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Evaluation and Forecasting of Effectiveness of the Use of Region's Development Potential

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Abstract

The purpose of the research is to improve methodological instrumentarium of evaluation and forecast of regional economic growth. The authors develop methodological approach of evaluation of effectiveness of the use of region's development potential and conduct imitation modeling, which allowed building forecast scenarios for achievement of variative limits with the indicator of effectiveness of the use of region's development potential. The offered methodology of evaluation of effectiveness of the use of region's development potential consists not only in the offered scheme of analytical actions, which allow identifying the level of effectiveness, but also allows building the evaluation results into forecast scenarios of regional development of economies for determining the probability of achievement of possible perspectives. This approach allows evaluating general results of work as to rational use of existing possibilities for socio-economic development (with their correction as to existing limitations) and substantiating the necessity for measures for elimination of negative tendencies in development and minimization of inter-regional differences. This opens new possibilities for regulation of socio-economic development of regions, based on perspective analysis. That is, forecasting in this situation becomes not only purpose but means for achievement of the set goals.

Keywords: evaluation, forecasting, potential, effectiveness, region development.

JELClassification: R11, E1.

1. Introduction

Region's development potential is realized in perspective in the form of activization of investment activities and general regional growth, but this realization takes place with certain time lag. This, after evaluation of region's development potential in current period, changes in regional development come later.

Therefore, there arose necessity for determining causal relations between region's development potential and main indicators which characterize regional development: investments into main capital per capita and gross regional product per capita. At that, potential of development is the cause for inflow of investments into region and for growth of gross regional product. As a result, development potential can be viewed as factor attribute, and investment into fixed capital and gross regional product – as resultative attribute. Consequently, it is possible to set the type and parameters of objectively existing dependence and choose the corresponding function.

Conclusions

Thus, the use of this approach to determination of effectiveness of the use of regions' development potential allows modeling possible variants of realization of situation within the developed scenarios of regional development. At that, the chosen scenario of development of situation of rational use of existing socio-economic advantages of region allows determining critical levels and perspectives for further development (maximums in imitation). This opens new possibilities for regulation of socio-economic development of regions, founding on perspective analysis. That is, modeling in this situation becomes not only the purpose but means for achievement of the set goals.

The offered methodology for evaluation of effectiveness of the use of region's development potential consists not only on the offered scheme of analytical actions which allow identifying the level of effectiveness, but allows building results of evaluation into forecast scenarios of regional development of economies for determination of probability of achievement of possible perspectives. This approach allows evaluating general results of work on rational use of existing possibilities for socio-economic development (with their correction as to existing limitations) and substantiating the necessity for measures for elimination of negative tendencies in development and minimization of inter-regional differences.

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The Political Economy of Public Spending on Italian Rail Transport: A European View

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Abstract

The public expenditure on railways is largely unexplored in Europe. This is surprising because the size of government financial support to the industry is remarkable. Filling a dozen years of missing information, this paper rebuilds the total public spending on the Italian railway since 1992 making it comparable. This research complements a significant lack of information of public interest since these data have been published from 1966 until 2001, year of the last data release. From then the extent of public support to the industry has remained indefinite. Our results serve: scholars aimed at comparing such expenses with other countries, policy makers aimed at taking superior data-supported decisions when it comes to budgeting and industry professionals for intelligence purposes. Thus, reducing the long-lasting asymmetric information in this domain - a key threaten to the sector growth. Results of this paper enable a proper comparison of the government spending on railways among different countries such as Italy, France and Great Britain as an exercise.

Keywords: Public expenditure, railways, state aid, public administration, political economy, transport policy, transport economics.

JEL Classification: D78, H25, H50.

1. Introduction

A major policy lesson stemming from the budgetary troubles of many countries within the European Union (EU) is the need to improve expenditure performance, i.e. the reinforced connection between funding decisions, policy priorities and outcomes (Di Foggia and Lazzarotti 2013, Vandierendonck 2014); no exception for railways. From a European perspective the railway sector is (still) significantly reliant on public subsidies, almost as much as its sales revenues. Although since as long ago as 1991 (Directive 91/440/EEC) covered three key areas, among which: restructuring deficits to put railway companies on a viable financial footing and maintain financial sustainability, at present, there are few signs as yet of a confidence-boosting solution to stabilize the sector. Therefore, in today's spending review environment, public expenditure should effectively target sustainable-growth enhancing policies while encouraging budgetary consolidation and limiting distortions of competition (Arrigo and Di Foggia 2013a, 2013b).

In Europe, data on railways funding suffer from some limitations. First, data are missing for some years as a result of missing notifications from European Union member States (MS). Second, the published data do not disaggregate between different support to the network for financing new investments, for renewals and maintenance, for operating expenses and for public service obligations (PSO) that is a common mechanism to ensure that all consumers retain access to public services (Mirabel, Poudou and Roland 2009). This paper is designed to help overcome these problems providing a comprehensive figure of the public expenditure on the Italian railways over 22 years, i.e. between 1992, when the company was transformed from a public entity into a joint-stock company, and 2013 - further updates will be useful and completed in the feature. The reason is over a decade of missing and incomplete information on public expenditure on railways or, eventually, when sporadically available data are issued from heterogeneous sources and for limited periods of time; situation which does not allow an extensive evaluation of such expenditure. This gap is even more evident now since the determinants and magnitude of subsidies to railways have triggered interest among policy-makers, academics, regulatory entities, professionals and European institutions (Arrigo and Di Foggia 2014). This paper gets bogged down in the analysis on Public expenditure on railways and does not cover the funding of the regional and sub-urban railways.

This is due to the difficulties faced in identifying the correct sources for this period of time. While there is utter confidence about either the definition or the quantifiable support to the railway, since the beginning of the

2000s it has not been made a comprehensive quantification of the costs. This condition of non-information is even more serious in view of the sombre fiscal problems that Italy keeps coping with for several decades already; the high-level of the Italian public debt that back in 2014 ranked third in the world, and the notable difficulty in fulfilling the requirements listed in the Maastricht Treaty (EU 2010). In fact, according to the Maastricht treaty the MS must demonstrate sound public finances and meet two criteria: their budget deficit must not exceed 3% and public debt must not exceed 60% of gross domestic product. In Italy, despite these important issues at stake, no public body is in charge to annually monitor and publish the costs related to the railway sector. In the last decade, no studies on the topic have been published, with the exception of our recent works (Arrigo and Di Foggia 2013b). Based on reliable official data results of this paper fill a severe knowledge gap and support (i) policy makers when it comes to allocate public resources, (ii) competition authorities in their market assessment and (ii) scholars aimed at investigates this prominent topic. This paper is organized as follows: in the first section we provide and introduction to the theoretical and empirical research available. After that we describe the research approach and methodology. This is followed by a reconstruction of the public expenditure on railways until it was published. Afterward we present data aimed at filling the mentioned gap, next come the conclusions.

Concluding remarks

Governments face a number of choices in determining the level of public support they provide for railways, they are more and more facing budgeting constraints and EU rules compliance requirements, so, sound budgeting requires efficiency in expenditure allocation.

In turn, to allocate expenditure properly, decision takers need precise information and this is the reason why this paper traces the sources of total public expenditure on railways since 1992, the year when the Italian rail company turned into a joint stock company; at the time of this writing this is the unique complete reference. Actually the research supplements a significant lack of information of public interest due to the fact that the total public expenditure on railways has been annually calculated and published in the CNIT from 1966 only until 2001; as a consequence, the total amount of the expenditure from then on has been unknown.

This work also updates the results of our previous analysis (Arrigo and Di Foggia 2013b) and put the basis for an international comparison which is a prominent need Europe wide. Therefore, a first suggestion for further research emerges i.e. modeling and encompassing regional financing mechanisms as well as the amount in order to see clear, comparable and non-discriminatory tenders for rail transport in Europe. This is a key element since Europe is at last beginning to glimpse that single railway market, but which has still not been achieved. In this regard this paper has policy implications too since in most EU member States, public payments have increased substantially, while the growth in traffic has been more moderate (Di Foggia and Arrigo 2015). Substantial public sector investment, particularly in the newer EU members where subsidy payments more than doubled in six years, has not in itself secured equivalent increases in rail demand. This is partly due to an inability to curb operational inefficiencies caused by a lack of appropriate competitive incentives. Yet in some countries, public expenditure is awarded directly without competitive tender and this leads to a second field for future research i.e. measurement of efficiency gains that are necessary to create sustainable growth and for the benefit of the public purse.

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An Investigation of Spatial Contiguity for Provinces in Turkey Using Nomenclature of Territorial Units for Statistics Level 3 Data

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Abstract

Using NUTS Level 3 data, this study examines whether provinces in Turkey exhibit spatial contiguity. Output-oriented BCC and CCR model forms of PCA and DEA were used in the data preparation phase. While a total of 72 models were obtained using findings resulting from PCA, CCR and BCC, those models having econometric complications and models not exhibiting spatial autocorrelation based on Moran's I test, were excluded. For the remaining 13 models, SAR and SEM estimates were performed, and component-based spatial contiguities were determined for the provinces. The contiguities were confirmed visually through spatial mapping.

Keywords: spatial econometrics, spatial autoregressive (SAR), spatial error model (SEM).

JEL Classification: B23, C21, R58.

