ECO-ENA Researches & Policy Analyses

ECO-ENA: Economics & ECO-Engineering Associate, Inc., Canada

The Annual Conference of Economic Forum of Entrepreneurship & International Business
ACEFEIB

The Third Annual Conference of Economic Forum of Entrepreneurship & International Business

Feb. 1st – Feb. 3rd, 2013

Venue: Lady Margaret Hall, Oxford University, Oxford, United Kingdom

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Conference Proceedings

Ottawa, Ontario, Canada

2013

The Third Annual Conference of Economic Forum of Entrepreneurship & International Business

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The Annual Conference of Economic Forum of Entrepreneurship & International Business (ACEFEIB)

The Third Annual Conference of Economic Forum of Entrepreneurship & International Business
1 - 3 February 2013

Venue: Lady Margaret Hall
Oxford University, Oxford, UK

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ECO ENA Researches & Policy Analyses

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ECO-ENA: Economics & ECO-Engineering Associate, Inc., Canada adopts different research forums in different fields related to economics & business studies in general.

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ECO-ENA: Economics & ECO-Engineering Associate, Inc., Canada sponsors the Annual Conference of Economic Forum of Entrepreneurship & International Business: ISSN 1925-4601 (CD-ROM) and ISSN 1925-461X ((Online): Library & Archive Canada. The conference collects successful papers in Economics & Business from all around the world and discusses them in a big symposium. The conference proceedings enable new ideas of research to reach out via a recognized worldwide outlook. The first annual conference of ECO-ENA, Inc. has been held in Cairo, Egypt under the organization of the Canadian Expertise House for Advanced Economic Studies, Cairo, Egypt. The second annual conference of ECO-ENA, Inc. has been held in the University of Ottawa, Ottawa, Canada. The third annual conference of ECO-ENA, Inc. has been held in the University of Oxford, Oxford, UK. ECO-ENA, Inc. is planning to hold its fourth annual conference in Paris, France from January 31st to February 2nd, 2014. ECO-ENA, Inc. is planning to hold its annual conference every year in a different country. ECO-ENA: Economics & ECO-Engineering Associate Inc., Canada also provides open seminars & lectures by international experts in the field.

ECO-ENA, Inc. holds also its annual meeting of financial economics; CEHAES International Conference of Financial Economics in the third day of its annual conference of economic forum of entrepreneurship & international business every year in a different country.

Recently; ECO-ENA, Inc. organizes another annual conference of Islamic Economics & Islamic Finance that will be held in Toronto every year in July. The first annual conference of Islamic Economics & Islamic Finance will be held this year in July 26th & 27th in Toronto, Ontario, Canada.

ECO-ENA: Economics & ECO-Engineering Associate, Inc., Canada abides to all international ethical rules of business.

ECO-ENA, Inc. does not have branches anywhere in the world. It's only located in Ottawa, Ontario, Canada. It however provides services globally.

ECO-ENA: Economics & ECO-Engineering Associate, Inc., Canada abides to all international ethical rules in business.

Ghada Gomaa

Dr. Ghada Gomaa A. Mohamed
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The Third Annual Conference of Economic Forum of Entrepreneurship & International Business

SELECTED ACCEPTED PAPERS

Dear Reader,

We are very pleased to present the proceedings of ECO-ENA: Economic & ECO-Engineering Associate, Inc.'s Third Annual Conference of the Economic Forum of Entrepreneurship & International Business held at Lady Margaret Hall, Oxford, from February 1st, to 3rd, 2013.

The aims of the conference were to provide a forum open to academics, managers and professionals to discuss all areas of business, economics and the pursuit of equitable and sustainable economic development; to provide an audience for high quality research papers relating these areas; and to provide a forum for young researchers to present their own research and to learn from research presentations by researchers at a more advanced stage in their careers.

We are delighted to be able to provide a wide range of papers from many countries around the world, on employment, entrepreneurship, financial markets, corporate social responsibility and other important issues of our time.

At a time when the social and corporate responsibilities of large corporations and the ability of governments, tax authorities, financial regulators and prosecutors to make their directors and servants answerable to the public and perhaps even the courts of law has become a critical issue, corporate governance remains a key subject for debate and we had the privilege of hearing significant contributions on the subject of corporate social responsibility and corporate governance by Syahiza Arsad and Rahayati Ahmad from Kolej Universiti Insaniah, Malaysia, and Roshima Said from Universiti Teknologi MARA, Malaysia, on governance in small firms by Susanne Durst of the University of Liechtenstein and Thomas Henschel of the Hochschule für Technik und Wirtschaft Berlin and on corporate governance and strategy from Samina Afrin from the University of Leeds.

