless manual labor is necessary. After repatriation, adjustment is a stressful experience (Begley et al., 2008). The propensity to move or the desire to remain in the host country or return home severely impacts intentions to migrate (Richardson et al., 2008). Tharenou and Caulfield (2010) argue that push and pull factors between host and home countries will attract workers in a constant tug of war, whereas Beitlin (2012) attributes that proper communication as the catalyst for following employment opportunities. Home countries will require to pull back their expatriates and offer them better employment opportunities, higher health and safety policies, and competitive salaries. Similarly, policy restrictions should be relaxed to allow trade unions to speed up the assimilation of returning expatriates into the workforce.

Conclusion

This article investigated whether COVID-19 positively affected expatriates leaving the country. Inflation and risk also exert a positive relationship, meaning that businesses are more eager to hire expatriates during uncertain times, while growth and employment opportunities motivate businesses to rely less on expatriates. The investigation indicated that including all the expatriates in the sample could mask the changing dynamics among ethnic groups. Investigating the direct impact on various ethnic groups, specifically (Pakistani, Filipino, Egyptians, Srilankans, Nepalese, Indians, and Bangladeshi), the analysis identified heterogeneity in the decisions to move or stay due to the pandemic. The findings indicated a decline in several expatriates from certain ethnic groups (e.g., from Bangladesh, India, and Pakistan) compared with expatriates from different ethnic backgrounds (e.g., from Egypt, Sri Lanka, Filipino) in Oman due to the COVID-19 pandemic. The aggregate data might have forced us to support the neoclassical model. Still, ethnic differences might be erratic based on the reference groups. This work could encourage other researchers to contemplate the dynamics between groups and how migration flows between ethnic groups are not static but volatile, depending on exogenous and endogenous factors within a host country.

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Table 1. Summary statistics

Variables	Mean	SD	Min	Max
Expatriates				
Total	1,694,615.0	130,616.4	1,468,721.0	1,869,416.0
Philippines	39,137.35	7,823.23	27,271.00	49,489.00
Nepal	14,777.20	2,273.02	1,645.00	17,621.00
Sri Lanka	17,468.31	4,246.29	205.00	23,099.00
India	641,009.70	41,864.52	517,702.00	695,251.00
Pakistan	220,176.10	11,224.17	178,883.00	237,807.00
Egypt	27,021.43	4,764.11	2,681.00	35,048.00
Bangladesh	605,840.90	76,200.20	449,725.00	705,326.00
Other	77,759.89	19,649.94	10,072.00	108,933.00
Employment	218,871.73	29,811.23	171,901.00	262,333.00
CPI	103.84	1.87	100.30	106.7
Industrial Production	978.00	34.66	847.67	1,117.67
Risk Stability	3.70	0.96	3.00	5.00
No. of Observations	97 (February 2013 to February 2021)			

SD = standard deviation, Source: DataStream

Table 2. GLS unit root test (February 2013 to February 2021-N=97) and Zivot-Andrews unit root with a structural break test (February 2013 to February 2021-N=97).

Variables		GLS Test		Zivot-Andrews
Expatriates	Levels	First Differences	Test T _a	Date
Total	-1.34(3)	-6.42(2)***	-6.128***	April 2020
Philippines	-1.28(3)	-6.29(1)***	-6.093***	April 2020
Nepal	-1.19(2)	-6.07(1)***	-5.985***	April 2020
Sri Lanka	-1.35(3)	-6.36(2)***	-6.259***	April 2020
India	-1.39(2)	-6.25(1)***	-6.116***	April 2020
Pakistan	-1.26(3)	-6.34(2)***	-6.472***	April 2020
Egypt	-1.45(2)	-6.51(1)***	-5.973***	April 2020
Bangladesh	-1.39(2)	-6.37(1)***	-6.642***	April 2020
Other	-1.40(3)	-6.28(2)***	-6.217***	April 2020
Employment	-1.16(3)	-6.14(2)***		
CPI	-1.29(3)	-6.52(1)***		
Industrial production	-1.33(3)	-6.31(1)***		
Risk stability	-1.38(3)	-6.47(1)***		

*Rejection of the null hypothesis for GLS indicates stationarity. Lags in parentheses denote the number of lags included in the test; it was determined through the Akaike information criterion. ***: $p \leq 0.01$. Source: DataStream*

Table 3. OLS and IV estimates: Total expatriates (February 2013 to February 2021-
N=97)