1. Introduction

Acknowledging that regions and countries possess dissimilar characteristicswhile failing to pay attention to the mutual interaction among regions, and notably, disregarding the effects of localities in analyses based on spatial experiments, may lead to biased forecasts and inconsistent results being obtained from the models used in the aforementioned analyses.Spatial econometrics is a sub branch of econometrics comprised of econometric methods involving spatial effects existing in cross-sectional and panel data. Spatial analysis includes using data in getting to information, as well as applying analytical methods to spatial geographical data. Spatial analysis has three components: mapping and geographical projection, research-based spatial data analysis, and spatial modelling. Spatial modelling necessitates the u econometrics and is performed using regression analysis (Sağbaş and Kaya 2009).

Spatial regression models exploit the structure of complex dependencies among the observations corresponding to countries, regions, provinces, etc. Therefore, parameter forecasts include the rich informational relationships that exist among observations and regions.

A change in a single observation (region) associated with an explanatory variable directly affects the region itself (direct effect) and indirectly affects (indirect effect) all other potential regions. As a matter of fact, the ability of spatial regression models to capture such effects represents one significant aspect of spatial econometric models. The value of spatial econometrics lies in its ability to accommodate the modelling strategies that define multi-regional interactions. However, such rich information increases the task of interpreting the obtained forecasts (Le Sage and Pace 2009).

This study is founded on two elemental goals. The first goal is to provide a detailed literature survey of other studies in the field of spatial econometrics. The second goal is to establish an original treatise which complements results from the limited number of spatial econometric implementations carried out in Turkey with principal component analysis and data envelopment analysis.

The data used in the analyses has been obtained from the Turkish Statistical Institute and The Bank Association of Turkey.Shapefile data has been used in the mapping of spatial econometric models, and the aforementioned data has been sourced from the Spatial Data Technologies department at the Tübitak Bilgem Research Institute of Software Development.

Conclusion

Many economic studies ignore the geography of the locations where said economic activity takes place. This is regrettable as spatial data used in regional and inter-regional studies provide researchers with expanded possibilities in their decision making processes, and it would help to include into models the spatial autocorrelation existing among observations. This study used spatial econometric analysis to take into account the geography information for locations included in the data sets. Based on their spatial autocorrelation structures, spatial econometric models are divided into two categories: SAR and SEM. SAR indicate autocorrelation existing due to interaction among locations, and SEM indicates autocorrelation resulting from errors in measurements (Yılmaz 2014).

The spatial econometric analysis performed using the results from the three analyses conducted provided us with further information for choosing the analysis results to which SAR and SEM methods could be applied to improve results. This is a distinctive outcome of the study, which was not initially targeted, but which emerged following the implementation stage of the study. For data sets used in regional spatial analysis that were generated using distinct types of analyses, the results indicate that it is possible to form and model disparate spatial relationships. Instead of obtaining heterogeneous relationships from raw data, researchers can generate data through various analyses and measure distinct relationships.

Consequently, taking into account indicators relating to 12 dimensions for 81 provinces, the existence of spatial contiguity has been proven both statistically and visually. It was observed that provinces mimic other provinces in such traits as agriculture, foreign trade, education and housing, and each province has an exogenous effect on its neighbours.

It will be beneficial for the results obtained in this study to be duly taken into consideration by those responsible for policy creation relating to regional development. One significant aspect ignored by policies aiming to mend the inequalities existing among regions is the effectiveness of the assistance provided to underdeveloped or developing regions. As such, consideration of the results of this and other scientific studies when planning for the aforementioned regional assistance will help in the success rates of those activities (Yılmaz 2014).

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Liquidity Analysis of Select Firms Listed in Muscat Securities Market – Sultanate of Oman

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Abstract

The study is to examine the liquidity of select manufacturing and service companies listed in Muscat Securities Market. The study examines the value of liquidity analysis using the traditional ratios compared to cash flow ratios. The traditional ratios used are Current Ratio, Quick Ratio, Total Assets to Total Liabilities and Interest Coverage Ratio. The Cash Flow Ratios used are Operating Cash Flow Ratio; Critical needs Cash Coverage, Cash Flow to Total Debt Ratio and Cash Interest Coverage Ratio. Correlation and Paired T Test are used to check the statistical significance. The study concludes that exists between Traditional Ratios and Cash Flow Ratios. Cash Flow Ratios can lead to better decision regarding the liquidity of a firm.

Keywords: liquidity, traditional ratios, cash flow ratios, muscat securities market.

JEL Classification code: M41.

1. Introduction

The need for liquidity analysis is crucial for companies and of interest to all stakeholders especially creditors like bankers and suppliers (Weygandt *et al.* 1998). Financial metrics that measure a company's ability to pay short term obligations are called liquidity ratios (Kiesco *et al.* 2004). Financial Ratios are used for predictive, explanatory and descriptive purposes (Barnes 1987).

These ratios look at a company's ability to pay off the short term liabilities with the help of most liquid assets. Shareholders also will take the help of these liquidity ratios when performing fundamental analysis on a firm. A higher liquidity ratio would indicate that the company is in a strong position to pay off its short term debts whereas; a lower ratio should be a warning to the company's management and investors / creditors. Companies that find it difficult to pay off their short term debts from liquid assets would certainly struggle to pay off their long term obligations. Liquidity of a company is affected by the cash inflows and outflows which in turn affects the future prospects and performance (Larson *et al.* 2006). Liquidity Analysis of a company is done using traditional ratios like Current ratio, Quick Ratio, Total Assets to Total Liabilities Ratio and Interest Coverage Ratio. The traditional ratios are useful in obtaining an indication of meeting current liabilities but do not reveal how effective the cash resources can be managed. Liquidity Analysis these days are done by using Cash Flow Ratios. They provide supplementary information in understanding the real operational status of business. The cash flow ratios are Operating Cash Flow Ratio; Critical needs Coverage Ratio, Cash Flow to Total Debt Ratio and Cash Interest Coverage Ratio.

To understand more about these ratios Current Ratio is a liquidity ratio that measures a company's ability to pay off its current liabilities with total current assets. Without considering how liquid some current assets are e.g.: stocks, this ratio assumes that companies with high current assets will find it easier to pay off their short term liabilities. A higher current ratio is always more favourable than a lower current ratio as it shows that the company can make the payments of current liabilities easily.

Quick Ratio or Acid Test Ratio tries to find whether a company is able to pay off its current liabilities with its quick assets. Quick assets are those that can be converted into cash in 90 days or less. Cash and cash equivalents, short term investments/marketable securities and current account receivables are considered quick assets. The difference between Quick ratio and Current ratio being, while calculating the Quick Ratio, we leave out inventories as these are considered to be less liquid.

Total Assets to Total Liabilities Ratio indicates how many times the total assets of the company cover the total liabilities. Assets here include all assets tangible and intangible, fixedand current. Similarly the total liabilities would include all liabilities, short term and long term. This ratio would only give a broad indication of the coverage the company has towards its liabilities and would help one to compare the company with others in the industry. Higher the ratio, more comfortable is the company in servicing its debts. Also, high ratio would indicate that lower value of assets are bought / serviced by debt.

Interest Coverage Ratio tells us the adequacy of Profits (Earnings before Interest & Tax) to pay the interest expenses. This ratio indicates how many times the interest expense is covered by the profits. When a company reaches a ratio of 2.5, it is a warning sign that the company should not dip further. A ratio of 1.5 is bare minimum. But when a company slips below a ratio of 1, the profits generated are not sufficient to meet the interest expenses. Interest Coverage Ratio is a very important indicator to the investors and the management. When we plot a trend of the ratio over the past 5 or more years, it will give us an indication whether the ratio is improving or worsening

Operating Cash Flow Ratio is the money generated from the business activities. Revenue generated from business activities minus the operating expenses would give us the operating cash flow. For a business to perform well, the operating revenue should always be higher than operating expenses. Operating cash flow ratio would tell us how many times the short term liabilities are covered by the operating cash flow. It is important for a company to ensure that business debts are collected faster and inventory is rotated faster in order to achieve a high operating cash flow ratio.

Critical Needs Cash Coverage Ratio explains whether the Net Cash Flow from Operations is adequate to pay off the urrent liabilities and interest. It is important that any company has enough cash generated to service its current liabilities and interest. Cash Flow to Total Debt Ratio indicates whether the yearly cash flow from operations is adequate or to what extent it is adequate to pay off the total liabilities of the company. The liabilities here include both current and long term liabilities.Though few companies that have very high cash flow from operations can service their total debt out of cash flow from operations, this ratio gives an indication as to the financial health of the company. Cash Interest Coverage Ratio tells us the adequacy of the cash generated from operations to fund the interest expenses. A high ratio will give investors' confidence about the capacity of the company to generate cash to pay off its interest expenses many fold. This is also an indication that the company has the capacity to pay off interest of more debt taken, if required.

Discussion and conclusion

The analysis reveals that differences exist between the traditional liquidity ratios and cash flow ratios. Traditional ratios are used by companies for analysis but cash flow ratios speak more about a company where the traditional ratios fail. Traditional Ratios are based on accrued data and are calculated at a particular period of time.

Taking data from cash flows will correct this deficiency (Schmidgall *et al.* 1993). Cash Flow information is more reliable than Balance sheet or Income statement information. Balance sheet data are static due to the measurement of only a single point in time. In contrast the cash flow statement records the changes in other statements and nets out the book keeping focusing on cash available for operations and investments which the shareholders are interested in Coltman and Jagels (2001).

Cash flow ratios give more insights and are more meaningful to the stakeholders and researchers as they need information about the firm's ability to service debt and fund capital expenditure if any in the long run. These discrepancies between traditional and cash flow ratios is a cause of concern to investors to question a future strategic plan of expansion that may not be generating the required cash flow to support future capital expenditures. Finally the ability of a company generating cash flows also might affect the rating given by credit rating institutions to debt instruments issued by a particular company to raise future capital.

