EDITOR'S NOTE

I am honored to edit this Issue with the support of Francisco Venegas-Martínez, Chief Editor of REMEF, and Gerardo Dubcovsky, Coeditor of REMEF. The articles presented here are a significant contribution to better understand the Energy-Growth Nexus, either from an empirical, theoretical, and methodological perspective.

It is worth pointing out that this year we are facing the COVID-19 pandemic that will affect the energy policy of most countries and it will be pending to verify whether these policies weaken or strengthen the nexus between energy use and economic growth. I have no doubt that the articles presented in this issue will lay the groundwork for answering this important question. The research papers that enrich this special issue are listed below:

1. Resource Rents, Democracy and The eight policy lessons

David Bonilla (UNAM, México), Colin J. Axon (Brunel University, UK) and Justin D.K. Bishop (University of Cambridge, UK)

The article examines whether resource revenues are likely to be managed more effectively with strong (or lack of) institutions and if so to contribute to economic development in resource abundant countries. Results show on the one hand 1) countries with ample natural capital and subsoil wealth levels are associated to a healthier democracy which potentially mitigates the resource curse; while on the other 2) high resource rents are negatively associated to weak institutional quality deepening the curse.

2. Energy, Growth and Environment: Analysis from the Microeconomics Perspective

Erico Wulf Betancourt (University of La Serena, Chile)

This paper, proposes a theoretical model of endogenous efficiency decision (choice) in the firm to understand the relationship between energy, production and growth. The proposed model and its maximizing utility-profit purpose out of human capital investment do fit empirical evidence about the East Asian countries economic growth case (1950-1995).

3. Bull vs. Bear Oil & Gas Leveraged Exchange Traded Fund: A Rolling Risk-Performance

Ricardo Jacob Mendoza-Rivera, Luis Enrique García-Pérez and Ana Lorena Jiménez-Preciado (Instituto Politécnico Nacional, México)

This research aims to capture the risk-performance exposure of 4 of the most popular leveraged energy ETFs: GUSH, DRIP, DGAZ, and UGAZ, which are an attractive investment option when the capital market (shares and bonds specifically) do not perform well due to the inherent uncertainty of the market. The results enable the characterization of the dynamics of risk-return of bull and bear leveraged energy ETFs and suggest a more accurate measure for risk compensation.

4. Energy Efficiency of Mexican states: Stochastic Production Frontier Approach

Cristina Isabel Ibarra-Armenta, Luis Armando Becerra-Pérez and Nora Teresa Millán-López (Universidad Autónoma de Sinaloa, México)

The main findings are threefold: first, most states have improved their EE, except for Jalisco, Baja California

and Veracruz. Second, three variables are identified as energy inefficiency drivers, namely, population density, market potential and high presence of materials industries. Third, electricity demand is not deterred through the price.

5. Short-term causal relationships between the oil sector and economic growth: GF-ARDL application

José Eduardo Medina-Reyes, Judith Jazmín Castro-Pérez and Agustín Ignacio Cabrera-Llanos (Instituto Politécnico Nacional, México)

This research aims to analyze the short-term causal relationships between the oil sector and economic growth, using two methodologies, the ARDL model and the proposal based on fuzzy logic, the FG-ARDL, Fuzzy Gaussian Autoregressive Distributed Lag. The most important conclusion is that the internal consumption of fuel and PEMEX Diesel are the key variables that drive short-term economic growth, this result is better observed in the proposed model.

6. Energy consumption in North America: visualization and pyramidal perspective

Sergio Lagunas Puls (Universidad del Caribe, México), Miguel Ángel Oropeza Tagle (Universidad Autónoma de Aguascalientes, México) and Juan Bautista Boggio Vázquez (Universidad del Caribe, México)

The objective is to visualize the energy consumption in North America through pyramidal. The base polygon is made up of four points representing non-renewable consumption and the peak corresponds to renewable consumption. Some conclusions indicate that reducing 5 % in refined media, could stimulate the use of renewable energies from 118.80 to 172.73 million tons, while the same reduction, but in fuel consumption could stimulate renewable consumption up to 139.77 million tons.

7. Causality and Stationarity with Structural Break in Electricity Consumption and GDP per capita in Mexico

Vicente German-Soto (Universidad Autónoma de Coahuila, México)

The originality of this contribution lies in the long-term analysis of the energy sector, emphasizing the importance of the breakpoints. Despite of some sensitivity performing the regression analysis, the conclusions recommend a strengthening of the energy sector as a feasible means of recovering the sustained growth achieved by Mexico in other times.

8. On the Interaction among Economic Growth, Energy-Electricity Consumption, CO2 Emissions, and Urbanization in Latin America

Humberto Valencia-Herrera, Roberto J. Santillán-Salgado (Tecnológico de Monterrey) and Francisco Venegas-Martínez (Instituto Politécnico Nacional)

This paper is aimed at studying the dynamics and long-run interaction among changes in CO2 emissions, economic growth, changes in energy and electricity use, and changes from rural to urban population among Latin American countries (LA) during the period from 1990 to 2014. The empirical results show no evidence of the existence of an environmental Kuznets curve. Moreover, it is not possible to generalize the nature of the economic growth-energy consumption-urbanization and CO2 emissions relationships across different latitudes.

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