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Editorial Policy

The Energy and Value Letter brings together academics and practitioners worldwide to discuss timely valuation issues in the energy sector. It publishes news from the Centre for Energy and Value Issues (CEVI), its linked organizations and others (including calls for papers), columns on topical issues, practitioners' papers: short articles from institutions, firms, consultants, etcetera, as well as peer-reviewed academic papers: short articles on theoretical, qualitative or modeling issues, empirical results and the like. Specific topics will refer to energy economics and finance in a broad sense. The journal welcomes unsolicited contributions. Please e-mail to **w.westerman@rug.nl** (Wim Westerman), a copy of a news item, column or a completed paper. Include the affiliation, address, phone, and e-mail of each author with your contribution. A column or news item should not have more than 600 words and a paper should not exceed 5,000 words, albeit that occasionally larger pieces can be accepted.

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About this issue

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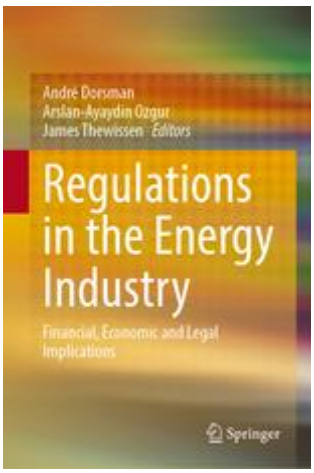
Happy New Year! While it is tempting to take a look ahead into the new decennium (officially starting in 2021!), let us simply take a look into the upcoming year. When doing so, it becomes readily clear that 2020 will be packed with all kind of activities, including contributions to a meeting of the Central Asian Productivity Research Center in Chicago in January, a seminar in Roermond (The Netherlands) in March and a CEVI workshop at the 14th ISINI conference in Wroclaw (Poland) in August, the publication of the 7th CEVI book at Springer still in this Winter and last but not least the start of the preparations for the 8th CEVI volume, edited by André Dorsman, Mehmet Baha Karan, Kazim Atici and Aydin Ulucan.

The reference to the CEVI books brings me to the abstracts of the 7th CEVI book, "Regulation in the Energy Industry", edited by André Dorsman, Özgür Arslan-Ayaydin and James Thewissen. Whereas one should of course congratulate the editors with their persistent work, one should also note that it is the authors that shape the volume. A broad array of contributors have shed their light on the core theme. Herewith I thank them for their willingness to share the article abstracts with us. Having said that, I am also happy to refer to our successful cooperation with Barbara Fess and Johannes Glaeser at Springer in Heidelberg (Germany) who are ultimately the ones that have made the 7th CEVI book come true.

The link from the above to the contribution by John Simpson in this EVL issue can be easily made. When analysing the success of the now eight year old book series at Springer, John feels that the book series is predominantly about the financial economics of energy and the pricing of fossil fuels, renewables and electricity generation and takes as a central theme the role of government compared to private sector involvement in the energy sector. He then continues to discuss this theme from a political risk view and takes at times the Australian example on board to make his point. He calls for getting back to a blend of classical financial economics and the realities of the economics of a modern changing world.

We have two calls for papers in this issue. Firstly, the "International Econometric Review" makes a call that is particularly interesting us because of the (energy) topics addressed. Many energy sources are generally becoming exhausted and the special issue aims to contribute to the energy transition. Interesting is that the journal welcomes both theoretical and empirical papers. We thank our long-time member (we are all so to say CEVI "members") Sidika Basci for forwarding this Call for Papers to us.

Also included with this issue is a Call for Papers for the 14th ISINI conference in Wroclaw, September 24-25. CEVI organises a special session (or let it be more than one). We had CEVI sessions at the last ISINI conference as well and ISINI had sessions at our conference last year. It is remarkable to see that the both organisations fit so well, which may have to do with a shared interest for new ideas, political economics, the well-being of people on earth and the role that firms have here. I kindly point you at the ISINI website (http://isini.info) and the Call for Papers. John van Ophem (ISINI) and I myself look forward to receive your papers. Mind however that the deadline for handing in a paper is set at May 1.