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Problems of Attracting Foreign Investment in Russia

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Abstract

In the current international economic relations, the research is devoted to the relevant problem of modern Russian economy, namely the article considers the problems of attracting foreign investment, the fall of the ruble and fears of foreign investors in investing their capital in the Russian economy. The relevance of the research of the problem of attracting foreign capital is determined by the need to improve the economy by strengthening its investment base. Socio-economic and political development in Russia at the present stage is aimed at shaping the developed open market economy. At the same time, the most important condition for attracting foreign investment in our country is the creation of favorable investment attractiveness.

Keywords: investments, foreign investments, direct foreign investments, investment climate, investment politics, rate.

JEL Classification: E22, O16.

1. Introduction

The relevance of the research topic is determined by the need to attract foreign investments to address both strategic and current tasks of the financial, economic and social development of Russia. The main task of foreign investment is not only to provide additional financial investment in the economy, but also to meet the needs of the recipient country in new progressive working methods and means of production. At the same time, new production relations form in the recipient country, which allow for more efficient use of available foreign capital. Increased foreign investment is not only the basis of the recovery processes, but also a factor of the reduction of unemployment, growth of tax revenues, raise in the level of the Russian management, increased competition in the national economy and social development (Shadskaja *et al.* 2015, Kryukova *et al.* 2013, Kryukova *et al.* 2014, Zaernjuk *et al.* 2014, Ilina *et al.* 2015).

However, along with the positive effects, due to its complex nature, this form of international economic relations can also have a negative impact on the economic processes in the country receiving foreign investments (Kaurova and Kanina 2012). Often, the purpose of foreign investment is speculation on the financial markets, which under certain conditions can lead to destabilization of the financial and economic system of the country. International practice has accumulated a lot of factors to support this assumption. Unfortunately, Russia also has negative experience in this field. According to experts, foreign investors played a significant role in exacerbating the financial crisis of 1998 and 2008.

Conclusion

Russia is open to cooperation and participation in the Chinese Silk Road mega project. There is a program of development of Siberia and the Far East and the scope for mutual cooperation and investment in Russia. The head of the investment firm Rogers Holdings, Jim Rogers, believes that the sanctions, which the United States use in a bid to "intimidate" and somehow "stop" us will in the end haunt the United States. After all, by doing so, they "push" Russia and Asia to each other. As Jim Rogers says, "Russians, Chinese and Brazilians are trying to find a way to move away from the US dollar. And it will have a long-term effect, because if they succeed, they will create a new World Bank and new currency; America will lose a huge portion of its prestige and power (Russian newspaper 2014)."

As President Vladimir Putin said in his address to the Federal Assembly (December 4, 2014), Russia will be open to the world, to collaboration, to attraction of foreign investment for the realization of joint projects. But most importantly, we must understand that our development depends primarily on us (Address of the President of the Russian Federation to the Federal Assembly, 2014).

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Is Advertising Innovation the Same as Shocking?

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Abstract:

Shockvertising is an innovative advertising technique that purposely attempts to gain and keep attention with horror and disgust. What makes fantastic marketing? The greatest marketing campaigns are those that are memorable. They are the ones that resonate with your audience and really create an affinity between your customer, the messaging, and the product or service. In order to obtain accurate and relevant information, current science only deals with the controversial and unethical advertising campaigns of companies. In this paper the values of each generation are presented then the concept of generation marketing is discussed in more details, from the advertising innovation point of view. In this research our goal is to find out how various age groups react to this kind of advertising or to innovation advertising. It is examined with the focus group technique, and, in order to extract quantitative data, the mentioned technique is combined with a questionnaire. Our assumptions and hypothesis are supported with statistical data, charts and tests of independence.

Keywords: shockvertising, shocking adverts, innovation, generations, generation marketing.

JEL Classification: M31, M37, Z33.

1. Introduction

In today´s society, with the increasingly cluttered advertising space, marketers are challenged with the tak of breaking through the clutter in an attempt to get their respective brand noticed. (Urwin and Venter 2014) Advertisement are considered offensive or "shocking" when they violate personal and values, regardless of whether it is because of being sexually inappropriate, indecent, vulgar or aesthetically unappealing. (Dahl, Frankenberger and Manchanda 2003) In order to cut through the daily clutter of advertising, that causes a decline in terms of its effectiveness perceptions, many marketing communicators opt for an offensive strategy that would stand out, attract attention and be memorable. (Dahl, Frankenberger and Manchanda 2003) Shockvertising is well utilized for charity issues, for example anti-fur or anti-smoking campaigns. This type of advertising turned out to be effective despite the fact that it has been critised because of its offensive style. Products or issues that require special attention are more likely to be advertised with negative shock rather than with positive (Uprety 2013).

Execution strategies that have been gaining attention in the past few years range from emotional to informational. Irritation (Greyser 1973, Aaker and Bruzzone 1985), humor (Sternthal and Craig 1973, Gelb and Zinkhan 1986), warmth (Aaker *et al.* 1986), fear (Ray and Wilkie 1970, La Tour and Zahra 1988), and sexuality (Bello *et al.* 1983, Severn *et al.* 1990) trigger various feelings.

Provocation, which is another form of execution strategy, has been popular recently. Its aim is to shock and gain attention. Provocation as a communication strategy has been used only recently, despite the fact that shocking has always been a strategy in advertising. The main objective of this research is to define provocation as a form of strategy and to analyse consumers´ reactions to various provocative advertising. The first shocking advertisements are connected to United Colors of Benetton. Oliviero Toscani photographer made some controversial advertising campaigns for the company. Benetton, a clothing retailer, which is based in Ponzano Veneto, Italy, is considered to be the pioneer of provocative advertising ("United Colors" publicity campaign). Their graphic ads sometimes contained images unrelated to any actual products being sold by the company.

These images included a variety of shocking subjects, for instance, a deathbed scene of a man dying from AIDS, a bloodied, unwashed newborn baby with umbilical cord still attached, a priest and nun about to engage in a romantic kiss, three different hearts with "black", "white" and "yellow" written onto them. Their strategy was adopted by other global brands, like Diesel (it debuted a series of ads for their "Be Stupid" campaign with cynicism in which women and men were in various indecent, unsafe and provocative situations) and Espirit (who raised eyebrows with its advertising ´´Unless George Bush is Available to Babysit´´, in which they took a stand on the abortion debate in the USA). Racism, AIDS, war and death appeared in the ads putting aside all ethical norms that were valid in the society. This advertising technique is called "Shockvertising", which is the blend of the expression shocking advertising. (Vézina and Paul 1997)

Conclusion

Our research has shown that from the five generations only 5 people have already heard the phrase "Shockvertising", and after explaining the terminology we found out that mostly the members of generation Y have already seen this type of advertisements.

The first hypothesis was proved, that generation X is able to avoid shocking advertisements intentionally and is able to ignore them. The second assumption is also true, as our research also showed that members of generation Y meet shocking advertisements mostly on the Internet, and they find the presented advertisements less controversial as the members of generation X do. In addition, we performed two independent analyses, where the five generations were considered as a group. We found out that brand loyalty is not related to the level of distraction caused by a shocking advertisement. Based on the other independent analysis we stated that the fact how a person thinks about traditional advertising does matter, if we want to predict whether in the future the person intends to avoid shocking advertisements.

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Market Segmentation in Developing Markets Evidence from Thai Non-Voting Depository Receipts

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Abstract

The introduction of Non-Voting Depository Receipts (NVDR) in the Stock Exchange Thailand allows for nearly ideal natural experiment to investigate the differences between three segments of traders; local, foreign and NVDR trades. We hypothesize NVDR traders who forgo any rights of control, must be compensated in some way for giving up this valuable aspect of equity ownership. We find that NVDR traders exhibit a higher probability of informed trades, NVDR order imbalances are significant in predicting daily returns and naive traders can use information from NVDR trades to generate trading profits. The implications of this study are of great interest to caretakers of emerging markets who must balance the desires of local constituents while maintaining a market that is liquid and attractive to foreign investors.

Keywords: voting right, emerging market, market segmentation, Thailand.

JEL classification: G10, G190.

1. Introduction

We exploit a very unique aspect of the Thai equity markets, the Non-Voting Depository Receipts (NVDRs), to investigate the trading results and behavior of three different investor segments in the Thai equity markets; local traders; foreign traders and NVDR traders. This segmentation of the market provides a very unique natural experiment to test some long held beliefs about the interaction between noise and informed traders and creates an interesting trading lab where, at least at some level, profits of informed traders are made at the expense of noise traders.

In 2002, the Stock Exchange Thailand, created a special share class, called NVDR, to allow foreign traders to participate in the Thai stocks market, while preventing potential control of Thai firms not to exceed the Foreign Ownership Limit (FOL). Foreign traders in Thailand are subject to control limitations for Thai companies, which generally limit the percentage that a non-Thai can own. FOL is currently 49% of the available equities of a Thai company (although percentage varies across firms). Prior to the introduction of NVDRs, if equity ownership of any company reached a predetermined limit, foreign traders were forced to trade in the foreign board to avoid a violation and potential fine. Equities on the foreign board were much less liquid compared to the main board, which led to excess volatility and valuation complications for equity markets in Thailand. In response, NVDR shares were introduced to create a more liquid market for foreign investors without diminishing potential control of a Thai firm. Those investing in NVDR securities must receive some form of extra compensation similar to Bailey and Jagtiani (1994) or will exhibit characteristics similar to noise traders. From a research perspective, the segmentation of unique traders provides a rich dataset to evaluate the trading activities of investors with virtually the same underlying equities.

