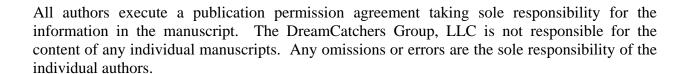
Allied Academies International Conference

Las Vegas, NV October 13-16, 2010

Academy of Economics and Economic Education

PROCEEDINGS

Copyright 2010 by the DreamCatchers Group, LLC, Arden, NC, USA



The Academy of Economics and Economic Education Proceedings is owned and published by the DreamCatchers Group, LLC, PO Box 1078, Arden, NC 28704, U.S.A., (828) 507-9770. Those interested in the *Proceedings*, or communicating with the *Proceedings*, should contact the Executive Director of the Allied Academies at info@alliedacademies.org.

Copyright 2010 by the DreamCatchers Group, LLC, Arden, NC

Table of Contents

| OF PANEL UNIT ROOT TESTS |
|--|
| Christopher N. Annala, SUNY Geneseo |
| Shuo Chen, SUNY Geneseo |
| THE DETERMINANTS OF ECONOMIC DAMAGES FOR VICTIMS OF THE BP OIL |
| SPILL |
| Randall Valentine, Georgia Southwestern State University Dawn Valentine, Georgia Southwestern State University |
| USING CURRENT AND UP-TO-DATE EXAMPLES AS A TEACHING TOOL IN |
| ECONOMICS: A DESCRIPTION |
| Indranil Ghosh, Saint Xavier University Faisal Rahman, Saint Xavier University |
| THE VOLATILITY OF THE DOLLAR/YEN EXCHANGE RATE: CAUSES AND EFFECTS |
| Mohammed Ashraful Haque, Texas A&M University – Texarkana |
| George Boger, Texas A&M University – Texarkana |
| A CONTINGENT VALUATION METHOD TO MEASURE WILLINGNESS TO PAY |
| FOR ECO-LABEL PRODUCTS |
| Eric Barnard, Purdue University Calumet Amlan Mitra, Purdue University Calumet |
| VARIABLES EXPLAINING THE PRICE OF GOLD MINING STOCKS 1 |
| Jimmy D. Moss, Lamar University |
| Donald I. Price, Lamar University |
| ECONOMIC IMPACT OF BASE REALIGNMENT AND CLOSING ON THE FORT |
| BRAGG REGION AND THE LARGEST ARMY BASE IN THE UNITED STATES 12 |
| Inder Nijhawan, Fayetteville State University |
| Pamela Jackson, Fayetteville State University |
| PRICE INFLATION AND GDP GROWTH-WHAT MATTERS MOST? |
| (EVIDENCE FROM EGYPT AND INDIA) 10 |
| Dina Abdel Moneim Rady, Ain Shams University, Egypt |
| U-SHAPED FEMALE LABOR PARTICIPATION WITH ECONOMIC |
| DEVELOPMENT: SOME PANEL DATA EVIDENCE |
| Henry Tam, York University |

CONVERGENCE OF STATE AND LOCAL FISCAL POLICIES: AN APPLICATION OF PANEL UNIT ROOT TESTS

Christopher N. Annala, SUNY Geneseo Shuo Chen, SUNY Geneseo

ABSTRACT

This paper uses two panel unit root tests to show that state and local tax revenues and spending exhibit unconditional convergence between the forty-eight contiguous United States. Results from the Im, Pesaran, and Shin test and the Levin, Lin, and Chu test provide evidence that tax revenues and most government expenditure categories are stationary, implying convergence. The two categories for which we do not find evidence of unconditional convergence are public welfare expenditures and health and hospital expenditures.

Keywords: Panel unit root tests, convergence, state and local, fiscal policies

THE DETERMINANTS OF ECONOMIC DAMAGES FOR VICTIMS OF THE BP OIL SPILL

Randall Valentine, Georgia Southwestern State University Dawn Valentine, Georgia Southwestern State University

ABSTRACT

Economic damages from the Deepwater Horizon explosion already have totaled in the billions. However, there are economic damages that have yet to be accounted for including possible irreparable damage to the reputation of the fishing industry, the loss of income from vacation rentals, and the loss of property value resulting from the oil spill. It is imperative in calculating the economic damages resulting from such a disaster that researchers use the correct methodology in calculation damages.

USING CURRENT AND UP-TO-DATE EXAMPLES AS A TEACHING TOOL IN ECONOMICS: A DESCRIPTION

Indranil Ghosh, Saint Xavier University Faisal Rahman, Saint Xavier University

ABSTRACT

In this paper we provide a pedagogical tool to make the experience of students in an Economics course more enriching, exciting and rewarding. We promote the idea of using examples from current events that are happening or have just taken place and relating them to economic concepts. This would involve the instructor researching and adding examples and case studies from real life events as they unfold. This would mark a change from using examples and case studies that are described in standard texts as they tend to be older and out of date, and are unable to excite students or hold their attention for very long. We provide examples and descriptions of a few examples and case studies that have been developed for MBA economics classes. We note that students are a lot more excited and are able to relate much more easily to current and up to date examples and some may have even experienced the events described in the examples. This leads to a positive externality for the class.

THE VOLATILITY OF THE DOLLAR/YEN EXCHANGE RATE: CAUSES AND EFFECTS

Mohammed Ashraful Haque, Texas A&M University – Texarkana George Boger, Texas A&M University – Texarkana

ABSTRACT

The volatility of the exchange rate between currencies has a great deal of impact on foreign trade. This is especially true of the yen/dollar exchange rate because of the trade volume between these two countries.

U.S. interest, Japanese interest, U.S. export, U.S. import, current account balance, CPI Japan, CPI U.S.A. were used in a stepwise regression as independent variables with exchange rate as the dependent variable. It was found that U.S. interest, U.S. export, U.S. import, current account balance of U.S. and CPI U.S. have a significant impact on the dollar/yen exchange rate.