 https://www.springer.com/gp/book/9783030322953

Regulations in the Energy Industry

Financial, Economic and Legal Implications

Editors: **Dorsman**, André, **Ozgur**, Arslan-Ayaydin, **Thewissen**, James

- Analyses energy regulations from corporate finance and financial economics perspectives
- Offers insights into how energy sector regulations differ across countries
- Adopts a multi-disciplinary approach with a European focus

This book provides a broad overview of the financial, economic and legal implications of energy industry regulations in various countries. In light of significant changes around the globe, it analyses various institutions that are involved in regulative measures, and based on various country studies, it offers insights into how energy sector regulations differ across countries with different market structures and institutions. Covering major topics such as laws and regulations geared to market competition and sustainability and the impact of noncompliance to regulations, from the perspectives of financial markets, and financial risks, the book is divided into four parts: Part I Regulations: price and trade controls; Part II. Non-price & trade control regulations; Part III: Compliance with regulations; and Part IV: Market issues and regulation. It will appeal to scholar in economics, finance and related fields as well as to policymakers and practitioners in the energy industry.

This is the seventh volume in a series on energy organized by the Centre for Energy and Value Issues (CEVI). The previous volumes in the series were: *Financial Aspects in Energy* (2011), *Energy Economics and Financial Markets* (2012), *Perspectives on Energy Risk* (2014), *Energy Technology and Valuation Issues* (2015), *Energy and Finance* (2016) and *Energy Economy, Finance and Geostrategy* (2018).

1. Introduction: Financial implications of regulations in the energy industry

André B. Dorsman, Ozgur Arslan-Ayaydin, and James Thewissen

Abstract
The characteristics of the energy industry leads to natural monopoly. The technological and economic features of the industry is such that a single provider is often able to serve the overall demand at a lower total cost than any combination of smaller entities could. Competition cannot thrive under these conditions. For this reason the regulations on this industry is not only targeted at fair pricing but also ensuring reliability and safety. Regulations on energy industry also target at their environmental impact as well. This book provides cross country studies on the financial, economic and legal aspects of the regulations of energy firms.

Keywords: regulation, energy, finance, energy economics

2. Environmental regulatory arbitrage by business groups in the context of the European Union's emission trading system (EU-ETS)

Frederiek Schoubben

Abstract
Although the EU-ETS is implemented in all member states as the cornerstone of Europe's climate policy, there is still significant cross-country variation in the stringency of its implementation. In this chapter, we explore how these differences between home and host countries of international business groups explain carbon emissions at the affiliate level. Using an extensive dataset of business groups with facilities covered by the EU-ETS, we find evidence of intra group regulatory arbitrage (RA) in that affiliates with foreign parent companies show significantly higher carbon emissions compared to domestically owned affiliates. Moreover, stringency of the host country's implementation of EU-ETS only reduces affiliate's emissions for domestically owned affiliates while stringent implementation at parent level seems to exacerbate carbon emissions at affiliate level. However, this RA-behavior is strongly influenced by the affiliate's carbon allowances. In line with recent results on the effectiveness of the EU-ETS, affiliates with carbon allowance shortages (under-allocated) provide less opportunities for intra group regulatory arbitrage. Our results therefore not only stress the importance of cross-country uniformity of EU-ETS implementation but also the allocation mechanism at firm level for the proper functioning of the cap-and-trade system.

Keywords: carbon emissions, regulatory stringency, business group affiliate, regulatory arbitrage, pollution haven