NVDR trades have been embraced by foreign traders not only as a way to participate in equity ownership of Thai companies over the FOL, but NVDR have developed into a more liquid investment alternative compared to equities on the foreign board. Since the inception of NVDRs, foreign investors have shifted their trading activity from the foreign board to the NVDR market and the number of trades on the foreign board has decreased while number and liquidity of NVDR equities have significantly increased.

Several studies have reported the differences in performance between foreign and local traders such as Grinblatt and Keloharju (2000) and Hau (2001) who find foreign investors have superior information compared to local investors, while Dvořák (2005), Choe *et al.* (2005) and Agarwal et al (2009) find advantages fall to the local investors and Bae *et al.* (2012) document that foreign investors have an advantage with their better resources

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and expertise in processing global market information. This paper builds on this idea, but with the advantage of segmentation which allows us to more closely identify local and foreign traders. We find the performance of foreigners, as well as NVDRs traders, experience higher long-run returns while local investors trading performance is not as profitable. Using the Probability of Informed Trading (PIN) model by Easley *et al.* (1996), we find foreign and NVDR traders experienced the high proportion of informed trades relative to local traders. The NVDR traders were significantly different from trading groups and trades were informed, despite being foreigners and despite the inability or threat to exert any control over publicly traded Thai firms.

The existence of NVDR shares also allow us to investigate some microstructure issues in the Stock Exchange of Thailand and we measure the impact of contemporaneous and lagged order imbalance by investor groups on open-to-close stock returns. NVDR and foreign investors exhibit positive and significant performance on the returns when order imbalances are used as a trading proxy. Time-series regressions show contemporaneous order imbalance of NVDR trades result in a 28% positive daily return. We also find the lagged terms on order imbalance results are negative and smaller which are present to compensate for “over-weighting of the auto-correlated portion of contemporaneous imbalance” (Chordia and Subramanyam 2004, 492), which is consistent with prediction by Chordia and Subrahmanyam (2004). The results are robust after controlling for foreign, and local traders imbalance. We also find the evidence that one-day lagged order imbalance of NVDR traders has significant predictive power.

Finally given the information revealed by NVDR traders, we explore whether the information is sufficient to develop a profitable trading strategy using net NVDR trading activity. When there is a positive imbalance of NVDR trades, naïve investors can generate returns from 0.008% over a 1-day horizon to 2.69% over a 60-day horizon. However, the trading strategy based on negative order imbalance of NVDR shares does not exhibit a strong influence which results in 0.176% over a 1-day horizon to 0.11% over a 60-day horizon.

Conclusion

As an emerging market, the Stock Exchange of Thailand must strike a balance between the desire for Thai firms to maintain control and foreign investor's desire for a liquid and attractive equity market for capital. One method SET devised to balance these sometimes contradictory goals is the Non-Voting Depository Receipt (NVDR). Using returns from NVDR trades and other segments of the SET, we investigate the trading results of foreign, NVDR and local traders to test several hypotheses. We find NVDRs trades have a higher probability of being informed as well as foreign traders. NVDRs traders achieve higher returns in the long-run compared to local investors. NVDR trades generally reveal important information about future stock returns, positive (negative) order imbalances result in positive (negative) and significant returns. Our findings offer another piece of evidence consistent to those of Grinblatt and Keloharju (2000), Kamesaka *et al.* (2003) and Bae *et al.* (2006) in that foreign traders are more informed than local traders and obtain higher profit on trading.

The results have important implications as restrictions in capital flow may reduce the liquidity and increase the proportion of noise traders in a market. Regulation designed to reduce stock market liquidity, may actually have the opposite effect in markets similar to the Stock Exchange Thailand. In the case of NVDR in Thailand, the creation of this innovative product has been able to both maintain local control for Thai corporations and increase liquidity of the underlying equities. The results of this paper reveal that shares restricting voting may be a remedy for equity market regulators of developing nations who must strike a balance between maintaining local control and creating liquid markets for foreign investors.

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Table 6 – Return following positive and negative NVDR order imbalances

Panel A. Positive Order Imbalance

Year	Same day	1 day	2 days	3 days	4 days	5 days	10 days	20 days	40 days	60 days
All	-0.039***	0.008	0.049*	0.078***	0.143***	0.205***	0.528***	0.992***	1.817***	2.689***
	-2.93	*0.42*	*1.95*	*2.66*	*4.37*	*5.69*	*11.08*	*14.94*	*18.95*	*22.66*
2002	-0.084*	-0.055	0.030	0.038	0.089	0.180	0.333*	0.243	-1.025***	-2.621***
	-1.74	*-0.76*	*0.34*	*0.37*	*0.75*	*1.38*	*1.92*	*1.06*	*-3.24*	*-6.89*
2003	-0.013	0.260***	0.465***	0.746***	0.994***	1.318***	2.547***	5.147***	11.358***	16.987***
	-0.26	*3.50*	*4.82*	*6.93*	*8.03*	*9.45*	*12.95*	*18.83*	*28.99*	*33.61*
2004	-0.142***	-0.198***	-0.226***	-0.320***	-0.352***	-0.403***	-0.286*	-0.645***	-0.820***	-1.088***
	-2.98	*-2.88*	*-2.63*	*-3.24*	*-3.21*	*-3.33*	*-1.79*	*-3.13*	*-3.07*	*-3.35*
2005	-0.076**	-0.094*	-0.094	-0.083	-0.003	0.005	0.067	-0.067	-0.983***	-0.775***
	-2.27	*-1.94*	*-1.60*	*-1.22*	*-0.04*	*0.06*	*0.57*	*-0.42*	*-4.46*	*-3.08*
2006	-0.001	-0.078	-0.094	-0.174*	-0.292***	-0.434***	-0.663***	-1.300***	-2.191***	-3.844***
	-0.01	*-1.14*	*-1.11*	*-1.82*	*-2.74*	*-3.79*	*-4.62*	*-6.50*	*-7.74*	*-11.88*
2007	-0.026	0.046	0.158*	0.167*	0.241**	0.415***	1.116***	1.975***	3.523***	5.138***
	-0.66	*0.75*	*1.95*	*1.73*	*2.23*	*3.58*	*7.33*	*9.13*	*12.85*	*15.67*
2008	-0.135**	-0.345***	-0.627***	-0.870***	-0.922***	-1.146***	-1.852***	-3.863***	-8.887***	-13.821***
	-1.98	*-3.34*	*-4.90*	*-5.80*	*-5.49*	*-6.25*	*-7.95*	*-11.74*	*-18.36*	*-24.27*
2009	0.094*	0.324***	0.518***	0.688***	0.951***	1.206***	2.435***	4.527***	9.517***	14.253***
	1.87	*4.45*	*5.71*	*6.61*	*8.14*	*9.43*	*14.66*	*19.16*	*26.88*	*35.79*
2010	0.001	0.188***	0.319***	0.513***	0.670***	0.852***	1.437***	2.488***	4.176***	6.869***
	0.03	*3.19*	*4.30*	*5.91*	*6.95*	*8.15*	*10.63*	*14.07*	*16.41*	*22.72*
2011	0.038	0.071	0.042	0.052	0.099	0.130	0.187	0.647***	2.284***	4.449***
	0.82	*1.02*	*0.49*	*0.52*	*0.89*	*1.07*	*1.24*	*3.10*	*7.66*	*12.29*
2012	0.027	0.140***	0.279***	0.413***	0.543***	0.668***	1.427***	2.949***	5.588***	7.943***
	0.75	*2.68*	*4.35*	*5.55*	*6.51*	*7.34*	*12.07*	*18.32*	*25.46*	*30.11*
2013	-0.154***	-0.214***	-0.347***	-0.484***	-0.605***	-0.739***	-1.198***	-1.386***	-2.942***	-4.378***
	-3.00	*-2.93*	*-3.67*	*-4.32*	*-4.89*	*-5.43*	*-6.84*	*-5.99*	*-9.94*	*-12.27*