It is concluded that the above variables determine the exchange rate between the yen and dollar.

Whenever there is a drastic change in any of the above variables, it causes volatility in the dollar/yen exchange rate. This has a significant impact on U.S./Japan trade volume.

A CONTINGENT VALUATION METHOD TO MEASURE WILLINGNESS TO PAY FOR ECO-LABEL PRODUCTS

Eric Barnard, Purdue University Calumet Amlan Mitra, Purdue University Calumet

ABSTRACT

This paper will illustrate the findings of primary and secondary research that shows products with eco-labels call for a price-premium over comparable, non-labeled products. The research method used in this study is the contingent valuation method (CVM) which estimates an individual's willingness-to-pay (WTP). Its purpose was to collect information on the attitude, behavior, and perception of consumers to purchase environmentally friendly goods, the reasons why or why not as to purchasing these goods, the awareness of eco-labels and the WTP for environmentally friendly, eco-labeled products in the economy. Along with a literature review of previous studies, this paper will include the survey results, interpretation and suggestions for future research.

INTRODUCTION

For many years there has been much debate over the preferences of consumers on certain items and why they are sought after. Price and quality have always been thought as the determining factors in the purchasing decisions of consumers although one factor is becoming increasingly more important, eco-labels. The presence of eco-labels is becoming more and more prevalent on consumer items these days (Case, 2009). In 1992 there were fewer than a dozen labels in the world with environmental impact, and now there are more than 300 different eco-labels in the marketplace (Case, 2009). With all of these labels becoming more present, how will companies make sure consumers know what the eco-label stands for? Or do they not want consumers to know exactly what the label means?

With the growing knowledge and trend of 'going green' companies are trying to get into the niche market of environmentally-friendly production and increase their competitive positions within the 'green' marketplace segment. Although eco-labels are only existent on a small percentage of products within the entire market, the environmentally-friendly claims on products have been increasing by at least 20% annually in the U.S. during the period 1990-2006 (Grolleau & Ibanez, 2007). The growth has not slowed during the past couple of years, but the timeframe is a limitation of the study, as is the case with the percentage of new products which display an eco-label. From just 1.1% of new products in 1986 to 11.4% in 1990, the use of eco-labels are still increasing today (Banerjee & Solomon, 2003). Studies have shown that buyers are willing to pay a premium price for products if they are stated as eco-friendly, but certain types of label demand a higher premium than others. A 1996 French study showed that 54% of households indicated they would be willing to pay up to 10% more for environmentally preferable products (Grolleau & Ibanez, 2007).

Although organic products have been slowly entering the mainstream in the U.S. marketplace, eco-labels have been around for decades. It was the early part of the 1970's when the organic label came out for fruits and vegetables (Allen & Howard, 2006). Labels weren't

enforced or regulated back then and are only slightly starting to become regulated today. Dobin (2009) stated that on August 11, 2009 the FTC charged several companies with making unsubstantiated, false and deceptive claims about their labels. Even though this event concerned the textile and fabric industry it feeds a much greater question, who else can be misleading consumers? There are not any federal regulations in the U.S. concerning product claims to consumers although states have the ability and some actually do have laws in place to protect consumers from fraudulent claims. Indiana is one of the few states that has enacted laws specifically to "discourage deceptive environmental advertising claims" in 1991. Indiana's law applies to any consumer good marketed with any type of environmental information on the product or packaging (Centner & Lathrop, 1998). The main criticism of eco-label regulation, along with credibility, is consistency and uniformity.

PROBLEM STATEMENT

This paper attempts to primarily examine whether the presence of a third-party eco-label on a product increases a consumers' willingness-to-pay (WTP). The paper also focuses on how to combat the low awareness of eco-labels and how to increase awareness of eco-label products. The labels are either third-party verified, meaning someone other than the manufacturer of the product makes the claim, or self-declared by the company itself. The existence of the second type of label may produce some uncertainty in the mind of consumers concerning the credibility of the eco-label. These unsubstantiated claims can result in adverse selection if producers provide false or misleading information about environmental attributes and production practices, causing consumers to choose products that do not have the attributes implied by the label (Delmas & Grant, 2008).

PURPOSE AND BACKGROUND

This paper is based on a survey sent out to determine the willingness to pay (WTP) of individuals and their concerns about the environmental friendliness of products in the market. Specifically, the effects of third-party eco-labels and the price premium they command, as well as awareness and recognition of the labels.

According to a Yale survey on the importance of environmentally-friendly products, key findings were that most Americans are willing to purchase environmentally-friendly products, but other considerations such as price and quality often take priority over the eco-labeling. A majority of Americans say that it is important that the products they purchase be environmentally-friendly such as automobiles (66% say it is important to them); clothes detergent (62%), and computer printer paper (51%). However, when asked whether an environmentally- friendly label, price, or quality is most important when buying particular products, only about one forth say eco-friendliness is the most important. Despite this, many say they are willing to pay more for "green" products. One half responded to surveys that they would "definitely" or "probably" pay 15% more for eco-friendly goods. One problem on surveys are limitations, although the majority of Americans say they will pay a premium for a good with an eco-label, when they have products in front of them, the story usually changes. This is one major limitation of the CVM; it gives a measure of WTP that is stated, not actual WTP. What would be more relevant to this research is historical data about purchasing decisions rather than simple intentions to buy. Even though the limitation of stated WTP is present, for the

scope of this paper it is sufficient enough to illustrate the pricing premiums for eco-labeled products.

