Macroeconomic Impacts of Oil Price Fluctuations: Panel Data Evidence from Oil-Importing Developing Countries

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ABSTRACT

This study reconnoiters the impact of oil price fluctuations on the macroeconomic performance of 95 oil-importing countries for the period 1981-2023. Due to an unobserved heterogeneity among the countries, the fixed effect approach of panel data estimation is employed. This approach is advantageous because it controls for the country-specific time invariant characteristics. According to our empirical findings, oil price fluctuations substantially affect GDP and Inflation. However, the coefficient on unemployment remains statistically insignificant. Our findings suggest that governmental policies should focus on reducing oil dependency by promoting renewable energy sources for improved macroeconomic performance and sustainable development.

1. Introduction

Oil is an imperative commodity and a prominent import for the oil-importing countries. The oil price fluctuations create problems for the oil importing countries because the higher costs of production and transportation lead to stagnant growth and higher Inflation (Hamilton, 2003). Any rise in the price of oil immediately results in higher production costs for the nations that import oil. This is predicted to lower production, and how much less production depends on how the collective demand curve is shaped—increased oil costs lower disposable income, which lowers consumption. When oil prices rise permanently, private investment also starts to decline sharply.

Additionally, less oil is utilized in production, labor, and capital productivity decline, and the potential production output of many industries declines if the shocks are chronic. Inflation rises and production declines due to high oil costs. As a result, tax income declines, and the budget deficit rises. The inelastic demand curve for oil indicates that overall expenditure on oil imports rises as oil prices rise. The local currency depreciates as a result of pressure being placed on the exchange rate. This decline in the value of money might significantly impair economic activity, particularly in the already troubled economies of developing countries. Cheratian, Farzanegan, and Goltabar (2021) explored that oil price fluctuations result in lower long-run economic growth and higher unemployment.

The uncertain scenario of oil prices adds further challenges to investors and policymakers in the market as they struggle to cope with the ever-changing economic environment and to compete with global players. The higher fuel prices harm the competitiveness of the exporting sectors of the oil-importing countries. The purchasing power is reduced, which results in the squeezing of actual earnings and jeopardizing macroeconomic stability. Macroeconomic performance can be affected by various channels, such as higher fuel prices leading to higher production costs and causing profits on investments to decline. Mainly, the macroeconomic performance is affected by lower GDP as fuel prices are negatively associated with economic growth in oil-importing developing economies. The existing literature finds many transmission channels, including the most popular supply and demand side channels. According to the supply-side transmission channel, if there is an oil price hike, output decreases, implying a negative effect of a rise in fuel prices in oil-importing countries. The main reason behind this is the higher production costs. The contraction in output creates unemployment and leads to lower GDP growth. The pivotal objective of this work is to investigate the effect of oil price oscillations on the macroeconomic performance of oil-importing developing economies. As most developing states are energy importers, they have to bear the brunt of fluctuations in oil prices in the form of deteriorating macroeconomic performance. Our study is significant in that it considers the macroeconomic effects of oil price fluctuations on the net oil-importing economies exclusively.

2. Review of Literature

Mork (1989) explains that sudden oil price deviations negatively influence GDP growth in oil-importing states. A negative relationship between oil prices and GDP growth has also been found in some other studies (Mahmood & Murshed, 2021; Van Eyden, Difeto, Gupta, & Wohar, 2019; Zulfigarov & Neuenkirch, 2020). Some works found a positive association between oil price oscillations and output growth (Alkahteeb & Sultan, 2019).

Hooker (2002) discovers a positive association between fuel price tramp and Inflation in the oil-importing countries. Lardic and Mignon (2006) discover that oil price shockwaves affect inflation expectations. Chen, Hu, Huang, Shiu, and Wang (2009) confirms that the inflationary influence of oil prices upsurges. Peersman and Van Robays (2009) find that the fluctuations in oil prices trigger Inflation in the Euro area. A small number of works especially discuss oil price fluctuations and unemployment nexus. Ahmad (2013) and Katircioglu, Katircioglu, and Altun (2018) observed a negative association between employment and oil prices. The other studies discussing the impact of oil price shocks on multiple economic indicators are presented in the following text.