Panel B. Negative Order Imbalance

Year	Same day	1 day	2 days	3 days	4 days	5 days	10 days	20 days	40 days	60 days
All	0.146***	0.176***	0.165***	0.181***	0.214***	0.230***	0.232***	0.099	0.165	0.112
	6.41	*5.00*	*3.68*	*3.44*	*3.60*	*3.52*	*2.69*	*0.81*	*0.96*	*0.55*
2002	0.124	0.099	0.053	0.086	0.142	0.258	-0.132	-0.631	-0.479	0.566
	1.51	*0.72*	*0.32*	*0.40*	*0.58*	*0.93*	*-0.38*	*-1.37*	*-0.78*	*0.83*
2003	0.148*	-0.266**	-0.612***	-0.946***	-1.303***	-1.628***	-3.122***	-6.108***	-10.283***	-13.162***
	1.73	*-2.05*	*-3.73*	*-4.96*	*-6.05*	*-6.97*	*-9.60*	*-13.24*	*-17.99*	*-20.28*
2004	0.208**	0.347***	0.482***	0.623***	0.725***	0.816***	1.169***	0.932**	0.498	-0.704
	2.11	*2.65*	*2.61*	*2.90*	*3.07*	*3.01*	*3.35*	*2.08*	*0.86*	*-1.16*
2005	0.117**	0.096	0.040	0.068	0.069	0.071	0.118	0.013	-0.949***	0.181
	1.99	*1.09*	*0.37*	*0.56*	*0.50*	*0.48*	*0.63*	*0.05*	*-2.48*	*0.37*
2006	0.176***	0.285***	0.337***	0.456***	0.606***	0.718***	1.441***	1.973***	2.178***	2.113***
	2.39	*2.67*	*2.54*	*3.08*	*3.60*	*3.92*	*5.93*	*5.74*	*5.20*	*4.29*
2007	0.085	0.080	0.030	-0.060	-0.187	-0.237	-0.587***	-0.251	0.060	-0.517
	1.57	*0.98*	*0.30*	*-0.51*	*-1.41*	*-1.64*	*-3.33*	*-1.04*	*0.17*	*-1.29*
2008	0.402***	0.773***	1.172***	1.601***	2.099***	2.455***	4.494***	7.811***	15.046***	22.013***
	4.73	*5.61*	*6.58*	*7.56*	*8.71*	*9.40*	*13.49*	*16.35*	*23.03*	*30.41*
2009	0.108	-0.149	-0.321*	-0.658***	-0.768***	-1.015***	-2.885***	-5.215***	-9.954***	-17.460***
	1.04	*-1.00*	*-1.74*	*-3.17*	*-3.30*	*-4.00*	*-8.41*	*-10.22*	*-14.03*	*-21.16*
2010	-0.022	-0.135	-0.294**	-0.304*	-0.369**	-0.465***	-0.818***	-2.716***	-5.968***	-7.595***
	-0.30	*-1.26*	*-2.25*	*-1.96*	*-2.13*	*-2.49*	*-3.34*	*-7.73*	*-11.91*	*-13.58*
2011	0.001	0.051	-0.033	-0.175	-0.279	-0.359*	-0.291	-1.481***	-3.194***	-4.492***
	0.01	*0.47*	*-0.23*	*-1.03*	*-1.49*	*-1.72*	*-1.00*	*-3.84*	*-6.73*	*-9.26*
2012	-0.026	-0.088	-0.249*	-0.455***	-0.624	-0.777***	-1.885***	-3.667***	-6.433***	-9.719***
	-0.38	*-0.88*	*-1.96*	*-2.97*	*-3.53*	*-3.94*	*-7.43*	*-12.47*	*-14.89*	*-19.26*
2013	0.159***	0.371***	0.338***	0.440***	0.527	0.596***	0.613***	1.240***	3.543***	3.870***
	2.36	*3.51*	*2.58*	*2.94*	*3.29*	*3.50*	*2.73*	*4.02*	*8.11*	*7.53*

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Regional Aspects of Business Cycle Synchronization in the V4 Countries

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Abstract:

The aim of the paper is to identify the degree of business cycle synchronization in the Visegrad countries on their regional level. Rising synchronization should be the outcome of their integration process. To increase robustness of the findings, we performed our analysis using traditional and alternative approach, i.e. Pearson correlation coefficients and minimum spanning tree method. To complete view on this topic we calculated Krugman specialization indices. Comparatively high level of specialization was revealed in the capital regions in the Czech Republic and Slovakia. Obvious heterogeneity was observed among Hungarian regions and negative correlations in case of some Polish regions.

Keywords: business cycle synchronization, Visegrad countries, minimum spanning tree, regional cycles.

JEL Classification: F40, F44, R10.

1. Introduction

Business cycle synchronization is one of the main aspects of integration and is crucial especially in terms of monetary unions. However, it seems superficial to measure level of national economy synchronization among member countries if their particular regions suffer from significant disparities. National economy indicators expressed usually via averages naturally smooth regional differences. In addition, the regional perspective of economic development is in line with the European integration principles. Despite shorter time series concerning regional indicators we consider to be important to focus on regional business cycle synchronization, too. During last decades the Visegrad countries, i.e. Czech Republic, Hungary, Poland, and Slovakia experienced significant integration changes. However, we would like to quantify if they had positive impacts on countries´ regional symmetry.

The structure of this paper is organized as it follows. Section 2 provides a literature review on recent research of business cycle synchronization and main determinants. Section 3 describes methodology and used data. Section 4 presents empirical results and discussion about synchronization of regional business cycles in the V4 countries. The last section provides some final conclusions.

Conclusion

Regional and national business cycle synchronization as one of crucial conditions of overall monetary union symmetry exists in all V4 countries. Using alternative minimum spanning tree approach, we conclude that their national cycle has central position throughout observed period. However according to traditional correlation coefficients approach, remarkable differences among the V4 regions are observed.

Whereas the Slovak and the Czech Republic show relatively high level of regional business synchronization, Hungarian and Polish regions seem to be less synchronized with the national cycle. Assumptions about significant disparities among regions were affirmed and provided analysis extended by calculated Krugman specialization indices showed notable reasons to examine synchronization from the regional perspective. Besides specialization indices, other determinants can be examined and enlarged our analysis, i. e. trade patterns among regions or factors specific for given location.

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Moderating Role of Perceived Organizational Support on Organization Commitment and Person-Organization Fit

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Abstract:

The study is about interaction between the Organizational Commitment and Person's Organization Fit. This has attempted to examine the moderation effects of Perceived Organizational Support on the relationship of Organizational Commitment and Person's Organizational Fit. The research has incorporated survey on 663 members of dual career family members, working with public and private organizations of central part of the India. Findings have supported the conceptual framework. The statistical inference has shown the moderation effect of organizational support on the relationship of Persons' Perceived Organizational Fit and his respective Organizational Commitment.

Keywords: organizational commitment, perceived organizational support, person- organization fit.

JEL Classification: D23, M54, L00, L20, L29.

Introduction

The members of dual career couples face several challenges of workplace and family as both are involved in the aspirations of work, family and career (Moen 2015). These challenges become even more intense, when the organization is having less supportive culture (Dunn and Brien 2013). The dual career couples persistently facing these challenges often leads towards reduced work-satisfaction that eventually affects their respective organizational commitment. On the contrary, it is assumed that the member of the dual career family who finds fit with the organizational values shows commitment for the workplace. The committed employees are less intended to leave the organization (Coulter 2003). Person organization fit refers to the fit between individual work values and job characteristics or perceived work rewards (Hult 2005).

The researchers have found that fits relate to the positive work outcome (Seong, Hong and Park 2012; Oh, Guay *et al.* 2014). The current study has incorporated the presumption that person with high value fit would project high level of commitment and may further eventually move upward (higher level of commitment) or downward (Lower level of commitment) with respect to observed fit. The study tries to answer the question that, those employees who feel fit with the organization possess high level of commitment. Though, the main objective of the study is to explore the moderating effects of Persons' Organizational support on the relationship between the Person Organizational Fit and Organizational Commitment.

Discussion and conclusion

The statistical inference in the previous section has supported the moderation effects of Perceived organizational support on the relationship of organizational commitment and persons' organizational fit. Therefore, Person Organizational Support was investigated as possible moderating variable in the relationship between the organizational commitment and person's organizational fit. The Organizational commitment (Affective, Normative and Continuance Commitment) has been incorporated as dependent variables and a co-relational study was performed in order to examine the relationship between the conceptual variables. The internal consistency and the reliability score being observed into the current study is quite satisfactory as all the construct has reported with reliable score with coefficient above 0.7. Interpreting the result of the first 3 hypotheses i.e. 1(a), 1(b), 1(c), the significance of the correlation confirmed the hypothesis. Hence, result has supported that perceived person organization fit relates positively with the affective commitment, normative commitment and continuance commitment. Although the current findings are consistent with the study of Karakurum, (2005) which states that the person who find fit with the value norms and culture of the organization would certainly possess the commitment though this may not refer the extent of commitment. Finding reveals here by that fit can be assumed as contributing factors to gain committed employees in the work. As the current study was intended to understand the relationship of PO fit with type of commitment, the statistics revealed that relationship exists between the variables.

Having explained the first part of the presumption in the current study, the second part of the hypothesis which was proposed to observe the moderation effects of person organization support on the relationship between of Person organizational fit and organizational commitment, has also statistically supported and confirmed the moderation effects. This reveals the understanding that the propensity to possess commitment may get affected by the organizational support in terms of psychological, physical and mental well being, employees' need of general satisfaction at work, his need of achievement and appreciation etc. This is suggesting that when organization would facilitate the support to its respective employees it may avail the strong commitment and boost the ratio of fit between individual and organization perseverance.

In sum and substance it has been found that perceived persons' organizational fit strongly relates to the organizational commitment with the moderation effects of the perceived organizational supports.

Limitation and future scope of the study

The current study has observed with four limitations. First, since the data has been gathered from the one state of the India where respondents were members of the dual career family and belonging to public and private sectors working domain may restrict the generalized implication of the research findings. Second the data collected at single point of time, which hindered the investigation of possibility reserve causality between the studied variables. Hence, this depicts the need of longitudinal studies which would allow researchers to get more accurate result with respect to the conceptual understanding. Third the study has limited fund to conduct research with wider sample collection geographically and fourth limitation revolves around the fact that study has been incorporated on multi-sectors which may counter reacts the implication on particular sector. The current study has observed the relationship among the Dual Career Couples where their respective home engagement, family type and industry type has not been considered hence this may take the scope of future study.

Implications for organizational development

The study has given important implication on the managerial settings, especially with respect to managing career couples in the organization. Dual career couples are often found themselves struggling for balancing the home and work life and in doing so, they often compromise with several personal and professional aspirations. Since the study has been taken in Indian context hence, this is implied that if the support would be well planned throughout the employment cycle, the employee satisfaction and commitment both can be achieved. Further, to assure the comprehensive performance from the members, HR manager requires designing of the supportive plans with respect to values and goal congruence. The issues pertaining work-life has more or less being the biggest contributing factor for the improved organizational commitment and the practices which are carrying family friendly policies and more assistance to work life balancing (Callier 2011). These are having direct impact on the couples' perceived affective commitment (Eisenberg *et al.* 1990).