It is a costly process to put an eco-label on a product (Grolleau & Ibanez, 2007). Along with the certification fees and costs to buy newer machines or purchase new technology, there is third-party present to evaluate and oversee the production process to ensure the fulfillments of the label (Grolleau & Ibanez, 2007). Depending on the costs of becoming certified with a certain eco-label, such as plant upgrades etc, some firms might not pursue the label and issue their own. Will the benefits exceed the costs? If a firm has a lead in market share and decides to become environmentally-friendly, how will their financial records be affected? Some companies want to become eco-friendly, but the benefits are still uncertain since there aren't many rules or laws governing the use of eco-labels in the U.S. (Kirchoff, 2000). The only requirements are that when becoming certified, all measures must be followed, as this decreases the false claims that some companies are eco-friendly when in fact they are not (Reisch, 2001). Although many segments of the market command a premium price for eco-label designation, this doesn't hold true for all.

According to a study conducted by the American Association of Wine Economists based on 13,400 observations of wine price, quality rating, varietals, vintage, and number of bottles produced, for the period 1998-2005 overall, certifying wine increases the price by 13%, yet including an eco-label reduces the price by 20% (Delmas & Grant, 2008). This result confirms the negative connotation associated by consumers with organic wine. The grapes used for fine wines are expected to be the same all the time and if a wine is certified organic, for example, buyers would shy away from the wine assuming it is of lesser quality than the regular bottle. Another closely related concept in eco-friendly production is land production yields. Whether organically grown products benefit the land or not has been assessed (Carambas, 2003).

METHODOLOGY

Aside from simply analyzing previous academic literature, this paper builds upon several other methods of research including a survey and regression analysis. The form of survey used was a questionnaire and the regression type was an ordered choice model. The survey consisted of a range of questions including simple demographics to multiple dichotomous choice questions. The analysis type was chosen over a linear model because of the type of questions answered and attempting to reach a higher goodness-of-fit for the model. Put simply, regression analysis examines "how much" of something while discrete choice analysis examines "which one". This contributes to the reasoning behind using a choice method opposed to linear regression. The dependent variable was price, how much the respondents indicated they were willing-to-pay, for an eco-labeled product over a comparable non-labeled product. Independent variables included in the study can be viewed in the table on the following page (FIGURE 1). Highlighted variables were found to be significant at the 95% confidence level on the normal distribution table.

RESULTS

Interesting and relevant information was gathered from the surveys sent out. It was found that people will pay the most price premium for a government verified, national branded product, while people would pay the least for a newer company's self-declared product. Also

found was that only 13% of respondents would be willing to pay above a 10% premium for ecolabeled products while about 27% aren't willing to pay a higher price for a more environmentally friendly product over a non eco-labeled one. The following figure depicts some of the outputs from the analysis conducted using eViews software. The eViews statistical package was chosen over Microsoft's Excel for an enhanced 'goodness of fit' for the model. The table is in the form of ANOVA, analysis of variance that shows which variables are significant and the value of their coefficients.

Throughout many studies it has been noted that demographics don't play a significant role in the WTP for eco-labeled products, and the assumption had held mostly true for this one. The results of this study had all followed the assumption excluding one, income level. Working at 95% confidence (1.96), income is narrowly significant with a Z value of 2.056. Although it doesn't have a strong level of significance, the reasoning could be verified/attributed to the type of data obtained from the surveys. Regardless of how much a person makes financially they can care about the environment the same, but purchasing might be geared towards the higher income individual since eco-labeled products are typically more expensive than non eco-labeled products. The most significant variable in this model is third-party verification, followed by the variable 'healthy' (the person feels eco-labeled products are better for them) and 'lifestyle' (attitude towards changing their lifestyle to save the environment).

The other variables listed within the figure were included in the analysis but were proven insignificant, so they were excluded from the final model which includes the four variables highlighted along with a random, error term (white noise). Although education was thought to play a role in determining willingness-to-pay (WTP), it was not found to be significant. Having more knowledge of the topic of eco-labels does not mean you actually care more about the environmentally-friendliness of a product.

| ANOVA Table (Figure 1) | | | | |
|------------------------|------------|------------|-------------|--------|
| | Coefficien | Std. Error | z-Statistic | Prob. |
| | | | | |
| AGE | 0.000796 | 0.003811 | 0.208759 | 0.8346 |
| EDUCATION | 0.043555 | 0.038468 | 1.132238 | 0.2575 |
| GENDER | 0.048823 | 0.100261 | 0.486953 | 0.6263 |
| GOV_NEW | 0.125096 | 0.117269 | 1.066749 | 0.2861 |
| HEALTHY | 0.155583 | 0.046832 | 3.322146 | 0.0009 |
| INCOME | 0.034235 | 0.016645 | 2.05671 | 0.0397 |
| LIFESTYLE | 0.165272 | 0.056345 | 2.933207 | 0.0034 |
| RECYCLING | 0.046552 | 0.052572 | 0.885501 | 0.3759 |
| THIRDPARTY_ | 0.482706 | 0.117228 | 4.117657 | 0.0000 |

Here are several explanations of certain variables from the ANOVA table:

Age is simply the age of the survey respondent; this variable doesn't play a significant role in the WTP of consumers. As stated earlier, demographics shouldn't be significant in this type of research as they don't affect how much someone cares about the environment or not. This study, for example, would look at the presence of the eco-label on a product and how much difference in pricing will be, not on which type of product it is displayed (i.e. nationality of good).

<u>Education</u> is the level of schooling each respondent has completed, from less than high school to a professional degree. Also a demographic variable, which might contribute to the

knowledge of a persons' understanding of eco-labels, but not actually influence their decision to pay a price premium on the product.

<u>Healthy</u> was from a section of the survey entitled 'Reasons to Purchase' which asked to rank how important the reasons were for the respondent to shop for environmentally friendly products. The reason found significant was that eco-labeled products are 'healthier and safer than other products.' This makes perfect sense as people believe the manufacturer takes extra steps to produce this product over the normal one, so a higher price is almost expected. The coefficient of 0.155583 means that a person who values a healthy lifestyle would be willing to pay about 15.56% more for an incremental increase of an eco-labeled product over a comparable one without an eco-label.