Jiménez-Rodríguez and Sánchez (2005) studied the impact of oil price shocks on economic activity in the industrial states. Using linear and nonlinear models, they applied a multivariate Vector autoregressive (VAR) approach. A negative influence of oil price oscillations on economic activity has been observed.

Jiménez-Rodríguez and Sánchez (2005) investigated the disaggregated data of six industrialized countries using a bivariate VAR approach and noticed diverse responses to oil price shocks in France, Italy, Germany, and Spain while similar responses in the UK and the US. Malik (2008) finds an adverse effect of oil price fluctuations on production. Katircioglu et al. (2018) empirically observed the nexus between macroeconomic aggregates and oil prices in 26 OECD member nations from 1980 -2011. They find a negative relation between oil prices and macroeconomic aggregates.

Ratti and Vespignani (2016) test the oil price-industrial production nexus in China, Europe, and the US. They detect a positive relation between the tightening of interest rates and oil prices. It has also been found that Europe, China, and America are the most important drivers of macroeconomic factors.

Nasir, Naidoo, Shahbaz, and Amoo (2018) explore the oil price shockwaves for emerging economies of BRICS countries. The quarterly data for 1987Q2 -2017Q2 has been used for the empirical analysis. For their research, they used a time-varying SVAR approach. Their key findings were the asymmetric effects and substantial differences among these economies. They also found that oil price shocks than India and China, major oil-importing countries more influence major oil-exporter countries such as Russia and Brazil. They noticed that India's economy is more at risk due to shocks in oil prices because they explored the more adverse effects on the balance of trade, Inflation, and GDP. While at the same time, South Africa was also negatively affected by oil price tremors.

Maghyereh, Awartani, and Abdoh (2019) discuss the role of oil price uncertainty and its impact on economic activity in Turkey and Jordan using data from 1986 - 2014. The bivariate structural VAR models show the negative impact of oil price uncertainty on industrial output.

Kumar et al. (2020) analyze the consequences of oil price changes on macroeconomic indicators such as interest rates, Inflation, real GDP, and exchange rate. They took data from 1982 to 2014 for selected five SAARC countries applying structural VAR Johansen cointegration approaches. The results showed that all macro variables are sensitive to oil price variations, and different countries respond differently to oil price shocks.

Some groups of studies deal with the inflationary effects triggered by the increase in oil prices through supply channels. These studies focus on how oil price hikes can create Inflation across countries (ORLOV; Sultan, Alkhateeb, & Fawaz, 2020; Yoshino, 2016).

The fuel price upsurge deteriorates the export sector of oil-importing economies and worsens the trade balance. Some studies that shed light on the influence of oil price oscillations on the exchange rate along with exports and imports are (Marquez, 2022; Nusair & Olson, 2019; Zankawah & Stewart, 2020).

Śmiech, Papież, Rubaszek, and Snarska (2021) use structural VAR methodology to explore the influence of fuel price on the exchange rate and industrial output in Russia, Canada, Norway, and Mexico. The study finds that industrial output declines due to oil price uncertainty. Ahmad (2013) examine the nexus between oil price instability and macroeconomic performance involving GDP, Inflation, exchange rate, and interest rates. A time-series data for 2000-2020 is used on South Asian countries. The VAR estimates show that a minor change in oil prices significantly influences macroeconomic indicators (Bhatti, Chaudhry, Rehman, & Bashir, 2021).

Serletis and Xu (2022) inspect the nexus between oil price movements and output in the USA. The empirical findings using structural GARCH models and VAR methodology illustrate that oil price volatility negatively affects real output growth.

3. Methodology and Data

We apply a fixed effect (FE) approach to panel data estimation. The significant advantage of this approach is that it can control for country-specific characteristics. Our panel has many economies, so that the time-invariant country-specific characteristics may vary across the states. In other words, each country possesses specific characteristics that may influence the dependent variable. By employing the FE method, we can control our empirical analysis of the effects of country-specific characteristics.