HR practices which are well managed and implemented, are able to increase organizational commitment and decrease turnover intention as the employee starts relating him with top level's commitment and support. While assigning the roles and responsibilities, the strength of the employee should be considered with the consistent communication of the mutual purpose. Employees' personal and career need should be identified and recorded in order to give proper care and support. If the timely support has been facilitated with possible appreciation and award recognition, the commitment would boost and it may be assured with persistent implication of love and mutual care (Allen and Meyer 1990).

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Predictive Possibilities of Day Surgery Hospitalized Patients' Rate in Slovakia during 2009 – 2013 and its Health Policy Significance

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Abstract:

The significance of health system expenses led politicians of different countries to search for optimal tools to regulate hospital expenses and support economy efficiency of health facilities for the last two decades. At present, countries reduce the beds' numbers and decrease an average length of stay in the hospital. Day surgery development is connected with a process of beds' reduction and increase of hospitalized healthcare efficiency. Slovak day surgery is supported by MOH SR government programme within a system of hospital bed reduction. It is declared as a highly-effective treatment that emphasizes patient's painless and easy treatment in a short time, while highlighting quality and the lowest costs. However, its rate within the total amount of surgical procedures is very low and there is no evident positive progress. The reasons are systemic, while related to a policy of procedures' financing and health insurance companies' strategies. The paper focuses on solving the partial issues of Slovak day surgery development. It also deals with analysing the rate of pediatric and adult patients' hospitalization regarding specific field, region and analysed years. The analysis results provide a valuable platform for the authors of a strategic health system framework, or other actors of health and social policy.

Keywords: day surgery, healthcare system, performance risk in day surgery, performance efficiency in day surgery, development barriers in day surgery.

JEL Classification: I13, I19, C38.

1. Introduction

The present health system needs to solve two main issues. On the one hand, there is an issue of medical ethics, i.e. requirements to provide as optimal the best possible healthcare for each patient. On the other hand, it is necessary to solve an issue of expenses with regard to healthcare provisioning (Bem and Michalski 2014, 2015, Szczygieł *et al.* 2014). It is important to ensure balance between these two issues (Gavurová *et al.* 2014, Szabo and Sidor 2014). However, it is very difficult as for the Slovak health system so abroad. Many opinions exist on possible solutions (Zelený and Bencko 2015). Each state takes it seriously, while developing models of effective healthcare provisioning and changing the methods and forms of health facilities' ownerships, their financing, principles as well as level of human solidarity.

The economic matter highlights a necessity to solve particular questions: Who will cover the treatment costs? What method will be used? What extent should a patient participate in this process to? What should be covered from public, state funds? The Slovak health system belongs to one of the most risky sectors from a sustainability of public finances point of view together with a pension system. Financial balance of the Slovak health system will negatively influence the process of demographic aging. If the health policy does not change, the deficit of resources in the health system will increase till 2060 to 2% GDP according to basic scenario (or 1.7%/2.6% according to optimistic/pessimistic scenario). This is confirmed by the forecasts of health system public expenses till 2060 (Kovalčík and Tunega 2015) as well as by the Council for Budget Responsibility. However, the income will not cover approximately 22% - 31% of public expenses to health system. Therefore, it is inevitable to search for options of increasing health system efficiency by unveiling the allowances and completing the additional income.

Conclusion

The Slovak day surgery is not sufficiently regulated for a longer period of time. It was already implemented into the process of health system efficiency increase; however, there is an absence of some important existential interconnections. Day surgery rate is still very low in comparison to other countries. Insufficiently performed system measurements represent the main reason of its development, which are also related to a low rate of clinics' specialization, unclear price strategies and preferential criteria of health insurance companies, insufficient social support that is connected to subsequent healthcare, etc. Procedure risk rate should provide information of additional financial burden of a particular procedure, and thus of a significance of such procedure implementation into day surgery process in a specific region. Therefore, it is necessary to question if this value of a hospitalization rate is not a result of a certain adjustment to contractual prices of health insurance companies in a given year by not accepting day surgery procedure due to more advantageous financial reimbursement per procedure. Health insurance companies' policies, financial policy and pricing strategy of day surgery procedures play an important role in day surgery development. In this article, we analysed an issue of day surgery procedures risk that was measured by patients' hospitalization rate.

We observed significant differences in hospitalization rates during analysed years, fields and regions especially in case of pediatric day surgery. All available predictors (field, region, year) are significant, but they can not explain other aspects of day surgery hospitalization rates. Data on individual level should be considered for further and more precious analyses. In Slovakia, there are formed good conditions for day surgery development, while considering its total evaluation. Therefore, it would be necessary to solve it systematically and it would represent a great challenge for all interested health system subjects.