<u>Lifestyle</u> is from a survey section on attitudes toward environment. Statements were rated on respondents own ability to agree with certain statements, with 'I am willing to change my current lifestyle if it helps to save the environment' found to be significant. This variable was also significant and showed consumers have a WTP of almost 16.53% more over a non ecolabeled product.

<u>Third Party</u> was the most significant variable in determining price premiums for ecolabeled products. With a Z-statistic over 4.0, this category revealed almost a 50% WTP above normal goods. From this study, the presence of a third-party verified eco-label is the most significant factor in determining the willingness-to-pay of a consumer. Mentioned throughout the paper, this is because of faith in the label amongst other effects as well.

CONCLUSIONS & SIGNIFICANCE OF RESEARCH

This paper helps to contribute a better understanding of consumers' environmental concerns and how it is not just the price factor that plays a role in purchasing decisions of the consumer. An improvement to build upon this study would be to increase the number of samples, from about 200 surveys to over a thousand respondents and to include residents from different regions of the country. This study was sent out to residents of only three states; Indiana, Illinois, and Michigan.

The impending success of eco-labeled products and their effect on consumers' behavior can be in part due to increasing government support, better publicity and label clarity. One of the biggest limitations of this study, as previously mentioned, is the use of intentional willingness-to-pay rather than actual purchasing information. To further improve this field of study, additional research should be conducted based on real purchasing decisions as opposed to intentions to purchase.

REFERENCES

Allen, P. & Howard P. H. (2006). Beyond Organic. International Journal of Consumer Studies, Sept. 2006 439-451

Banerjee, A. & Solomon, B. D. (2003). Eco-labeling for energy efficiency and sustainability: a meta-evaluation of US programs Energy Policy 31 (2003) 109–123.

Carambas, M. C. (2003). Economic Analysis of Eco-Labeling. 84-106.

Case, S. (2009). The Future of Green Labels. Gopro.com. NIGP Oct./Nov. 2009. 22-23.

Centner, T. J., & Lathrop, K. W. (1998). Eco-Labeling and ISO 14000: An Analysis of US Regulatory Systems and Issues Concerning Adoption of Type II Standards. Environmental Mgmt Vol. 22 No. 2 163-172.

Delmas, M. A., & Grant, L. E. (2008, March). Eco-Labeling Strategies: The Eco-Premium Puzzle in the Wine Industry. *American Association of Wine Economists (AAWE Working Paper No. 13)*.

Dobin, D. (2009). Greenwashing harms entire movement. Lodginghospitality Nov. 2009.

Grolleau, G., & Ibanez, L. (2007). Can Ecolabeling Schemes Preserve the Environment? Business Media, 233-249.

Kirchoff, S. (2000). Green Business and Blue Angels. Environmental and Resource Economics, 403-420.

Reisch, L. A. (2001). Eco-labeling and Sustainable Consumption in Europe. Consumer Interests Annua.

VARIABLES EXPLAINING THE PRICE OF GOLD MINING STOCKS

Jimmy D. Moss, Lamar University Donald I. Price, Lamar University

ABSTRACT

The purpose of this study is to examine the relationship between an index of gold mining stock prices and a variety of explanatory variables including the price of gold and other economic variables. A sample of week ending values of the gold mining stock index (GOX) is used as a proxy for the industry. The weekly closing interest rates for the 13-week Treasury bill, 5-year Treasury note, 10-year Treasury note and the 30-year Treasury bond were used in the study. Other data used were the U.S. dollar index, the CRB index, the price of gold, the price of crude oil, the S&P500 stock index, the VIX stock market volatility index and two measures of the yield curve. Data was taken from January 1998 through July 2010. Therefore, a total of approximately 656 cases of weekly observations were included in the study. All variables were converted to a stationary series by computing the logarithms of the series and then taking first differences of the logs. Multiple linear regression was then used to study the variables that explain the gold mining stock prices. A stepwise procedure was used to identify those variables with the strongest relationships in a multi-variable equation. Five independent variables were found with an adjusted R-squared of 0.557. Checks were made for multicollinearity and none was found. The results of this study corroborate to some extent previous studies and offer new insights into gold mining stock determinants. Further, the results have practical implications for investors and for managers of gold mining companies. The topic is very timely with gold prices hitting historical highs in recent weeks.

ECONOMIC IMPACT OF BASE REALIGNMENT AND CLOSING ON THE FORT BRAGG REGION AND THE LARGEST ARMY BASE IN THE UNITED STATES

Inder Nijhawan, Fayetteville State University Pamela Jackson, Fayetteville State University

ABSTRACT

The Base Realignment and Closure (BRAC) initiative is expected to change the landscape of the Fort Bragg Region which encompasses the largest army base in the United States. BRAC will add approximately 40,000 additional people, 8,554 jobs and \$625 million in military construction expenditures to the region. This paper provides an analysis of the economic impact of recurring and non-recurring military expenditures on the economy of the Fort Bragg Region. The direct, indirect, and induced effects of these expenditures on output, employment, personal income, and indirect business taxes are presented here. It also identifies the major sectors that will be impacted by the increase in military expenditures.

INTRODUCTION

The Base Reassignment and Closure (BRAC) initiative will transform the economy of the region. Fort Bragg is located 50 miles south of Raleigh and 10 miles northwest of Fayetteville. It occupies an irregular-shaped parcel of land, covering approximately 160,700 acres, that stretches into four counties and its influence extends far beyond the 7 additional counties that are in close proximity to Fort Bragg. Source: IMPLAN Data

The estimates provided in this paper account for only those expenditures and personnel changes which are expected to occur because of the Base Realignment and Closure. Fort Bragg is the largest army base in the United States. This military base exerts a powerful influence in Cumberland and surrounding counties. It generates over \$2 billion in military pay, \$409 million in civilian pay and over \$400 million in government contracts. These expenditures directly or indirectly end up in the pockets of local employees of restaurants, grocery stores, local malls, hospitals, movie theaters, toy shops, car dealers, construction companies etc., which in turn induces further increases in demand when these employees spend their incomes. We would not, however, study the impact of these expenditures which occur routinely and annually as a result of the military presence.