This approach is preferred over the panel least square method because it successfully works in the panels where entities essentially differ. However, the F-test is used as a preliminary test to examine the feasibility of the fixed effects technique—the effect of oil prices on different macroeconomic performance indicators, including GDP, Inflation, and unemployment. For the empirical analysis, we interchangeably use three dependent variables: GDP growth, Inflation, and unemployment. The empirical specification may be written as given below.

$$EPI_{it} = \beta_0 + \beta_1 LGDP_{it} + \beta_2 OP_{it} + \beta_3 LZ_{it} + \eta_i + \varepsilon_{it} \tag{1}$$

EPI is the economic performance indicator used as a dependent variable proxied by real GDP, Inflation, and unemployment interchangeably. We will denote the gross domestic product, Inflation, and unemployment as GDP, INF, and UN, respectively. The first lag of GDP has been involved among the explanatory variables to capture the dynamic nature of the growth process. The notation OP stands for the oil prices in Dubai/Oman, with a benchmark of US dollars per barrel. The logic behind using the Dubai-Oman oil prices is that most of the oil imported by developing countries comes from the Gulf countries. The other units of oil prices are also available, such as WTI and Brent, but we are using Dubai prices for our analysis because these are the most convenient. The oil price data comes from the OPEC website. Inflation is the rate of change of CPI (consumer price index). CPI is a fabled indicator of Inflation as it measures the price of a basket of goods and services in a percentage change households consume to satisfy their needs directly or indirectly. INV is the gross investment represented by the gross fixed capital formation expressed as a percentage of GDP. Gross investment measures the amount an economy spends on new capital, such as buildings, equipment, machinery, and other structures—the notation POP stands for the population growth of a country.

Unemployment, denoted by the UN, is the number of unemployed people in the labor force as a percentage of the total labor force. When someone can do work and shows willingness to do a work but did not get it, the situation is called unemployment. There are many reasons for unemployment, such as technological improvements, recessions or depressions, leaving one job to get a desirable job, or it can be job outsourcing. X stands for the goods and services exports as a percentage of GDP. Exports are the backbone of an economy. As exports increase in a country, it will improve its economic growth. For any government, it is highly desirable to increase exports as exports increase in a country, which will create trade surplus and increase the country's real GDP, which ensures its higher macroeconomic performance.

The notation η represents the fixed effects to capture the country-specific characteristics. Lastly, the subscripts i and t represent identity cross-section and time, respectively. The variables GDP, exports, investment, population, and unemployment are used in the log form for the simplification and precision of the empirical results. Economic growth, Inflation, and unemployment may be considered the core indicators of the macroeconomic performance of an economy. So, we shall focus our empirical analysis on how these major macroeconomic factors are affected in developing countries. We have omitted the major oil-

exporting developing countries from our analysis to clarify our empirical results. The data on 95 oil-importing developing countries for 1981-2023 is obtained. All variables' data comes from the World Development Indicators (WDI) except oil prices.

3.1. Results

This section will explain the empirical results of sample data after conducting the tests and regression analysis. Before the estimation results of our model, we present the descriptive statistics of all variables explaining all details of the sample data. The tables provided below illustrate our study's empirical findings. These statistics show that the number of observations is not the same on all variables, which means that we have unbalanced panel data on 95 developing economies.

The tables presented below show the results of fixed-effect regressions. We have three models which have different dependent variables. The first model takes GDP as a dependent variable, while the other models have Inflation and unemployment as dependent variables, respectively. The coefficients column tells us about the variables' magnitude and direction of a relationship. In the second column, we show the standard errors. The t-values and p-values are presented in the last two columns to assess the significance of regression coefficients. To reject or accept the null hypothesis, we use the p-value approach because it is a more informative and precise statistic to check the significance level.

Table 1
Effect of Oil Prices on GDP

Variables	Coef.	Std. Err.	t-value	p-value
GDP(-1)	0.243*	0.022	11.05	0.00
OP	-0.074***	0.014	-5.29	0.01
INF	-0.027	0.19	-1.42	0.12
INV	0.157*	0.019	8.06	0.00
Constant	3.13*	0.586	5.34	0.01
R-squared	0.21	Number of obs		2483
F-test	23.65	Prob > F		0.000

Note: The notations *, **, and *** indicate the significance of a variable at 1%, 5%, and 10% levels of significance, respectively. All variables are in the log form except INF and OP.

Table 2
Effect of Oil Prices on Inflation

Variables	Coef.	Std. Err.	t-value	p-value
GDP	-2.41*	.76	-3.17	0.01
OP	0.26**	.119	2.19	0.048
POP	-.219	.232	-0.94	0.57
Constant	61.301*	12.506	4.90	0.01
R-squared	0.17	Number of obs		2650
F-test	9.33	Prob > F		0.001

Note: Notation * indicates the significance of a variable at 1% levels of significance. All variables are in the log form except INF and OP.