3. Measuring the effects of energy efficiency policies: evidence from Turkish manufacturing industry

Pinar Engin, Kazim Baris Atici, Aydin Ulucan

Abstract

This chapter aims to provide insight on the energy efficiency concept, which is getting progressively important with increased awareness on environmental issues, rising demand and costs of energy. Within the scope of energy efficiency, a contemporary approach is the Energy Management System (EnMS) that represents continuous and systematic efforts for energy improvements. After discussing the basics of the both concepts, we conduct an empirical analysis in Turkish manufacturing industry firms that applied EnMS principles and carried out energy efficiency increasing activities between 2015 and 2017. In the empirical analysis, we make use of data collected in the scope of a recent project implemented by the Ministry of Energy and Natural Resources in cooperation with the United Nations Development Programme (UNDP) and United Nations Industrial Development Organization (UNIDO), with funding from the Global Environment Facility (GEF). The data includes information about several small/medium/large scale manufacturing firms that have been carrying out energy efficiency activities at different sizes. We approach to the data from two perspectives and provide firm-based evaluations and activity-based evaluations. Our modeling scheme includes both energy related (capacity, energy savings, emission savings) and financial indicators (cost, financial savings) to observe the performance of applied projects and applying firms. The aim of the empirical part includes providing evidence from a micro-level analysis of how EnMS policies can be efficient in-line with identifying the prominent energy efficiency activities and determining the most efficient sub-sectors. We employ a well-known relative efficiency measurement methodology, Data Envelopment Analysis and present results at sub-sectoral level and identify the efficient sectors. The efficient projects are identified and discussed relying on their size. The evaluations on projects are also supported with a simulation model to observe the level of robustness in efficiency scores. All evaluations also consider two different subsets of the firms as ISO certification holders and small and medium-sized enterprises (SMEs). We derive conclusions on EnMS applications at firm, sub-sector and activity level.

Keywords: energy efficiency; energy management system; performance measurement; data envelopment analysis; simulation

4. The Convergence of Electricity Prices for European Union Countries

M. Erdinç Telatar and Nermin Yaşar

Abstract
The goal of achieving a single European market for electricity has been one of the main objectives for European countries since the "Single European Act" of 1988. The main purpose of this study is to examine whether the aim of unified electricity market has been achieved in terms of the convergence of electricity prices. β-convergence and σ-convergence tests are applied for 12 European Union states electricity price data through the period of 2003-2017. For this reason, along with conventional applied techniques, recently improved unit root tests are implemented for both linear and nonlinear data generating processes. The results suggest that convergence did not occur for most of the considered countries.

5. Blockchain as a technology backbone for an open energy market

Ozgur Arslan-Ayaydin, Prabal Shrestra and James Thewissen

Abstract
As the underlying technology behind Bitcoins, blockchains have attracted the attention of entrepreneurs, policymakers and academics alike. Its potential to facilitate transactions, coordination without a central authority and its capacity to support smart contracts is likely to open the door for its application to numerous settings. One of the more prominent application being the clean energy sector. This chapter provides insights on how this novel technology that offers disintermediation, transparency and flexibility is providing new ways of interaction to tackle challenges of communication, coordination and efficiency in the clean energy sector. Along with providing a brief overview of the blockchain technology, we discuss some of the prominent clean energy applications of the technology, such as micro energy exchange grids, cap-and-trade and electrical vehicle charging networks. Furthermore, the chapter includes empirical evidence on Initial Coin Offerings (ICOs) launched by projects focusing on various aspects of development of renewable energy sector. We identify six prominent themes of services, namely, clean cryptocurrency mining, energy exchange, project financing, investment intermediation, network building and hosting incentive programs. Furthermore, we find that clean energy ICOs tend to be more successful than other similar ICO projects.

Keywords: blockchain technology, green energy, initial coin offering

6. Geopolitics and gas-transit security through pipelines

Volkan Ş. Ediger, John V. Bowlus, Mustafa Aydın

Abstract
Hydrocarbons are valuable only if they can be transited from where they are produced to where they are consumed. Despite the enduring importance of transit to the global energy system, the topic did not begin to be extensively analyzed until contentious relations between Russia and Ukraine disrupted natural gas flows to Europe in 2006. This chapter examines the geopolitics and security of transiting gas through pipelines by exploring the connection between geography, global energy strategies, and natural gas markets. Gas has grown in recent years as a percentage of global energy consumption and is helping the world transition to a cleaner energy regime. At the same time, it is intensifying the contest for and control of gas-transit routes. Russia, the world's second-largest producer, has built new pipelines to Europe since 2006 in order to diversify its flow from relying on Ukraine, while the United States, the world's largest gas producer, is increasingly exporting liquefied natural gas (LNG) through sea routes mostly controlled by the U.S. navy. We argue that geostrategic calculations will more profoundly affect gas transit in the future and that countries that rely solely on market or commercial factors for their gas-transit security will become increasingly vulnerable to geopolitical volatility.