This paper does not attempt to quantify the BRAC impact on the quality of life which may be inevitable considering the fact that an increase in the presence of military is likely to increase traffic congestion, school crowding, crime, real estate prices, and contribute to additional civic and cultural activities etc. Instead, attention is confined to the gross effects of military expenditures and jobs which will be created by BRAC.

LITERATURE REVIEW

There are numerous studies that analyze the impact of military expenditures on the economy. The North Carolina Department of Commerce's 2008 study estimates the anticipated effects of the military presence impact until 2013. Using the REMI input output model, it is expected that military expenditures will add to the North Carolina economy, 49,620 jobs, \$2.85 billion and \$1.93 billion to the Gross State Product and Personal Income respectively. Maguire Company (2008) laments the fact that notwithstanding the enormous contributions of five major military installations to the Arizona economy, it is generally under-recognized. This may be partly because the military base is isolated from the rest of the county because of security reasons. The military impact, however, is significant in that it adds approximately \$9 billion in output and 96,000 jobs to the Arizona economy. Apart from the military data furnished by the Department of Defense, the study used survey data to measure the total impact of military personnel and retirees. The San Antonio 2006 study uses the REMI model to estimate the impact of military on the San Antonio economy. The Base Realignment and Closure impact is measured separately. The NAHB study (2006) is more comprehensive than others in that it goes far beyond the usual impact of military expenditures on employment, income and output. It also includes the effect of military expenditures on the real estate market, education and social services. The NATO study (2000) is different from other studies in that it estimates the impact of military bases within a 200 kilometer radius of the base and throughout Europe. Row's study estimates by fiscal year the economic impact of Marine Corps and Navy on the economy of San Diego. The study emphasizes the point that the expertise supported by military can be easily transferred to civilian sectors. Sara Nienow et al's (2008) report updates the 2007 study of military economic impact on the North Carolina economy. It is reported that the military growth during 2010 -2013 will add about \$2.9 billion to the State Gross Product and create 49,000 additional jobs.

Our study differs from many of these studies in that it includes a 11 county region; it uses survey data to determine the exact local purchase content in the contracts; it includes civilian employees who support the military; it analyzes the employment effects by sectors and occupations; and provides an estimate of occupational gaps.

BRAC is expected to add 40,815 new residents to the region. These will include active duty soldiers, civilian personnel employed by the Army, employees of private defense contractors, dependents of Army personnel and private contractors, and economic migrants. Of course, since Pope Air Force Base will be closed, the region will lose 3,247 personnel. However, there will be a net increase in active-duty soldiers of 2,361 because the Army will add 5,608 soldiers. The civilian personnel attached to the Air Force and Army is expected to increase to 6,193 and the construction expenditure for residential quarters will increase by \$336 million. The U.S Army Forces Command (FORSCOM) and the Army Reserve Command will transfer from Fort McPherson in Atlanta and will require new headquarters. This will necessitate an additional construction expenditure of \$289 million. Since the Fort Bragg region has a small number of construction companies, it is highly unlikely that all of the construction demands will be met locally. Our survey of vendors shows that the local content of construction expenditure will be 40 percent for residential and 20 percent for the non-residential construction.

BRAC IMPACT

An analysis of the BRAC impact requires the construction of a Fort Bragg Region model which consists of 11 counties (see Figure 1). The construction expenditures with appropriate local purchase content and employment data were entered into the IMPLAN regional input-output model to obtain the direct and indirect effects of jobs and construction expenditures. The results of the IMPLAN impact model are shown in Table 2.

| Table 2: Economic Impact of BRAC on the Fort Bragg Region | | | | | |
|---|-----------------|---------------|---------------|-----------------|--|
| Impact | Direct | Indirect | Induced | Total | |
| Output | \$1,936,761,124 | \$73,657,288 | \$370,958,433 | \$2,381,376,848 | |
| Employment | 8,158 | 682 | 3,822 | 12,664 | |
| Value Added | \$ 940,884,822 | \$ 36,192,822 | \$205,489,682 | \$1,182,566,989 | |
| Indirect Business Taxes | \$1,686,376 | \$3,817,405 | \$23,211,405 | \$28,715,282 | |

Source: IMPLAN Report

The impact of the BRAC in the Fort Bragg region is expected to be significant in that it will create 12, 662 new jobs and add \$1.18 billion in personal income, \$2.4 billion in output, and \$29 million in indirect business taxes. The indirect and induced effects of initial job creation and construction expenditures are shown in Table 3.

| Table 3: Indirect and Induced Impact of BRAC on the Fort Bragg Region 2009-2011 | | | | |
|---|-----------------|--------------------|--|--|
| Impact | Direct | Indirect + Induced | | |
| Output | \$1,936,761,124 | \$444,615,721 | | |
| Employment | 8,158 | 4,504 | | |
| Value Added | \$ 940,884,822 | \$444,620,225 | | |
| Indirect Business Taxes | \$1,686,376 | \$27,028.810 | | |

Source: Derived from Table 2

The counties in close proximity to Fort Bragg (Cumberland, Harnett, Hoke, Moore and Robeson) are considered Tier 1 counties and are likely to receive the maximum impact of BRAC. The irony is that many of the outlying counties have a higher unemployment rate than the Tier 1 counties, but are likely to garner a limited number of the 12,664 jobs which BRAC is expected to bring to this region. Further, the types of jobs created by BRAC will require educational and skills levels which may not be available in Tier 2 counties. How much employment impact each county will receive will depend on the nature of jobs, required skills and education, distance from the location of jobs, and the existing pattern of employment in each county.