4. Interpretations and Findings

Table 1 shows the fixed effect regression results about the influence of oil price fluctuations on the GDP growth of the oil-importing nations. Oil prices are the core independent variable and other control variables. Oil prices exhibit a significantly negative effect on the GDP of oil-importing economies. A one-dollar rise in oil prices causes a decrease in GDP by 0.07 % or vice versa. The higher oil price level leads to a lower level of economic growth. General findings point out that international oil market prices substantially influence the macroeconomic performance of the oil-importing states. The lag between GDP and investment

is also strongly significant at a 1 percent significance level. This implies that the past year's GDP and investment have affected GDP positively and significantly.

Table 3
Effect of Oil Prices on Unemployment

Variables	Coef.	Std. Err.	t-value	p-value
Lag UN	1.92***	1.02	1.88	0.07
GDP	-0.241**	0.111	-2.17	0.050
INV	-0.032**	0.019	-1.71	0.07
OP	0.071*	0.021	3.38	0.03
POP	0.005	0.004	1.25	0.09
Constant	3.621*	0.266	13.61	0.00
R-squared	0.37	Number of obs		1441
F-test	43.82	Prob > F		0.000

Note: The notation* indicates the significance of a variable at 1% levels of significance. All variables are in the log form except INF and OP.

Table 2 displays the fixed effect regression results about the effect of oil price changes on Inflation. The coefficient on GDP is negative and statistically significant at a 1% level, which shows that output has a negative effect on Inflation. As GDP increases, there is more production; hence, more products are available, causing Inflation to decrease. The coefficient on population is statistically insignificant. The core variable is the oil price, which is statistically significant at a 5% level with a positive sign. A one-dollar rise in the oil price leads to a rise in Inflation by 0.26 % or vice versa. The upsurge in oil prices leads to a rise in the cost of transportation and production, aggravated by inflationary pressure. So, the coefficient on oil prices is positively related to Inflation as the production costs of goods and services rise due to higher oil prices.

Table 3 shows the impact of oil prices on unemployment, which is also a vital indicator for any economy to check its macroeconomic performance. The GDP of a country and investment have a negative influence on unemployment. The higher levels of GDP and investment encourage the producers to hire more labor. So, an increase in GDP and investment leads to reduced unemployment. However, the coefficient on oil prices is positive but statistically insignificant. So, oil prices have no significant observable effect on unemployment. A logic for this situation can be given that unemployment occurs after a specific time lag, which the short-run oil price oscillations may not reflect. The downward rigid behaviors of wages can explain another reason behind this insignificant coefficient on oil prices.

5. Conclusion and Policy

The global oil price fluctuations severely hit the macroeconomic performance of oil-importing countries. This study inspects the effect of oil price fluctuations on the macroeconomic performance of 95 developing economies' net oil importers. The fixed effect estimation method is employed using a panel data set for the period 1981-2023. According to our findings, GDP and Inflation are substantially affected by the fluctuations in oil prices. However, the coefficient on unemployment remains statistically insignificant.

Macroeconomic policies and governance play a pivotal role in extenuating the influence of oil price oscillations on the economy. The following policies are recommended for sustainable economic growth by curbing inflationary pressures and unemployment. Cheaper and more environmentally friendly substitutes for oil should be encouraged. Energy generation may shift towards low-cost renewable energy sources like hydro, solar, and wind power. Growth-promoting fiscal policies should be adopted, while luxury imports should be discouraged, especially during high oil prices. Investing in infrastructure and human capital can help stabilize the economy and create jobs. Governments may need to subsidize energy costs or implement

policies to mitigate the influence of higher oil prices on their economies. Governments in developing countries may use subsidy programs; however, the capacity and effectiveness of these measures can vary widely.

Moreover, these actions may affect government finances. Developing countries should reduce their reliance on oil by encouraging cheaper solar alternatives. Most developing countries, including Pakistan, experience proper daylight and ample sunshine, enhancing solar power generation capacity. The duty-free imports of high-quality solar panels may be very lucrative. Developing countries should build resilience to manage the effect of oil price fluctuations better.