Keywords: **e**nergy transit; geopolitics; security; natural gas; political economy; pipelines

7. Tapping the potential: Turkey and renewable energy sources

Wietze Lise and Banu Bayramoğlu-Lise

Abstract
One of the biggest challenges facing the modern world is competition and conflict over the sharing of energy resources within the international system. Energy security challenges among the nations have emerged as a result of the unequally distributed fossil fuel resources around the world. Tapping the Renewable Energy Source (RES) potential is becoming critically significant in the face of depletion of conventional energy sources and their negative impact on the environment. Therefore, as a geopolitically important actor, Turkey has set some RES targets for 2023 and tries to achieve these targets with supportive regulations and legislation to raise its standards to European Union levels. Firstly, this chapter presents the RES potential and the current level of RES development in Turkey. Furthermore, it also discusses various impediments against the rapid progress of RES investments and reaching the RES targets in Turkey. Overall, we conclude that Turkey has a remarkable economic RES potential, which is largely untapped both in Turkey but also elsewhere around the world. This is mainly due to various barriers, such as lengthy administrative procedures, stop on license provision observed in various instances and economic issues. Therefore, in the current situation, it seems that the 2023 targets can be reached only if hard and consistent work and policies are continued in Turkey.

Keywords: renewable energy; Turkey; targets; green technologies; power sector.

8. The financing decision of oil and gas companies: the role of country level shareholder protection

Halit Gonenc, Oleksandr Lebediev and Wim Westerman

Abstract
This paper investigates the financing decisions of oil and gas companies in various countries for the period from 2001 to 2015. We focus on the determinants of proportions of both internal (cash flows) and external (debt and equity) funds used in the financing of capital expenditures and aim to understand which theories explain the financing decisions of oil and gas companies. The results provide strong support to the dynamic trade-off theory and partial support to the pecking order and market timing theories. The choice of financing source depends on the shareholder protection at the country level. Companies in countries with a high level of shareholder protection are willing to issue more equity than companies in countries with a low level of shareholder protection.

Keywords: financing decision, capital structure, investor protection, oil and gas firms.

9. Attitudes of SMEs towards the Elements of Eco-Efficiency: The Turkish Case

Fatih Cemil Özbuğday, Derya Findik, Sıdıka Başçı and Kıvılcım Metin Özcan

Abstract
Eco-efficiency is achieved by creating more value with less environmental impact. Since Small and Medium Sized Enterprises (SMEs) are responsible for most of the production in the industrial output, their adoption of and awareness about elements of eco-efficiency is crucial for green growth. In this study, we investigate the attitudes of Turkish SMEs over three items concerning eco-efficiency: (i) increasing resource efficiency investments, (ii) producing more environmentally compatible "green" products or services, and (iii) the consumption of energy from renewable resources. To this end, we utilize data on Turkish SMEs from the 2017 wave of the Flash Eurobarometer, Small and Medium Sized Enterprises, Resource Efficiency and Green Markets (GESIS) dataset and conduct descriptive analyses. Our investigation of 299 SMEs from Turkey reveals that there is a distance between Turkish SMEs and the elements of eco-efficiency. Many firms criticize the administrative and legal barriers to resource efficiency investments and acknowledge the need for external support to improve resource efficiency. The results also indicate that most of Turkish SMEs are unwilling to produce green products or services. Furthermore, only a small fraction of the SMEs relies on renewable sources for self-generation. As SMEs construct a sizeable portion of the output in the economy, these results show that the contribution of SMEs to green growth will be lacking in the coming years, unless further action is taken, and supported by the Turkish government.

Keywords: Eco-efficiency, Resource Efficiency, Renewable Energy, SMEs, Turkey

10. Volatility Spillovers between Oil and Stock Market Returns in G7 Countries: A VAR-DCC-GARCH Model

Göknur Büyükkara, Onur Enginar, Hüseyin Temiz

Abstract
The oil prices declined from a peak of $115 per barrel to under $35 between June 2014 and February 2016. This decline was due to the decision of the Organization of Petroleum Exporting Countries (OPEC) to maintain an oversupply in November 2014, despite declining demand for crude oil and the United States' growing shale capacity. We examine whether the decline in oil prices can be attributed to the impact of OPEC oversupply on stock market volatility in the G7 countries. We apply a vector autoregressive model in a multivariate generalized autoregressive setting with the dynamic conditional correlation. The results indicate bilateral volatility spillovers since the beginning of the 2014 oversupply period. Dynamic correlations between oil and stock prices started to increase but, in the middle of 2016, started to decrease again after rebalancing. Oil price decreases seemed to increase the conditional correlations between oil and the stock market in the United States, Europe, Japan, and Canada as investors responded positively to oil price declines. Analyzing hedge ratios calculated from the conditional correlations and portfolios we establish, we find that optimal oil-stock portfolios outperforms index investment.