Variables	OLS		IV	
	Coefficients	p-values	Coefficients	p-values
Panel A				
Constant	1.086**	0.04	1.042**	0.05
Δ Industrial production	-0.328***	0.00	-0.307***	0.00
Inflation	0.082***	0.00	0.071***	0.00
Δ Risk stability	0.235***	0.00	0.224***	0.00
DCovid-19	0.328***	0.00	0.317***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.82		0.77	
Durbin-Watson	2.02			
Sargan test			1.64	0.48
Number of instruments			7	
Panel B				
Constant	0.857*	0.07	0.836*	0.08
Δ Employment	-0.459***	0.00	-0.428***	0.00
Inflation	0.093***	0.00	0.084***	0.00
Δ Risk stability	0.263***	0.00	0.250***	0.00
DCovid-19	0.395***	0.00	0.369***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.85		0.80	
Durbin-Watson	1.99			
Sargan test			1.36	0.59
Number of instruments			6	

OLS and IV p-values are homoskedasticity-only and heteroskedasticity-robust, respectively. Sargan's tests accept the null hypothesis of the instruments' validity. The number of instruments was determined as the lagged variables from the controls. Source: DataStream.

Table 4. OLS and IV estimates: The role of ethnicities (Philippines, Nepal, and Egypt) (February 2013 to February 2021-N=97)

Variables	OLS		IV	
	Coefficients	p-values	Coefficients	p-values
Philippines				
Constant	-0.274	0.12	-0.261	0.14
Δ Employment	-0.386***	0.00	-0.367***	0.00
Inflation	0.086***	0.00	0.079***	0.00
Δ Risk stability	0.248***	0.00	0.242***	0.00
DCovid-19	0.272***	0.00	0.258***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.91		0.86	
Durbin-Watson	2.01			
Sargan test			1.42	0.53
Number of instruments			7	
Nepal				
Constant	-0.175	0.19	-0.164	0.21
Δ Employment	-0.514***	0.00	-0.483	0.00***
Inflation	0.097***	0.00	0.085	0.00***
Δ Risk stability	0.165***	0.01	0.158	0.00***
DCovid-19	0.298***	0.00	0.236	0.00***
<i>Diagnostics</i>				
Adjusted R ²	0.62		0.59	
Durbin-Watson	1.97			
Sargan test			1.28	0.64
Number of instruments			8	
Egypt				
Constant	0.222	0.17	0.205	0.20
Δ Employment	-0.416***	0.00	-0.397***	0.00
Inflation	0.070***	0.01	0.063***	0.01
Δ Risk stability	0.103**	0.02	0.096**	0.02
DCovid-19	0.268***	0.01	0.264***	0.01
<i>Diagnostics</i>				
Adjusted R ²	0.55		0.51	
Durbin-Watson	1.96			
Sargan test			1.48	0.51
Number of instruments			7	

OLS and IV p-values are homoskedasticity-only and heteroskedasticity-robust, respectively. Sargan's tests accept the null hypothesis of the instruments' validity. The number of instruments was determined as the lagged variables from the controls. Source: DataStream.

Table 5. OLS and IV estimates: The role of ethnicities (Sri Lanka, Pakistan and India) (February 2013 to February 2021-N=97)

Variables	OLS		IV	
	Coefficients	p-values	Coefficients	p-values
Sri Lanka				
Constant	-0.313*	0.06	-0.288*	0.07
Δ Employment	-0.416***	0.00	-0.399***	0.00
Inflation	0.068***	0.01	0.063***	0.01
Δ Risk stability	0.259***	0.00	0.243***	0.00
DCovid-19	0.241***	0.00	0.178***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.61		0.57	
Durbin-Watson	1.94			
Sargan test			1.22	0.68
Number of instruments			6	
Pakistan				
Constant	0.281*	0.10	0.265*	0.10
Δ Employment	-0.611***	0.00	-0.579***	0.00
Inflation	0.121***	0.00	0.113***	0.00
Δ Risk stability	0.209***	0.00	0.182***	0.00
DCovid-19	-0.355***	0.00	-0.318***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.60		0.57	
Durbin-Watson	2.05			
Sargan test			1.22	0.67
Number of instruments			10	
India				
Constant	0.293*	0.08	0.279*	0.09
Δ Employment	-0.498***	0.00	-0.480***	0.00
Inflation	0.121***	0.00	0.116***	0.00
Δ Risk stability	0.258***	0.00	0.247***	0.00
DCovid-19	-0.475***	0.00	-0.433***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.71		0.66	
Durbin-Watson	1.94			
Sargan test			1.45	0.50
Number of instruments			9	

OLS and IV p-values are homoskedasticity-only and heteroskedasticity-robust, respectively. Sargan's tests accept the null hypothesis of the instruments' validity. The

number of instruments was determined as the lagged variables from the controls. Source: `DataStream`.