Author's Contribution:
Iftikhar Ahmad: Led the study's conceptualization, designed the research methodology, and was primarily responsible for the data analysis.
Muhammad Azhar Bhatti: Contributed to the literature review and provided expertise in the panel data estimation techniques.
Muhammad Atiq-ur-Rehman: Played a key role in data collection and preparation, particularly in compiling the dataset for the 95 oil-importing countries.
Tusawar Iftikhar Ahmad: Provided oversight and guidance throughout the research process, ensuring alignment with the study's objectives.

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References

Ahmad, F. (2013). The Effect of Oil Prices on Unemployment: Evidence from Pakistan. *Business and Economics research journal, 4*(1), 43.

Alkahteeb, T. T., & Sultan, Z. A. (2019). Oil Price and Economic Growth: The Case of Indian Economy. *International Journal of Energy Economics and Policy, 9*(3), 274-279. doi:https://doi.org/10.32479/ijeep.7602.

Bhatti, M. A., Chaudhry, I. S., Rehman, H.-u., & Bashir, F. (2021). Financial Globalization, Output Gap and Foreign Output Gap on Inflation: Evidenced from Developing Economies. *Journal of Accounting and Finance in Emerging Economies, 7*(2), 419-433. doi:10.26710/jafee.v7i2.1773

Chen, X., Hu, B., Huang, M.-x., Shiu, G., & Wang, Y. (2009). Large Primordial Trispectra in General Single Field Inflation. *Journal of Cosmology and Astroparticle Physics, 2009*(08), . doi:https://doi.org/10.1088/1475-7516/2009/08/008

Cheratian, I., Farzanegan, M. R., & Goltabar, S. (2021). The Asymmetric Impact of Oil Prices on Unemployment in the Mena Region. *Review of Middle East Economics and Finance, 17*(3), 175-204.

Hamilton, J. D. (2003). What Is an Oil Shock? *Journal of econometrics, 113*(2), 363-398. doi:https://doi.org/10.1016/S0304-4076(02)00207-5

Hooker, M. A. (2002). Are Oil Shocks Inflationary? Asymmetric and Nonlinear Specifications Versus Changes in Regime. *Journal of money, credit and banking, 34*(2), 540-561.

Jiménez-Rodríguez, R., & Sánchez, M. (2005). Oil Price Shocks and Real Gdp Growth: Empirical Evidence for Some Oecd Countries. *Applied economics, 37*(2), 201-228. doi:https://doi.org/10.1080/0003684042000281561

Katircioglu, S., Katircioglu, S., & Altun, O. (2018). The Moderating Role of Oil Price Changes in the Effects of Service Trade and Tourism on Growth: The Case of Turkey. *Environmental Science and Pollution Research, 25*(10), 35266-35275. doi:https://doi.org/10.1007/s11356-018-3448-2

Kumar, A., Kalhoro, M. R., Kumar, R., Ghumro, N. H., Dakhan, S. A., & Kumar, V. (2020). Decomposing the Effect of Domestic and Foreign Economic Policy Uncertainty Shocks on

Real and Financial Sectors: Evidence from Bric Countries. *Journal of Risk and Financial Management, 13*(12), 315. doi:https://doi.org/10.3390/jrfm13120315

Lardic, S., & Mignon, V. (2006). The Impact of Oil Prices on Gdp in European Countries: An Empirical Investigation Based on Asymmetric Cointegration. *Energy policy, 34*(18), 3910-3915. doi:https://doi.org/10.1016/j.enpol.2005.09.019

Maghyereh, A. I., Awartani, B., & Abdoh, H. (2019). The Co-Movement between Oil and Clean Energy Stocks: A Wavelet-Based Analysis of Horizon Associations. *Energy, 169*(2), 895-913. doi:https://doi.org/10.1016/j.energy.2018.12.039

Mahmood, H., & Murshed, M. (2021). Oil Price and Economic Growth Nexus in Saudi Arabia: Asymmetry Analysis. *International Journal of Energy Economics and Policy, 11*(1), 29-33. doi:https://doi.org/10.32479/ijeep.10382

Marquez, J. (2022). Oil Prices and Exchange Rates: Measurement Matters. *Commodities, 1*(1), 50-64. doi:https://doi.org/10.3390/commodities1010005

Mork, K. A. (1989). Oil and the Macroeconomy When Prices Go up and Down: An Extension of Hamilton's Results. *Journal of political Economy, 97*(3), 740-744.