Keywords: Volatility spillover, VAR-DCC-GARCH, OPEC oversupply, stock market, oil market

11. Corporate cash holdings in the oil and gas industry: the role of energy directives

Yilmaz Yildiz and Mehmet Baha Karan

Abstract
With the implementation of energy directives and increasing competition among the market players, energy firms face more uncertainty than past. As being one of the most prominent factors for energy firms, industry-specific regulations and directives related to the energy security and climate change have a considerable impact not only on their performances but also on their corporate strategies. In this chapter we investigate the impact of the energy directives on the corporate cash holding decisions of the energy firms in Europe. Using a large number of firms and a variety of econometric approaches, our findings suggest that there are significant differences among countries in terms of cash holding decisions and the impact of energy directives. We find that the energy firms in in Northern and Western Europe increase their cash holdings as a buffer against the unexpected cash shortages with the implementation of the Second and Third Energy Directives. However, directives do not have any impact on the cash accumulation of the energy companies in UK and Eastern Europe. Our results also suggest that speed of adjustment towards the target cash position for the energy firms in Eastern Europe (Northern Europe) decreases (increases) with the implementation of the Second and the Third Energy Directives. Overall, the results suggest that energy directives have a strong influence on the energy firms in Northern, Western, and Eastern Europe, but firms in UK are less sensitive to the changes in the industry dynamics in terms of cash accumulation and the speed of adjustment towards the target cash position. The findings of this study shed important lights on how industry-specific regulations affect the cash holding decision of energy firms, which is often a neglected issue in the energy economics.

Keywords: Cash holdings, energy firms, energy directives, adjustment speed, European firms

12. The determinants of systematic risk of renewable energy firms

Lars J. Hesselink, Lammertjan Dam and Wim Westerman

Abstract
Conventional asset pricing theory predicts that expected stock returns are driven by systematic risk. In this context, we investigate the determinants of systematic risk of renewable energy firms. To do so, we estimate a dynamic beta model using a cross-country panel data set of 578 renewable energy firms from 52 countries for the period 2005-2016. We employ both global and country-specific factors to explain both variation over time and variation between firms in their systematic risk. The results show that systematic risk of renewable energy firms is negatively influenced by oil returns and that country-level net-imports, environmental policy stringency, and environmental policy stability explain differences in risk at the country level.

Keywords: Renewable energy, dynamic beta estimation, cross-country differences

13. Optimizing resource usage in an unobtrusive way through smart aggregation: the case of electric vehicle charging in Amsterdam

Kees van Montfort, Halldora Thorsdottir and René Bohnsack

Abstract
The increasing popularity of electric vehicles (EVs) is known to amplify the already present peaks in electricity demand. The possibility to remotely control and influence the charging of many EVs using the internet of things (IoT) via an aggregator has been proposed to optimize resource usage, to alleviate peak problems, and to exploit revenues that may be harnessed from fluctuating electricity prices. However, so far, the potential hinged on the acceptance of users, particularly the willingness to change their charging behavior. In this study we develop an unobtrusive and easily implementable optimization method. Its effectiveness is tested on 360,000 charging sessions at public charging points in Amsterdam during the year 2015, providing a realistic assessment of the effects of optimization in terms of reduced costs, change in peak demand and long occupancy of charging points. Based on the model, an average reduction of electricity costs between 20% and 30% can be achieved, depending on the day of the week. We also show that changing EV owner's charging preferences such as starting earlier or later can benefit certain groups of EV drivers substantially and reduce electricity charging costs up to 35%.