Table 6. OLS and IV estimates: The role of ethnicities (Bangladesh, and Others)
(February 2013 to February 2021-N=97)

Variables	OLS		IV	
	Coefficients	p-values	Coefficients	p-values
Bangladesh				
Constant	1.869**	0.03	1.652**	0.04
Δ Employment	-0.526***	0.00	-0.512***	0.00
Inflation	0.056**	0.02	0.052**	0.02
Δ Risk stability	0.332***	0.00	0.319***	0.00
DCovid-19	-0.117***	0.00	-0.108***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.84		0.79	
Durbin-Watson	1.98			
Sargan test			1.32	0.61
Number of instruments			8	
Others				
Constant	-0.289*	0.07	-0.264*	0.08
Δ Employment	-0.285***	0.01	-0.266***	0.01
Inflation	0.066***	0.01	0.058***	0.01
Δ Risk stability	0.462***	0.00	0.448***	0.00
Δ Covid-19	0.266***	0.00	0.252***	0.00
<i>Diagnostics</i>				
Adjusted R ²	0.45		0.41	
Durbin-Watson	2.06			
Sargan test			1.48	0.50
Number of instruments			7	

Others = immigrants from other countries. OLS and IV p-values are homoskedasticity-only and heteroskedasticity-robust, respectively. Sargan's tests accept the null hypothesis of the instruments' validity. The number of instruments was determined as the lagged variables from the controls. Source: DataStream.

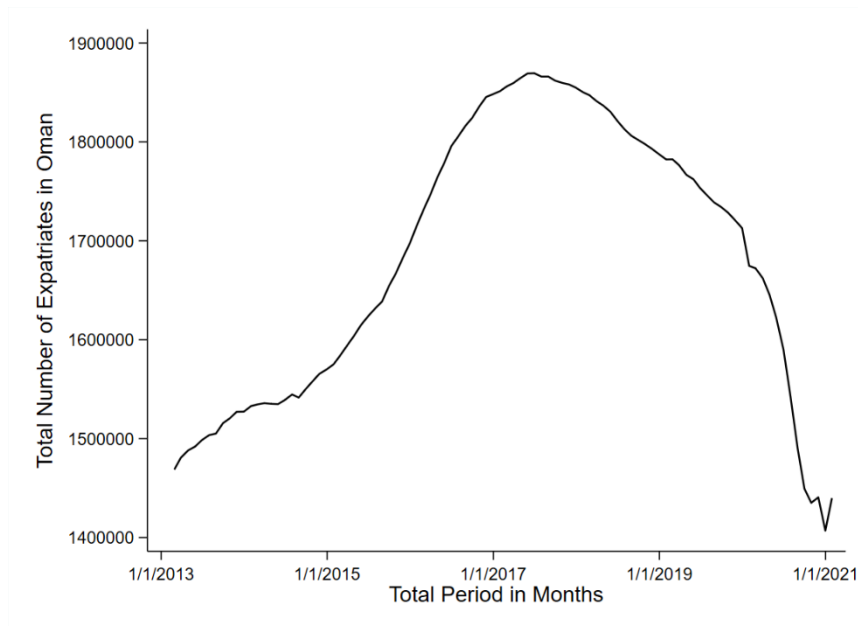


Figure 1. The total number of expatriates in Oman from February 2013 until February 2021. Source: DataStream.