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APPENDIX 1

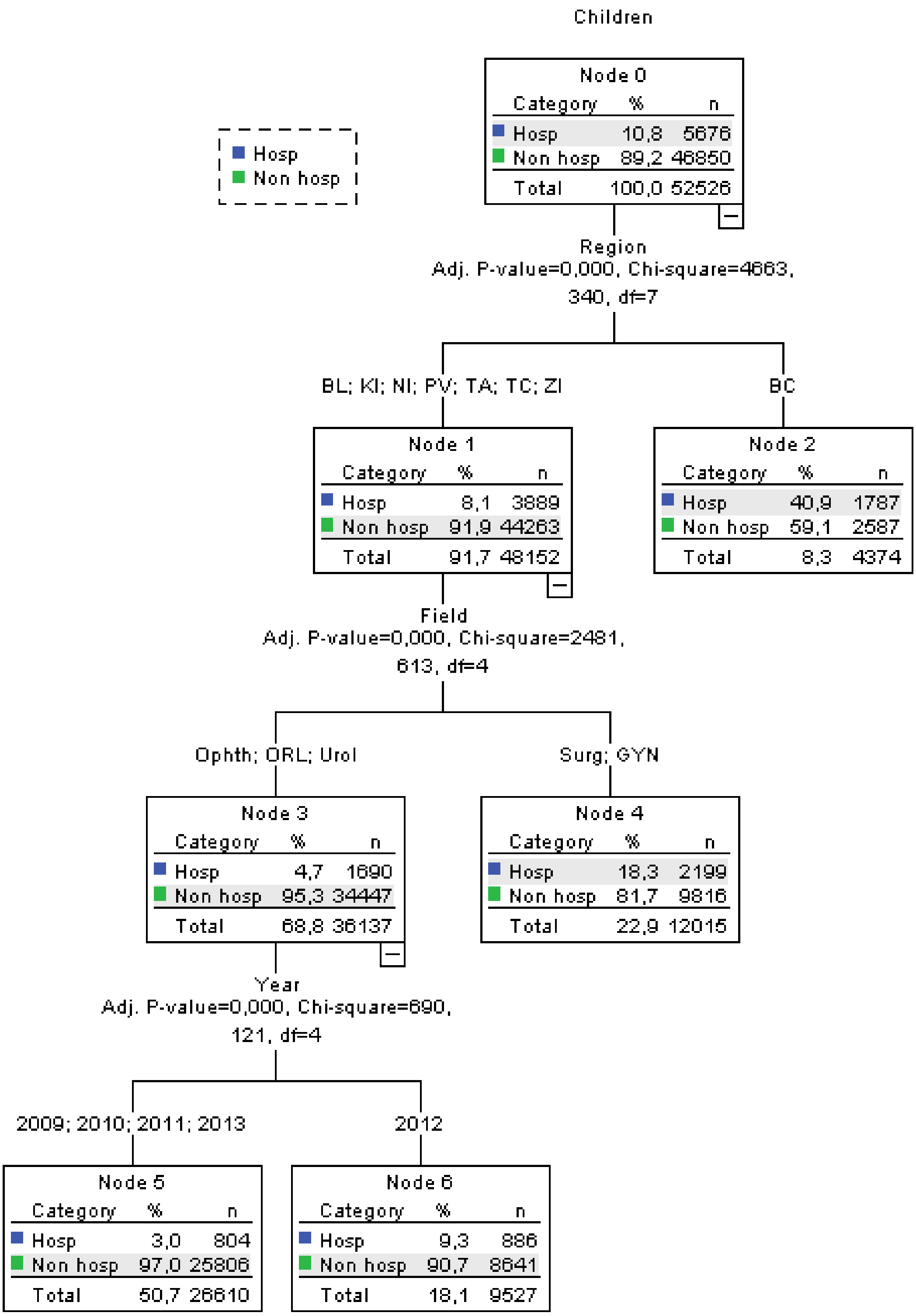

Figure 1 - QUEST decision tree of pediatric day surgery hospitalisation rate

Appendix 2

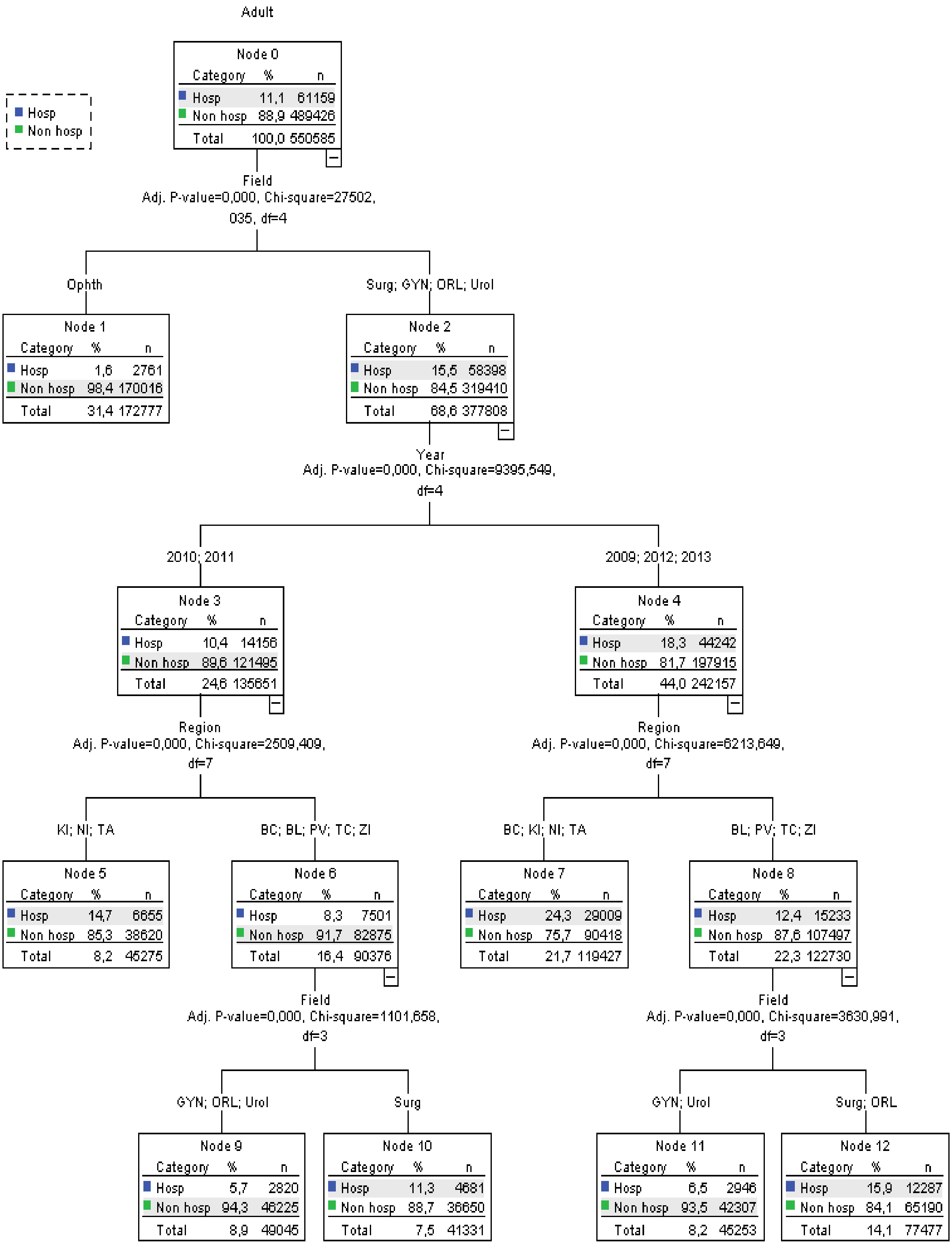

Figure 2 - QUEST decision tree of adult day surgery hospitalisation rate

Enterprise Investment Attractiveness Evaluation Method on the Base of Qualimetry

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Abstract:

Evaluation of investment attractiveness is very important either for inner or for outer users. The outer users are primarily presented by investors, who want to identify the most prospective projects to invest in; the inner users are interested in revealing «problem areas» and working out managerial decisions for the purpose of raising the level of investments attractiveness. At the same time there are a lot of enterprise investment attractiveness evaluation methods that cover only quantitative factors, which are nonsufficient for receiving an adequate result. If a method takes into consideration both quantitative, and qualitative factors, such evaluation presupposes an expert survey, and, nevertheless, the expert is not always supplied with all the needed information. A method of enterprise investment attractiveness evaluation on base of qualimetry is presented in the article, which allows taking into account qualitative and quantitative factors, and the evaluation result is presented as a numeric value.

Keywords: enterprise investment attractiveness; evaluation; qualimetry.

JEL Classification: D92, G11, G31.

1. Introduction

Implication of different techniques of enterprise investment attractiveness evaluation involves usage of various methods of analysis ranging from expert survey to multivariate regression model, although the result of all the models is creating of an integral index. The difference in the results obtained is derived from the adequateness of the model itself and the factors included in the evaluation.

While selecting factors for enterprise investment attractiveness evaluation authors more often choose exceptionally quantitative factors, hence they are easier to assess to create a mathematical evaluation model. Taking into consideration that not all the factors affecting enterprise investment attractiveness are included in an evaluation model, it cannot be safe to say that the evaluation method comprehensively characterizes the level of investment attractiveness.

If a model includes not only quantitative, but also the qualitative factors, the most commonly encountered method of processing of such data is presented by expert surveys. The method has substantial drawbacks: while comparing great quantity of enterprises it takes a major labor contribution; an expert doesn't always possess the information on potential investment objects.

Conclusion

Therefore, the proposed method of investment attractiveness evaluation of agricultural enterprises on the base of qualimetric approach takes into account sectoral factors characterized by quantitative and qualitative indexes; it is oriented to different groups of users: investors – for pinpointing the most prospective investment projects, enterprises – for evaluation the level and dynamics of their investment attractiveness, and revealing «problem areas», the State – for identifying the way the developed support programmers affect the investment attractiveness of enterprises .

The division of enterprises by level of investment attractiveness made it possible to specify the main problems attributed to each group. In this regard, development of a differential approach to upgrading investment attractiveness of enterprises is considered to be of a particular interest.

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The Behavioral and Social Implications of Sequential GroupLending: A Multi-agent comparative Approach between ROMCA, Debt Financing and ROSCA

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Abstract:

In this research we study complexity and how it affects social value creation in a small microeconomic environment. We compare a new model of musharakah called ROMCA with debt financing and ROSCA as three sequential group lending systems using Net logo as multi-agent environment. We found evidence that the new model of musharakah can dominate debt financing in terms of employment creation, consumption, wealth creation even under risks of adverse random shocks. We also found evidence that the new model of musharakah can be better for tax authorities in terms of quicker tax recovery.

Keywords: Conditional collaborative reinvestment Musharakah, charity, altruism, employment, social value, moral hazard.

JEL Classification: C7, G02, G24, G17.

1. Introduction

In group lending, the borrower has a joint liability for the repayment of their loans. The group is considered in default if at leas tone of them does not fulfil the obligations of repayment. The fact that each borrower guarantees his groupmates helps in reducing asymmetric and moral hazards problems.

Our model however is based on a rotating musharakah with credit association, hence named later ROMCA, where funds are handed over to the other entrepreneur after a roll-over period of work. The profits are then shared between the financial operator and the entrepreneurs on one hand according to a predetermined ratio and then shared between the financial operator and investors who provided the fund according to another sharing ratio. We use a net-logo simulation to compare the robustness of our model against other modes of financing specifically ROSCA and standard debt financing.

Our paper will proceed as follow: In section 2 we provide a literature review about what was achieved in group-lending and what are the agency problems associated with debt financing, ROSCA and Musharakah. In section 3, we present the three models including our ROMCA model. In section 4, we present the methodology. In section 5, we present the results of our simulation. In section 6 we provide a discussion of the outcomes. Finally the last section will conclude with some possible venues of extension.

Conclusion

In this research we have tried to compare three financing models under different market conditions and price levels. We have found that the ROSCA model due to its non collaborative investment feature have no power in new employment generation. Our rotating musharakah model, ROMCA, seems to prevail against debt financing in terms of employment generation, wealth creation, and consumption. It becomes even dominant under cases of adverse random shocks with low market conditions. Debt financing on the otheriss hown to dominate both ROMCA and ROSCA interms of employment generation in cases of low chances of adverse random market conditions and high market prices.This caseisalsoapparentincasesoflowchanceofadverserandommarketconditions and low price. We should note the importance of charity and altruism bonus in the model. The More charity and altruism given, the more are the chances of more employment generation and wealthcreation.

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Analysis of National Budget Implementation: Evidence from 2012-2014 Budgets of Nigeria

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Abstract

The paper examines national budget implementation focusing on the 2012-2014 budgets of Nigeria by juxtaposing the actual performances of the budgets against the projections. Evidence from the study revealed that macroeconomic variables (such as real GDP growth rate, inflation rate, exchange rate and crude oil production), components of revenue and expenditure failed to meet their respective budgeted figures during the period. It was also found that the proportion of actual capital expenditure in aggregate expenditure was abysmally low and capital budget implementation was awfully poor. The paper elucidated some possible causes, implications and policy options.

Keywords: national budget, revenue, expenditure, implementation.

JELClassification: H61, H20, H50, H62.

1. Introduction

The importance of government budget in the socio-economic development of a country cannot be overemphasized. This is because the national budget is the vehicle through which government allocates resources to the various sectors of the economy with a view to ensuring economic transformation. As observed by Ohanele (2010), a well-functioning national budget is vital for formulating sustainable fiscal policy and stimulating economic growth. Apart from being the most important economic policy instrument of the government, the national budget enables the government to translate government social and economic policies, political goals and promises into actions as well as make decisions about where to collect and spend funds in any given period. The national budget reveals the proposed expenditure and the expected revenue of the government for a fiscal year.

A typical budget cycle consists of four major stages namely; budget preparation, enactment, implementation and appraisal. Out of these four stages, budget appraisal is the most neglected stage. The reason is probably because the other three stages seem mandatory by law while the last stage appears not adequately backed by law. In a country that practices the presidential system of government such as Nigeria, it is the responsibility of the executive arm of government to prepare the budget in each fiscal year and send it to the legislative arm for enactment (approval). After all the necessary scrutiny and passage into law, the budget is sent back to the executive for assent and implementation. During and after implementation, little or no attempt is made to ascertain the performance of the budget by juxtaposing the actual performances of the budget against the projections with a view to identifying gaps for corrective measures in subsequent years.