Keywords: electric vehicles, smart charging, optimization

Energy: Classical Financial Economics Revisited

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1. Introduction

The Centre for Energy and Value Issues over the past decade, and through the editorial efforts of primarily the founding Directors of the Centre, has published valuable research by many international energy economics researchers in several book editions by the respected publishers, Springer. For example, "Financial Aspects in Energy" was published June 2011 and thus far has seen over 11000-chapter downloads. "Energy Economics and Financial Markets" published in October 2012 has achieved almost 26000-chapter downloads. "Perspectives on Energy Risk" published in March 2014 has gained almost 8500-chapter downloads. "Energy Technology and Valuation Issues" published in March 2015 has achieved over 7500-chapter downloads and "Energy and Finance" published in September 2016 achieved almost 6500-chapter downloads to date.

Much of this published research relates to financial economics of energy and the pricing of fossil fuels, renewables and electricity generation. The central theme of government compared to private sector involvement in the energy sector is predominant and is recurrent throughout the various publications, without siding on public or private sectors.

As one of the original Directors I have been requested to make a general comment about some of the themes of research covered and I have decided to pass on my own comments about the recurrent research themes relating to the involvement of public and private sectors in the financial economics of energy. The views expressed are my own and for what they are worth are as follows.

2. Government economic management

The notion that sound government economic management in energy markets (for example, fossil fuels, nuclear power and renewables and including electricity generation) should be the primary policy consideration in any ideological contest is not without merit. Sound government economic policy applicable to energy perhaps paradoxically implies minimal direct government interference in the fore-mentioned markets. By its very definition energy economics is also about the efficient allocation of scarce resources. Time has proven that the private sector provides the most efficient resource allocation and wealth creation, assuming healthy competition.

With that assumption, market forces in fuel and electricity equate supply and demand to produce an equilibrium price or a clearing price for fuel and electricity independent of any direct market interference by government.

Of course, in such a system there must be strong assumptions. The key assumption is as stated above, minimal government intervention in fuel and electricity supply and demand and thus in pricing. This scenario represents the most efficient way to provide incentive for the private sector to increase production, consumption and employment in fuel and electricity and to produce increased private sector profits out of which increased taxation is used to pay for government areas of responsibility including welfare expenditure and in expenditure relating to regulations for clean energy and climate change and fair pricing for consumers by ensuring near to perfect competition.

This may represent an unrealistic classical, or even a neo classical economic approach to some, but it remains an ideal to strive for, given that wealth must be first be produced before it may be fairly and equitably taxed and redistributed. Private sectors are good at creating wealth through the financial economics tenet of shareholder wealth maximization. Any exploitation by the fuel and electricity sectors (for example, actions that move against clean energy production and actions that move against perfect competition in energy markets) merely requires government involvement in the areas of regulation and enforcement. The goal of course is to ensure cleanly produced electricity is provided to consumers at an affordable price.

Government raison d'etre should be to create a competitive business environment in the energy sector that eliminates monopolies and the adverse effects of monopolistic or cartel pricing. It should govern to retain incentive for the private energy sector as the most efficient producers of energy to in turn produce wealth and provide employment. Government needs to appropriately tax that wealth and equitably redistribute resultant revenue to sectors that require funding (for example, defence, health, welfare, education, but also including funding for regulation for clean energy and environments and regulations against monopolistic and cartel pricing and regulations to ensure near perfect competition in the energy sector). Governments need to be lean and efficient with balanced budgets and should not directly compete in these markets with private sector energy firms.

Government media, being taxpayer funded, should not demonstrate bias towards political parties, especially if those parties only espouse big government in energy supply and demand involvement and excessive incentive destroying energy sector taxation. If government owned press indeed is permitted to comment on energy related political events (rather than simply inform the public of the true facts), the views expressed by government media should be balanced.

Government and private media should present the properly researched pros and cons of all arguments (for example fossil fuels versus renewables). If higher profile government ego driven media presenters wish to unfairly lend weight to political factions or to some of the unreasonable aspirations of vocal minorities, they should shift themselves to the fringe private media

sector. The greater public as non-believers of propaganda will then not concern themselves with who pays their journalistic salary.