An analysis of employment effects in Table 4 reveals that high levels of job creation will occur in the government sector (50 percent) followed by professional and technical services (17.5 percent), construction (15.7 percent), retail trade (8.4 percent), and food and accommodation sectors (5 percent). The remaining sectors will create less than 10 percent of BRAC jobs.

| Table 4: Projected Number of Military–Related Jobs Added in Leading Growth Sectors | | | | |
|--|-----------|--|--|--|
| Sector | 2009-2011 | | | |
| Government | 6,382 | | | |
| Construction | 1,781 | | | |
| Professional and Technical Services including health care | 2,169 | | | |
| Retail Trade | 1,064 | | | |
| Accommodation & Food Services | 607 | | | |

Source: IMPLAN report

While over 12,000 jobs will be available in the Fort Bragg region, how many of these jobs will be filled by the unemployed workers? It is estimated that 60 percent of the BRAC jobs will require a college degree, 29 percent require a two-year degree with some experience, and the remaining require high school diploma with some relevant experience.

OTHER EFFECTS OF BRAC

When 40,000 people move into a region and billions of new investment is added to the economy of the region, its effects go far beyond the economic impact discussed in this paper. One can easily surmise that such a massive movement of people and money will impact demand for housing, social services, education, infrastructure, child care, health care, public safely and emergency services, water, sewer and waste, telecommunications and information technology, and transportation. While we acknowledge these consequences, its discussion is relegated to a sequel of this paper.

For occupational gap model and relevant analysis, contact the authors.

REFERENCES

American Community Survey, US Department of Census, 2007

Maguire Company, Economic Impact of Arizona's Principal Military Operations, 2008. <u>ArizonaDeptCommerce EconIm~1.pdf (790 KB</u>.

Military Transformation Task Force, Economic Impact of the Department of Defense on San Antonio http://www.sanantonio.gov/oma/pdf/bracpdfs/ImpactBulletin.pdf

NAHB Research Center and Concourse Group, LLC. Economic Impact Study of Grand Forks Air Force Base Realignment 2006. ConcourseGroup_GrandForksA~1.pdf (2 MB)..

NATO, Economic Impact Study 2008 http://www.e3a.nato.int/html/economic impact/main.htm

North Carolina Department of Commerce, North Carolina's Military Footprint: Current Economic Impacts and Estimates for 2013 http://www.ncsu.edu/iei/documents/NC-Military-Report-short.pdf

Rowe Jeff. Economy: Military Impact Growing.

http://www.nctimes.com/business/article_b0ab7bc2-3f6d-5686-bf47-71f9ea8c808c.html.

Sara Nienow, Chris Harder, Tim Cole, and Anna Lea North Carolina Department of Commerce. NC Military Impact

Analysis.

 $\underline{http://www.ncmilitary.org/Subpages/documents/NCMilitaryEconomicImpactAnalysis2008ExecSummary.p} \\ \underline{df}$

PRICE INFLATION AND GDP GROWTH-WHAT MATTERS MOST? (EVIDENCE FROM EGYPT AND INDIA)

Dina Abdel Moneim Rady, Ain Shams University, Egypt

ABSTRACT

Egypt and India are both emerging developing countries which share some common economic features; their rate of economic growth has approximately the same trend while they both begin series of economic reform process in the same period of time (early 1990's) while passing through high inflation rates. This paper analyses the Indian distinguished high economic growth rates while having higher inflation rates in comparison with Egypt in the period 2000-2010. The paper concludes that India's inflation was accompanied by an increase in labor productivity, at the same time focusing on successful sectors in the economy, boosting savings and investments. The paper recommends that emerging countries while applying economic reforms process do not focus on inflation targeting, but rather let the market correct itself and focus on real production and productivity since growth in labor and capital productivity is the key engine of economic growth.

* The author would like to thank Prof Dr. A.M. Rady, Prof Dr. Safa El fouly, and Prof Dr. Tamer Rady for their valuable comments on earlier drafts of this paper.

INTRODUCTION

Analyzing GDP growth rates trend between the two countries during the period; it is shown that it is higher in India though both countries almost have the same trend.

The two countries started by a decline in the GDP growth rate during the period from 2000 to 2001, then showed an increase through the period 2001 to 2007, India then decreased from 9.4 to 7.3, while Egypt went up from 7.1 to 7.2 (2007 to 2008), the two countries went down following the global financial meltdown in 2008. India jumped to 8.8% in 2010 while Egypt achieved only 5%.

India' GDP growth rate recovered faster than Egypt after the 2008 financial crisis, although the two countries suffered high rates of inflation, which reflects the underlying strengths of the Indian economy

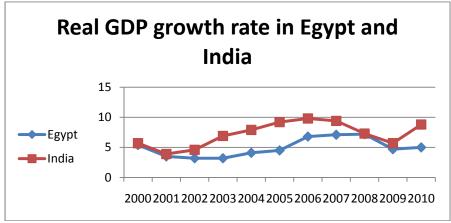
ANALYZING INFLATION RATE TRENDS BETWEEN THE TWO COUNTRIES DURING THE PERIOD

As shown in figure (2), inflation rates in Egypt in general is higher than those in India during most of the period except for the first three years, after which India witnessed a continuous increasing rate of inflation, while Egypt had sharp trends of increase in inflation rates till it reached its highest level in 2009 (16.2%).

Egypt

0

Figure (1)



Source: international monetary fund data and statistics

Inflation rate in Egypt and India

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

Source: international monetary fund data and statistics

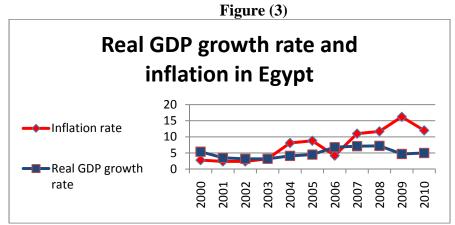
The two countries had periods of sharp rise in inflation rates, but India passed Egypt in the GDP growth rates, in the following sections, the paper will examine the major factors that were fostering India's growth rate despite the high inflation rates.