Faleti and Myrick (2012) opined that budget as an instrument of national resource mobilization and allocation needs to be properly designed, effectively implemented, adequately monitored and painstakingly evaluated. Thus, since government uses the budget as a vehicle for fiscal and economic management, facilitation and realization of government vision as well as a tool for enhancing economic growth and development, all the phases in the budget process need to be fundamentally linked. In the past three years, the government of Nigeria has budgeted over N12 trillion (USD80 billion) aimed at achieving fiscal consolidation, inclusive growth and job creation. But these objectives have not been achieved after spending such colossal resources as the country is still experiencing high poverty rate, increasing unemployment rate, widespread income inequality, high maternal and infant mortality, unprecedented infrastructural decay, irregular and erratic power supply, decaying health, educational and transport facilities and lately, serious security challenges.

As government continues to budget more financial resources for the country each year, the level of macroeconomic variables are getting unabated and worse. Therefore, the broad objective of this study is to analyse national budget implementation in Nigeria focusing on the 2012-2014 budgets implementation. The specific objectives of this study include: (i) to examine the performance of macroeconomic variables in the 2012-2014 budgets; (ii) to investigate the performance of revenue and expenditures in the 2012-2014 budgets; and (iii) to examine capital budget implementation by Ministries, Departments and Agencies (MDAs) in the 2012-2014 budgets. In this regards, the contributions of this study are immense. First, it unveils the performances of the national budgets for the period and juxtaposes them with the projected values. Second, it suggests possible reasons for the performances of the budgets for the period. Third, it draws out the implications of the budgets performance on the economy. Finally, the findings from this study will be beneficial to the government in implementing subsequent budgets for the country.

Conclusion and policy options

The paper examines national budget implementation with emphasis on the 2012-2014 Federal Budgets of Nigeria. The paper found that actual performances of all the macroeconomic variables such as real GDP growth rate, inflation rate, exchange rate and crude oil production fell short of the projections during the period. Similarly, gross federally collected revenue, oil revenue and non-oil revenue failed to meet the budgeted targets. This had serious implications in the ability of the government to finance the expenditure components of the budgets.

Although the actual aggregate expenditures fell below the appropriated expenditures during the period, but the expenditure components revealed that recurrent expenditures always meet or surpassed the projections, while capital expenditure significantly deviated from the appropriated expenditures. Also, the actual proportion of capital expenditure in aggregate expenditure deviated from the projected ratio. Finally, the overall performance of capital budget implementation by MDAs was colossally poor. The economic and social sectors (such as Agriculture, Education, Health, Transport, Housing, Power and Water) not only suffer from inadequate allocation of funds, but also from poor implementation of the appropriated funds. Therefore, the paper elucidated some possible causes and implications of the abysmal performances of the 2012-2014 Budgets on the Nigerian economy.

The paper recommended some policy options such as diversification of the economy from depending solely on oil revenue to non-oil revenue, ensuring the security of oil installations and systems, reduction of recurrent expenditure and its proportion in aggregate expenditures as well as increasing the proportion of capital expenditure for developmental projects. Finally, to accelerate the implementation and utilization of capital budget by MDAs, early release of funds, ease procurement procedure, manpower building in MDAs as well as effective legislative oversights is highly recommended. Thus, this paper has succeeded in emphasizing the need for budget appraisal which is a fundamental stage in the budget process and it can stimulate other areas of the budget process that may need further researches.

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Evaluating Operational Efficiency of Airports in Thailand with Special Reference to Low Cost Traffic

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Abstract:

The traffic of Low Cost Airline (LCA) model is burgeoning and growth has now become all pervasive across globe expanding in Europe, Oceania, South America, Asia and Australia. This eventually brings the paradigm shift in aviation business. It is also mandating the change in the business operations of airport operator, which specifically addresses the needs of LCA traffic. In Thailand first LCA started in December 2003 and by 2015 LCA holds 41% of market share and expected to have unprecedented growth in future. The growth of LCA in Thailand has also mandated change in airport operations. However, comparatively, little analysis has been done to evaluate the operational efficiency of the airport in Thailand in parlance to growth of LCA traffic. Hence this paper measures the Operational Efficiency and facilitating the managerial implications to enhance it. Data Envelopment Analysis has been employed to measure the efficiency of six major airports in Thailand covering approximately 87% of total passenger traffic. It has been observed that total passenger enplanements and aircraft movements are contributing significantly in the efficiency scores. The terminal efficiencies of the airports examined are higher than airside efficiencies. It is concluded that the efficiency of airports depends on LCA demands and its characteristics.

Keywords: operational efficiency, airports, low cost airlines and data envelopment analysis.

JEL Classification: RL40, L93, M11, D24, C67.

1. Introduction

The Low Cost Airlines (LCA) model has been initiated by Southwest Airlines in 1970 and became one of the most successful examples in airline business, earning consecutive profits for 42 years and bringing unprecedented benefits to passengers and economy as whole (Southwest Airlines 2015). The traffic of Low Cost Airline (LCA) model is burgeoning and growth has now become all pervasive expanding in Europe, Oceania, South America, Asia, Australia and eventually bringing paradigm shift in aviation business. In December 2003, the first LCA in Thailand, One to Go, owned by Oriental Thai airlines started its operation (Charoensettasilp 2013). In February 2004, Thai Air Asia, jointly owned by Air Asia (Malaysia) and Shin Corp (Thailand), started its operation as second LCA in Thailand. Later Solar Air and Happy Air joined as LCA in Thailand. Nok Air, a subsidiary of Thai airways International, began operating as LCA in July 2004. Later in 2009, Thai smile, a second subsidiary of Thai airways International, was also launched as LCA (Qin 2012). In 2015, LCA holds 41% of market share and is growing with CAGR of 26.3% for the period 2014-2015 in terms of passengers (Department of Civil Aviation 2015). Eventually the increasing role of LCA has in many ways affected the airport operations. However, there has been comparatively little analysis looking at airport efficiency in light of unprecedented growth of LCA.

The purpose of this paper is to fill this apparent gap and examine the efficiency of six major airports in Thailand which handles approximately 87% of total passenger traffic of which 40.3% passengers are pertaining to LCA. (Airport of Thailand 2015). The paper is organized as follows.The next section provides a literature review on previous studies conducted on airport efficiency and productivity measurement. Section 3 briefs about methodologies and data used to measure the airport efficiency. Section 4 presents the empirical findings and analysis results and finally conclusions are drawn in Section 5.

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Conclusion

Data Envelopment Analysis has been utilized on terminal service model and flight movement model of input and output variables of airport; to assess the operational efficiency of airports in Thailand with high LCA traffic. The data used for the above pertaining is for two years for the six AOT Airports in Thailand that account for almost 87% of LCA traffic in the country. By employing the terminal service and flight movement models the input and output variables are distinguished between airside and terminals while exploringthe efficiencies and inefficiencies for each. The results indicate that airport efficiency has high correlation with identified input variables of terminal service model. Similarly high correlation has been identified between input variables of Flight movement model and Flight Efficiency. It is identified that combination of input variables are significantly contributing to efficiencies of airport. It has also been observed that terminal efficiencies are higher than airside efficiencies. High correlation is observed between total passenger enplanements, total aircraft movement and efficiency scores. As total passengers and aircraft movements at all the airports exclusively involve LCA traffic, which indicates that airport efficiency both from a terminal and airside perspectives depends, to a large extent, on LCA demands and its characteristics.

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Developing a Java Application for Distributive Computations using Semantic Schemas

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Abstract

In this paper I describe an implementation of the Java application for distributive computations using semantic schemas. The application uses the model of distributive system and it is implemented in Java. It contains the server and the client application. A master-slave system is a cooperating system of semantic schema. One of the components is the master of the system and the other components are named the slaves of the system. Both the server side and the client side of the application are described.

Keywords: *master schema, slave schema, semantic schema, master-slave system, knowledge-based system.*

JEL Classification: C63, C88.

1. Introduction

In artifical intellgence, an important concept is Knowledge Representation and Reasoning Sstem (KRRS). The researcher Wagner (Wagner 1994) describe the KRRS such a system with components that cooperate between them and the whole system is able to reason in order to give the answer of an interrogation. The main components of a KRRS are the knowledge base and the answer function (Popîrlan, Țăndăreanu, 2008) and (Popîrlan 2004). The concept of semantic schema was introduced in (Țăndăreanu 2004) as a method of knowledge representation. This structure is based on graph theory and universal algebras. A master-slave system (Țăndăreanu 2007) is a cooperating system of semantic schema. One component is the master of the system that guides the computations of the system. The other components are named the slaves of the system. Two slaves cannot cooperate directly one by another. A slave can help the master to obtain an inference. Two kinds of components are described by a master-slave system: a formal computation and a semantic computation.

The semantic computations in a semantic schema are defined by means of a interpretation. The semantic computation of the master takes into account the semantic computation in a slave. The mecanism leads to the posibility of a direct implementation that will be described in the next section.

Running application and results

In this section I illustrate the result of the interrogation process. The connection of the client with the server is started because the server sends the messages: *Welcome to my server!* and *You can introduce an interrogation*. The user can obtain the explanations if he presses on the button *Explanations*. The model presented in this paper allows obtaining distributed inference conclusion. From two conclusions of different slaves the master can obtain a conclusion which can not be obtained by a slave. From the next informations detalied in KB1 and KB2:

KB1: *Maria is the mother of Diana. Dan is the husband of Diana. Maria is the mother-in-law of Dan. Dan is the father of Cornelia*.

KB2: *Cornelia received 3200 RON*.

The system obtain the conclusion: *A granddaughter of Maria is paid with 3200 RON*.

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