3. The Australian Case

It should be said that minimal direct government involvement in energy markets works. Australia is a small yet a leading developed country with a hardworking and energetic population. According to most economic criteria (for example, GDP growth, income per capita, inflation rates, interest rates, employment opportunities, health of financial sector, public debt as a percentage of GDP, quality of education), Australia ranks well within in the top five percent of all countries and at the same time ranks highly compared to other OECD countries.

Australia is a prominent private sector producer and exporter of natural gas and coal. It is a potentially leading global exporter of uranium and lithium and rare earths for battery components. Domestic electricity markets have made great inroads in environmental issues relating to the tradeoff of fossil fuel power generation and renewables. There is a particularly strong growth in solar power in Australian residences. Solar and wind power are expanding into light industry power generation.

The vocal minorities in Australia have not yet won the battle for completely renewables industrial power generation. Common sense prevails with governments directing a more realistic policy of maintenance of a base power load through fossil fuel power whilst renewables continue to be phased in. The Australian government has set reasonable and achievable targets in relation to the reduction of greenhouse gas emissions. The majority of Australian voters who re-elected a conservative government Australia espousing free enterprise, is contributing to the process of slowing climate change. Even so and despite a degree of privatization, there is some government ownership in electricity generation. Electricity is expensive and oligopolistic pricing needs to be re-examined.

There is a generally strong awareness in Australia of the need to stop climate change (at least the human made component) and the need for clean environments. Some feel nothing has been done but that is nonsense. Sensible Australians see that a great deal has been done for example, with the rapidly growing importance of solar and wind power juxtaposed with the realistically gradual winding back of fossil fuel power generation. Most Australians also know that vital components of the Nation's exports are coal and natural gas, that renewables cannot possibly immediately replace fossil fuels and that is up to the importers try as much as possible to ensure clean burning.

4. Political risk

Apart from legislative, executive and judicial roles, less government is better. This, it is posited, also applies to energy markets. More government involvement means more political risk. Political risks affect pricing, payment and energy supply continuity. The writer has commenced research into the measurement of political risk in energy markets on a daily rather than monthly basis as provided by risk ratings agencies. Risk ratings agencies should be able to, but for some

reason cannot, provide at least a daily assessment of a countries political risk as either an importer or an exporter of energy. After all good and bad political news arrives randomly on a daily basis.

It is acknowledged that country risk is the risk of the slowing down of meeting international energy obligations due to economic and financial reasons or political reasons. Political risk is the slowing down in meeting international obligations due to overtly political and human factors. High political risk means excessive government involvement in energy markets. In this research energy market models are run for each country be they an energy importer or an energy exporter. Countries with lower government involvement will have less political risk and less political risk means less pricing risk and less risk of loss of continuity of supply and less risk of non-payment for energy exports.

An energy market model is specified for each country by regressing energy prices in that country against global energy prices. The regression coefficients represent market risk. This risk is systematic, unavoidable and arises from economic and financial factors that are the same for all. It cannot be eliminated. The regression residual is unsystematic and country specific and arises from political and human factors within a country. This risk in theory can be eliminated through portfolio diversification. The greater the error term the greater the level of political risk and the error term can thus be calibrated to become a daily indicator of political risk in energy markets and used to make decisions that reduce pricing, payment and supply risks. Market models could be developed for fossil fuel sectors bearing in mind that for the greater part renewables will be developed with in a country and not as such imported or exported.

5. The takeaway

This is a new area of research that continues to be pursued by the writer and eventually will involve a study of all countries. It will lead to better decisions be made in risk elimination or avoidance. The takeaway message is that getting back to a blend of classical financial economics and the realities of the economics of a modern changing world has a degree of merit in the study of energy markets. Such research may include more macroeconomic explanatory variables. Other messages conveyed above are that private sectors, provided they are competitive are more likely to produce positive energy price outcomes. Also, government media, when discussing privatization versus nationalization, are required to present a balanced view, as the public, who pays their salary will not all agree on a biased assessment.

Call for Papers for Special Issue of the Journal "International Econometric Review": The Problem of the Century: Energy

Energy is one of the most important input for production and it is also necessary for most of the consumptions of individuals. The main sources of energy are fossil sources like coal, crude oil and natural gas, hydroelectric energy and nuclear power. In recent years sources like solar and wind energy started to be important due to the fact that except nuclear power other sources are close to their limits. This special issue aims to contribute to research on the problems that are related to these sources. We are open to submissions of both empirical and theoretical research.