METHODOLOGY

The paper examines data from Egypt and India through the period from 2000-2010. Since exploring the inflation dynamics following a statistical approach does not capture the behavioral structure of the economy, therefore we use the inductive methodology in tracking the position of vital macroeconomic variables of the two countries during the period of study. The data involve mainly real GDP growth rate, price inflation rates, GDP composition (demand side), taxes as a percentage of GDP, foreign domestic investments and labor productivity growth.

ANALYZING REAL GDP GROWTH RATE AND INFLATION IN EGYPT

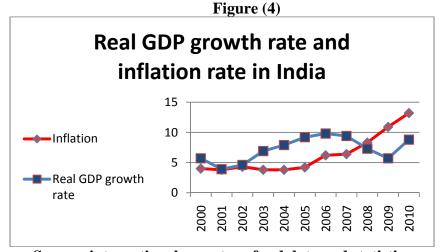
As shown in figure (3), when inflation was at its lowest rates (2000-2003) GDP growth rates were decreasing and when inflation started to boost from 3.2% to 8.1% (2003-2004); GDP growth rate escalated until it went down to 4.7% in 2009 at the same time inflation reached its highest level in the period (16.2%).



Source: international monetary fund data and statistics

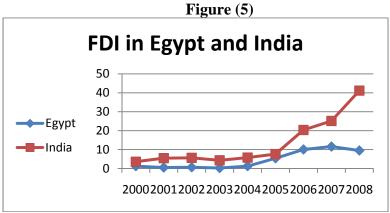
ANALYZING REAL GDP GROWTH RATE AND INFLATION IN INDIA

Figure (4) shows that GDP growth rate continued to increase at the same time the inflation rate was increasing, that was obvious in the last two years when GDP growth rate boosted from 5.5% to 8.8% at the same time inflation rate increased from 10.9% to 13.2%.



FOREIGN DIRECT INVESTMENT AS A PERCENTAGE OF GDP IN EGYPT AND INDIA

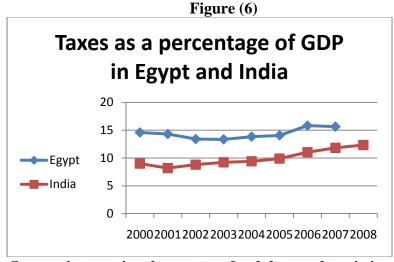
Figure (5) shows that foreign direct investment as a percentage of GDP is much higher in India than Egypt with an enlarging gap. FDI's % of GDP in India reached 41.17% in 2008 versus 9.49% in Egypt.



Source: international monetary fund data and statistics

TAXES AS A PERCENTAGE OF GDP IN EGYPT AND INDIA

Figure (6) shows that taxes as a percentage of GDP in India have lower levels than Egypt which encourages profit margins and boosts investments.

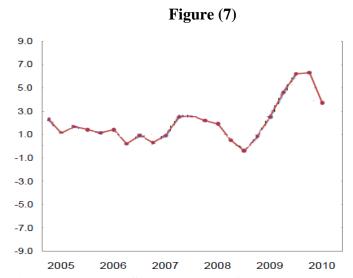


Source: international monetary fund data and statistics

OUTPUT PER HOUR, NONFARM BUSINESS, ALL PERSONS, PERCENT CHANGE

Figure (7) shows the progress of growth in India's nonfarm business productivity which increased at an average annual rate of 2.5% in the period (2000-2009).

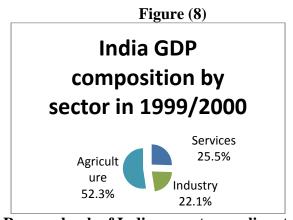
In 2009, Egypt grew in its industrial production by 6.4% from previous year (2008) while India grew by 10.3% in the same period, despite the financial crisis of 2008.



Source: productivity and costs, "US department of labor, Bureau of labor statistics, USDL-10-1211.

INDIA GDP COMPOSITION BY SECTOR IN 1999/2000

As shown in the figures below, India's economic reforms that began in 1991 helped transforming its economy from one depending on agriculture to an open and progressive one that depends on services.



Source: Reserve bank of India, monetary policy statements

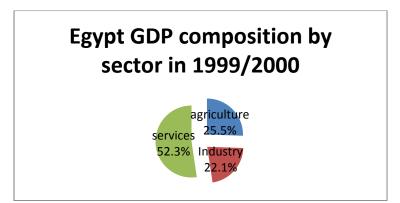
India GDP composition by sector in 2009/2010

Agricultu re 14.6%

Industry 20.3%
65.1%

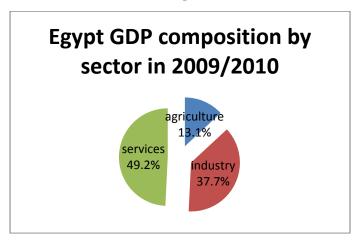
Source: Reserve bank of India, monetary policy statements

EGYPT GDP COMPOSITION BY SECTOR IN 1999/2000 Figure (10)



Source: Reserve bank of India, monetary policy statements

Figure (11)



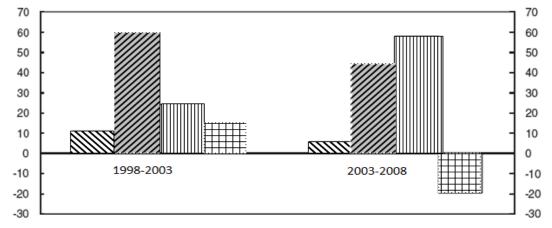
Source: Reserve bank of India, monetary policy statements

The above figures show that Egypt's progress in expanding its industrial sector share in GDP was limited (from 22.1% to 37.7%) in 10 years. The service sector's share in GDP decreased from 52.3% to 49.2%). The share of agriculture decreased to 13.1% from 25.5%.