We also heard papers from Daniel May from Harper Adams University College and Silvana Paratori from the University of Keele on modeling of farmers' behavior and from Gazmend Qorraj from the University of Prishtina, on entrepreneurship and self-employment. Both papers dealt with the reactions of individuals and especially small businesspeople to their environment and therefore formed part of a theme running through the conference of the interaction between the individual, in employment or self-employment, and the business environment. In this context, Gurdal Aslan and Humberto Lopez Rizzo, from the First University of Paris, and Kaviyarasu Elangkovan and Ahmed Razman Abdul Latiff, from Universiti Putra Malaysia, presented papers on the effects of the minimum wage. These papers were of high quality and reflected the complexities of the effects of minimum wages on employment. They demonstrated clearly that the simplistic assumptions or isolated observations sometimes made by political commentators are not sufficient to analyse the effects of decisions which affect different people in different ways.
A further paper on employees and labour was presented by Gabriela Trentin Zandoná and Luiz Damato Neto from Universidade Anhembi Morumbi, Brazil, and provided insight into the regulations governing employment conditions and in Latin America and working life there.

Two papers, by Bei Luo and Terence Tai Leung Chong from the Chinese University of Hong Kong, and by Atsuyuki Kato from Waseda University and Naomi Kodama from the Japanese Ministry of Economy, Trade and Industry, concerned entrepreneurship, SMEs, productivity and profitability. These papers will be of interest to anyone who is concerned with the impact of the activities of small and medium sized firms on the wider economy and the contribution that these businesses can make. These papers were followed by two papers, by Baiba Zvirbule from the University of Latvia and Ahmed Ali Mohammad from Sultan Qaboos University, on accounting, dealing both with levels of disclosure and with accounting for innovation. These are both significant topics as communication with stakeholders and the ability of accountants and analysts to capture and predict the impact of research development and collective corporate learning continue to be issues for the accountant in business and government.

Moving on from accounting to audit and regulation, we were delighted to be able to include papers from Zuraidah Haji Ali from the International Islamic University in Malaysia, on charity regulation and Norazida Mohamed, from Teesside University, on internal audit and the detection and prevention of financial statement fraud.

Further papers from Richard Fairchild and Ian Crawford from the University of Bath and Rahayati Ahmad from Koley Universiti Insaniah, Malaysia, concerned game theory and factors in stock market performance respectively. Talat Afza (Presenter) Hira Yousaf and Atia Alam from the COMSATS Institute of Information Technology, Pakistan, spoke on information asymmetry and IPO pricing.

Paula Hernandez and Ruy Valdés Benavides from Universidad de Guanajuato, Mexico, joined us to speak on virtual currencies, which may become an increasing feature of a world in which business crosses national boundaries.

On the final day, we heard papers from Shala Al-Abiyad from Tripoli University and Morrison Handley-Schachler from Teesside University on bank service pricing and from Callistar Obi from Delta State Unversity Nigeria on external debt and national economic growth. We were also delighted to hear fascinating papers from Peter Geczy, Noriaki Izumi and Kôiti Hasida from National Institute of Advanced Industrial Science and Technology, Japan, on security and other issues in virtual clouds and from Muhammad Said and Abdul Djalil from the College for Islamic Studies and the University of Palangka Raya on managers' perceptions of Syariah Principles, as well as two papers presented by our distinguished president, Dr Ghada Mohamed on issues affecting the Gulf States.

We were also highly privileged to welcome Cherie Chen from Cass Business School, London, whose keynote speech on behavioral finance was both informative and entertaining.

We would like to express our deep gratitude to all who have contributed to this conference and to these proceedings. We would especially like to extend our thanks to the staff of Lady Margaret Hall, Oxford, for making this conference possible and for ensuring that it ran smoothly. We also look forward to welcoming as many of you as possible to our third conference in Paris in 2013.

Yours Sincerely,

M. Handley-Schachler.

Dr. Morrison Handley-Schachler
The Chair of the Conference
ECO-ENA, Inc. Vice President of Research & Policy Analysis

The Third Annual Conference of Economic Forum of Entrepreneurship & International Business - (TACEFEIB)

Contributors *(Program order)* Presenters*

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- **Roshima Said**, Universiti Teknologi MARA, Malaysia
- **Susanne Durst**, University of Liechtenstein, Liechtenstein
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- **Samina Afrin***, University of Leeds, United Kingdom
- **Daniel May***, Harper Adams University College, United Kingdom
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The Third Annual Conference of Economic Forum of Entrepreneurship & International Business (SACEFEIB)