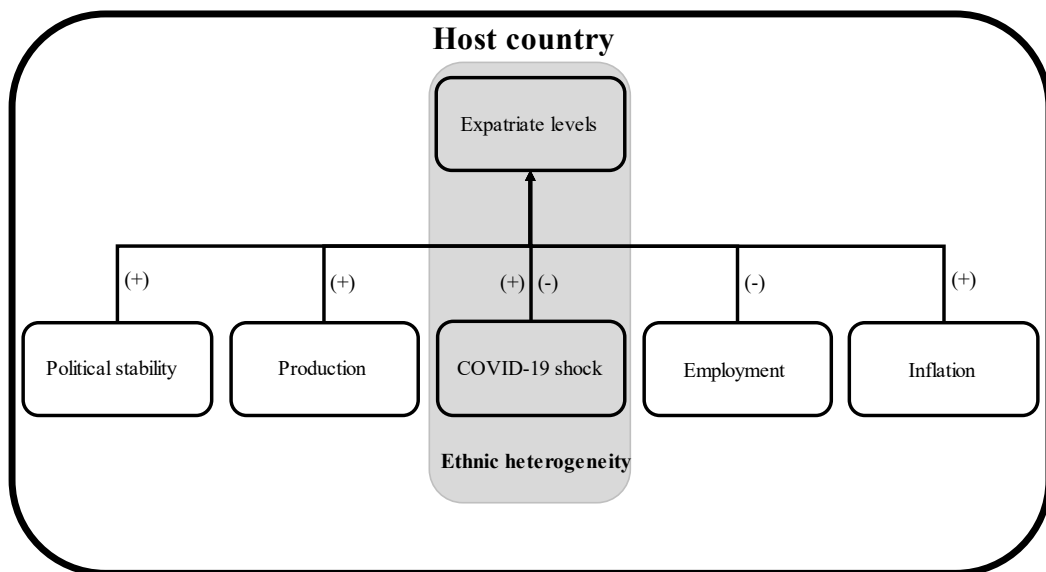


Figure 2. The current set of hypotheses tested.

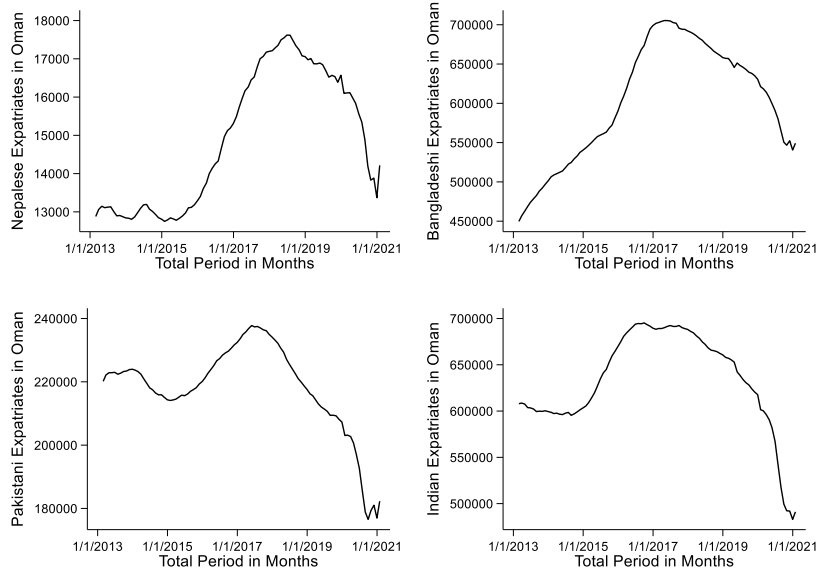


Figure 3. The rapid decline of Nepalese, Bangladeshi, Pakistani and Indian expatriates in Oman between February 2013 until February 2021 every month. Source: DataStream.

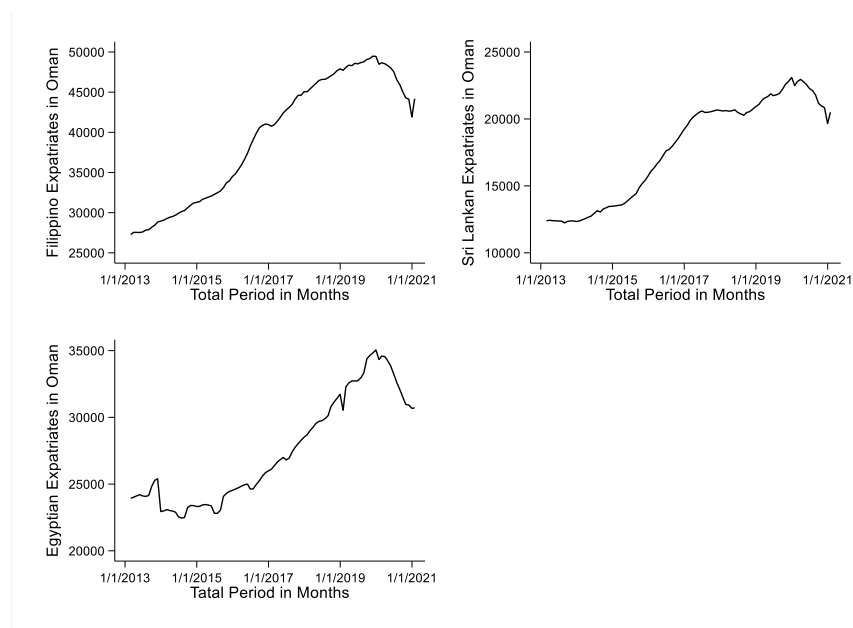


Figure 4. The moderate decline of Filipino, Sri Lankan and Egyptian expatriates in Oman between February 2013 until February 2021 every month. Source: DataStream.