Nasir, M. A., Naidoo, L., Shahbaz, M., & Amoo, N. (2018). Implications of Oil Prices Shocks for the Major Emerging Economies: A Comparative Analysis of Brics. *Energy Economics, 76*(10), 76-88. doi:https://doi.org/10.1016/j.eneco.2018.09.023

Nusair, S. A., & Olson, D. (2019). The Effects of Oil Price Shocks on Asian Exchange Rates: Evidence from Quantile Regression Analysis. *Energy Economics, 78*(2), 44-63. doi:https://doi.org/10.1016/j.eneco.2018.11.009

ORLOV, A. V. Econometric Analysis of the Influence of Factors on the Share of Energy from Renewable Sources in the Eu. doi: https://doi.org/10.37394/232033.2024.2.13

Peersman, G., & Van Robays, I. (2009). Oil and the Euro Area Economy. *Economic Policy, 24*(60), 603-651. doi:https://doi.org/10.1111/j.1468-0327.2009.00233.x

Ratti, R. A., & Vespignani, J. L. (2016). Oil Prices and Global Factor Macroeconomic Variables. *Energy Economics, 59*(9), 198-212. doi:https://doi.org/10.1016/j.eneco.2016.06.002

Serletis, A., & Xu, L. (2022). Oil Price Uncertainty: Panel Evidence from the G7 and Brics Countries. In *Behavioral Finance and Asset Prices: The Influence of Investor's Emotions* (pp. 3-21): Springer.

Śmiech, S., Papież, M., Rubaszek, M., & Snarska, M. (2021). The Role of Oil Price Uncertainty Shocks on Oil-Exporting Countries. *Energy Economics, 93*(1), 105028. doi:https://doi.org/10.1016/j.eneco.2020.105028

Sultan, Z. A., Alkhateeb, T. T. Y., & Fawaz, M. M. (2020). Empirical Investigation of Relationship between Oil Price and Inflation: The Case of India. *International Journal of Energy Economics and Policy, 10*(3), 90-94. doi:https://doi.org/10.32479/ijeep.9015

Van Eyden, R., Difeto, M., Gupta, R., & Wohar, M. E. (2019). Oil Price Volatility and Economic Growth: Evidence from Advanced Economies Using More Than a Century's Data. *Applied energy, 233*(1), 612-621. doi:https://doi.org/10.1016/j.apenergy.2018.10.049

Yoshino, N. (2016). Naoyuki Yoshino and Farhad Taghizadeh-Hesary. *Monetary Policy and the Oil Market, 131*. doi:https://doi.org/10.1007/978-4-431-55797-5

Zankawah, M. M., & Stewart, C. (2020). Measuring the Volatility Spill-over Effects of Crude Oil Prices on the Exchange Rate and Stock Market in Ghana. *The Journal of International Trade & Economic Development, 29*(4), 420-439. doi:https://doi.org/10.1080/09638199.2019.1692895

Zulfigarov, F., & Neuenkirch, M. (2020). The Impact of Oil Price Changes on Selected Macroeconomic Indicators in Azerbaijan. *Economic Systems, 44*(4), 100814. doi:https://doi.org/10.1016/j.ecosys.2020.100814

Appendix
List of Selected Countries

Albania, Argentina, Aruba, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Chad, Chile, Comoros, Costa Rica, Croatia, Congo, Ecuador, Egypt, Eswatini, EI Salvador, Ethiopia, Fiji, Georgia, Ghana, Grenada, Guatemala, Guinea, Haiti, Honduras, Hungary, India, Jamaica, Jordan, Kenya, Kuwait, Kiribati, Kyrgyzstan, Lebanon, Lesotho, Libya, Madagascar, Maldives, Malawi, , Mali, Marshall Islands, Mauritius Mauritania, Moldova, Mongolia, Morocco, Mozambique, Namibia, Nepal, Nicaragua, Niger, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Romania, Rwanda, Senegal, Sri Lanka, South Africa, Sudan, Suriname, Seychelles, Sierra Leon, Tanzania, Thailand, Bahamas, Gambia, Ghana, Togo, Tonga, Trinidad and Tobago, Tunisia, Türkiye, Uganda, Uruguay, Vietnam, Yemen, Zambia, Zimbabwe.