CONTRIBUTIONS TO GDP GROWTH 1998-2003AND 2003-2008 IN INDIA

Figure (12) represents the contribution to GDP growth in India, which shows that investment is the biggest contributor to GDP growth. India succeeded to boost its investment at the expense of consumption.

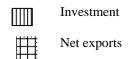
Figure (12) Contributions to GDP growth 1998-2003and 2003-2008 in India



source: Luiz de Mello, "Growth and sustainability in Brazil, China, India, Indonesia, and south Africa", OECD, 2010.

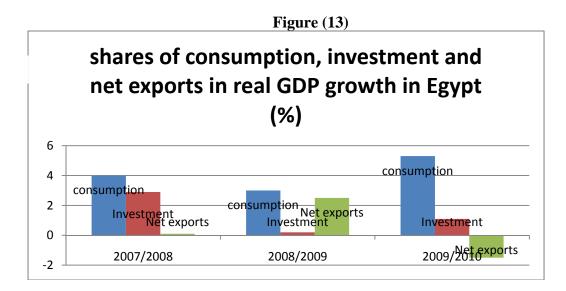
Government consumption

Private consumption



SHARES OF CONSUMPTION, INVESTMENT AND NET EXPORTS IN REAL GDP IN EGYPT (%)

Figure (13) shows that Egypt in the last 3 years (2007-2010) had increased its consumption's share in GDP growth (from 4% to 5.3%), decreased its investment's share in GDP growth (2.9% to 1.1%) and shifted its net exports share to GDP growth to negative (-1.5). This will not help Egypt to rely on real savings and domestic sources resulting from investment in its economic progress, which will have its effect on the strength of the economy.



Source: central bank of Egypt annual economic review, different issues

CONCLUSION

Tracking Egypt and India's price inflation trends, Egypt has experienced short bursts of high inflation, but India had acceptable rates during the first 5 years (ranged from 3.8% to 4.2%). A low or moderate inflation for long periods provides a favorable environment for growth. The duration of keeping lower rates of inflation for a long time helps driving trust in the government's commitment of lower inflation thus fostering investments and high expectations. The long run solution to the real inflation problem depends on the ability of the government to provide adequate supply and stabilize domestic demand. Therefore, a government that is producing high inflation is a government that has lost control of macroeconomic management. Macroeconomic stability exists in a country if it manages to resolve the macroeconomic crisis that emerged within a year or two, which was the case of India.

Some studies argue that it is not clear whether applying inflation targeting leads to better performance of the economy, the performance of these countries after applying the inflation target policies are different than before applying them in containing inflation for only short terms. Therefore targeting policies might have lower short run effects in countries fighting inflation, if they do not have negative recessionary impact on the economy. India fostered its real GDP growth rates while having high inflation rates by applying policies that focused on real production and productivity, shifting its economy towards successful sectors that generates income in the short run (industry and services), at the same time having acceptable tax rates, hence boosting investment and generating more income. Then; what matters most is GDP growth rate, emerging countries should focus on productivity and investment rather than inflation targeting and let the market correct itself.

REFERENCES

- Anne O. Krueger (2008), "The Role of Trade and International Economic Policy in Indian Economic Performance", *Asian Economic Policy Review* (2008) 3, 266–285.
- Central Bank of Egypt Economic Review, different issues.
- Current state of Indian Economy (2010), Federation of Indian Chambers of Commerce and Industry (FICCI), New Delhi.
- Doing Business in India (2009), The World Bank and the International Finance Corporation, Washington.
- Economic and Social Indicators Bulletin of the Arab Republic of Egypt (2010), *The Egyptian Cabinet Information and Decision Support Centre* IDSC, No 205, Vol (18).
- Frederic S. Mishkin and Klaus Schmidt-Hebbel (2007), "Does inflation targeting make a difference?", *National Bureau of Economic Research*, Working Paper No. 12876.
- Michael Debabrata Patra and Partha Ray (2010), "Inflation Expectations and Monetary Policy in India: An Empirical Exploration", *International Monetary Fund*, Working Paper WP/10/84.
- National Bank of Egypt annual reports, different issues.
- Piti Disyatat (2010), "Inflation targeting, asset prices, and financial imbalances: Contextualizing the debate", Journal of Financial Stability, 6 (2010) 145–155.
- Productivity and costs, US department of labor, Bureau of labor statistics, USDL-10-1211.
- R. Kannan (1999), "Inflation Targeting: Issues and Relevance for India", *Economic and Political Weekly*, Vol. 34, No. 3/4.
- Rajesh P (2009), "Deflationary paradox in India", paper presented at an open seminar organized by the *Interdisciplinary Forum-Multimedia Centre*, Govt. Sanskrit College, New Delhi.
- Rudrani Bhattacharya et al (2008)., "Early Warnings of Inflation in India", *National Institute for Public Finance and Policy*, New Delhi.
- Stilianos Fountas (2010), "Inflation, inflation uncertainty and growth: Are they related?", *Journal of Economic Modeling*, 27 (2010) 896–899.

U-SHAPED FEMALE LABOR PARTICIPATION WITH ECONOMIC DEVELOPMENT: SOME PANEL DATA EVIDENCE

Henry Tam, York University

ABSTRACT

Using a panel data of about 130 countries from 1950-1980, we analyze the relationship between female labor participation and economic development. Although previous literature finds a U-shaped relationship between female labor participation and economic development in cross-country regression analysis, such cross-country results are subject to "Kuznets fallacy" and need not be interpreted as evidence of a true underlying U-shaped pattern in the time-series sense. We resolve the issue by employing dynamic panel data estimation. The current results demonstrate that the U-shaped relationship between feminization of the labor force and real GDP per capita is not a "Kuznets fallacy" and it holds up as an intertemporal relationship, which confirms the cross-sectional results in the literature.