Topics of special issue include (but are not limited to):

- Fossil sources of energy
- Hydroelectric energy
- Nuclear power
- Solar and wind energy
- Importance of renewable energy
- Energy efficiency
- Energy security
- Relationship between energy and environment
- Energy transmission routes
- Financing energy
- Pricing energy
- Energy and government policies
- Relationship between energy costs and current account deficit
- Country or region specific analysis

Please send your abstract (maximum 1000 words) to

journal@era.org.tr

indicating that your submission is for the special issue.

The abstract should have the following structure:

Aim: The author(s) should shortly explain the reason or motivation for taking up the research problem (why is the topic important?), and what is the objective or aim of the research. The aim should be clearly formulated, and be specific enough to be achieved within the range of the paper.

Design / Research methods: The authors should clearly explain the way in which the aim or objective is achieved. The main research methods as well as the approach to the research should be provided that enable effective dealing with the paper's aim.

Conclusions / findings: What are the main results of the research? The authors should refer to the analysis, discussion or results of the paper in order to show the main findings.

Originality / value of the article: Within the context of the current state of the art in science, what is new or what is the scientific value added of the paper? For whom would the paper be of interest?

Implications of the research (if applicable): How and to what extent can the results of the research be applied to practice? What are the consequences of application of the findings of the research to practice?

Limitations of the research (if applicable): Does the research imply directions or suggestions for future research? What are the limitations of the research methods used? What are the limitations of the implications of the research findings?

Keywords: provide 3 keywords in alphabetical order

JEL codes: provide the JEL codes applicable for your paper

Important dates:

28 February 2020: Submission of Abstract
15 March 2020: Notification of status invitation to submit full paper
30 April 2020: Deadline for submission of full paper
June 2020: Publication

Call for Papers ISINI 2020 conference (Wroclaw Poland, 24-25 September 2020)

The fourteenth international conference of the International Society for the Intercommunication of New Ideas (ISINI) will take place at the WSB University in Wroclaw, Poland on Thursday 24 – Friday 25 September 2020. You are invited to submit full papers or summaries that are within the scope of ISINI.

The purpose of the Society is: to foster the discovery and dissemination of new ideas, in particular in economics and other social sciences, to test these ideas and to study the application to problems of the real world. The Society aspires to realize its purpose by creating and upholding an environment where economists meet, consult and cooperate with scholars from other disciplines.

The major instrument of ISINI has until now been its conference. So next to the usual economists, we hope to welcome scholars in Wroclaw who are working in other social sciences (including law, legal science, history and political science), who are cooperating with economists in common research projects or who are doing research in areas where both sides could benefit from an exchange of ideas.

The organizers invite scholars, young and old, to submit papers around the following thematic focal points:

1. **Andries Nentjes Memorial Session - environmental economics, law and policy in the context of economic and sustainable development**
2. **Sustainable Regional Development Compass**
3. **Special CEVI session on "Energy and Valuation Issues" (see below)**
4. **Loss management in a disintegrating Europe**
5. **Challenges in transport and transport systems**

Specific information you can find on: http://www.isini.info/

Please feel free to spread the information in your network.

!!Special CEVI session on "Energy and Valuation Issues"!!

The objective of the CEVI session is to bring together academics and practitioners from all over the world to focus on timely energy finance and investments, financial performance, energy markets and valuation issues in the energy sector worldwide. Specific topics refer to energy issues, and include:

Financial Regulation; Financial Markets; Financial Risks; Asset Pricing; Value at Risk; Capital Structure; Sourcing Capital; Corporate (Re-) Structuring; Corporate Governance; Behavioural Finance; Financial Performance; Cost Control; Financial Accounting; Fiscal and Legal Issues.

Please submit your papers (completed or nearly completed) or participation interest via e-mail to: Dr. Wim Westerman (w.westerman@rug.nl) and Dr. Johan van Ophem (johan.vanophem@wur.nl).

The submission deadline is May 1, 2020. Notification of acceptance will be made shortly hereafter.