Conference Program

Feb. 1st – Feb. 3rd, 2013

Talbot Hall, Lady Margaret Hall, Oxford

Day One
Friday, February 1st 2013

9:00 Welcome and Coffee

10:00
Three Papers on Corporate Governance and Corporate Social Responsibility

Paper 1

Syahiza Arsad (Presenter)
Kolej Universiti Insaniah, Malaysia

Rahayati Ahmad (Presenter)
Kolej Universiti Insaniah, Malaysia

Roshima Said
Universiti Teknologi MARA, Malaysia

The Effect of Corporate Social Responsibility on the Relationship between Corporate Governance, Internal Audit and Firm Performance

Paper 2

Susanne Durst
University of Liechtenstein

Thomas Henschel (Presenter)
Hochschule für Technik und Wirtschaft Berlin, Germany

The practice of governance in small firms – A country comparison

11:00 Coffee

11:30

<u>Paper 3</u>

Samina Afrin (Presenter)
University of Leeds, United Kingdom

Strategic Approach to Corporate Social Responsibility: A Paradigm Shift

12:00
Two Papers on Responses to the Business Environment

<u>Paper 4</u>

Daniel May (Presenter)
Harper Adams University College, United Kingdom

Silvana Paratori
University of Keele, United Kingdom

A Review on Farmers' Behavior Modeling

<u>Paper 5</u>

Gazmend Qorraj (Presenter)
University of Prishtina, Kosovo

Entrepreneurship Activities in Transition Countries: Self-Employment versus. Development

13:00 Lunch

14:00
Three Papers on the Economics and Employment

<u>Paper 6</u>

Gurdal Aslan
Université Paris I, France

Mr. Humberto Lopez Rizzo (Presenter)
Université Paris I, France

Impacts of Minimum Wage on Employment: First Evidence in Turkish SMEs

<u>Paper 7</u>

Kaviyarasu Elangkovan (Presenter)
Universiti Putra Malaysia

Ahmed Razman Abdul Latiff
Universiti Putra Malaysia

A Strategy in Encountering the Rising Rate of Unemployment: The Introduction of Minimum Wage Laws in Malaysia

<u>Paper 8</u>

Gabriela Trentin Zandoná (Presenter)
Universidade Anhembi Morumbi, Brazil

Luiz Damato Neto (Presenter)
Universidade Anhembi Morumbi, Brazil

The Labor Market in Latin America

15:30 Coffee

16:00
Two Papers on Business and Entrepreneurship

<u>Paper 9</u>

Bei Luo (Presenter)
Chinese University of Hong Kong

Terence Tai Leung Chong
Chinese University of Hong Kong

Dual Sides of China Entrepreneurial Activities: the Productive and the Unproductive

<u>Paper 10</u>

Atsuyuki Kato (Presenter)
Waseda University, Japan

Naomi Kodama
Ministry of Economy, Trade and Industry, Japan

Markups, Productivity, and External Market Development: An empirical analysis using SME data in the service industry

17:00 Close

Day Two
Saturday, February 2nd 2013

9:00 Coffee

9:15

Two Papers on Accounting and Reporting

<u>Paper 11</u>

Baiba Zvirbule (Presenter)
University of Latvia

Corporate Reporting: Advantages and Disadvantages of Disclosure

<u>Paper 12</u>

Ahmed Ali Mohammad (Presenter)
Sultan Qaboos University, Oman

Does Accounting Account for Innovation

10:15 Coffee
10:30
Two Papers on Regulation and Auditing

<u>Paper 13</u>

Zuraidah Haji Ali (Presenter)
International Islamic University, Malaysia

Charitable Organizations in Malaysia; Issues on Regulating and Monitoring of Charitable Organizations

<u>Paper 14</u>

Norazida Mohamed (Presenter)
Teesside University, United Kingdom

Financial Statement Fraud Control and Internal Auditing Expectation Gap

11:30: Coffee

12:00 Keynote Address

Cherie Chen
Faculty of Actuarial Science and Insurance,
Cass Business School,
City University, London

The Implications of Behavioral Finance in Advertising, Branding, Investment and Insurance

13:00 Lunch

14:00

Three Papers on Corporate Finance

<u>Paper 15</u>

Richard Fairchild (Presenter)
University of Bath, United Kingdom

Ian Crawford (Presenter)
University of Bath, United Kingdom

A Development Bank's Choice of Private Equity Partner: A Behavioral Game-theoretic Approach

<u>Paper 16</u>

Rahayati Ahmad (Presenter)
Kolej Universiti Insaniah, Malaysia

Effect of Leverage and Selected Control Variables on Performance of Firms Listed On Bursa Malaysia

<u>Paper 17</u>

Talat Afza (Presenter)
COMSATS Institute of Information Technology, Pakistan

Hira Yousaf
COMSATS Institute of Information Technology, Pakistan

Atia Alam
COMSATS Institute of Information Technology, Pakistan

Information Asymmetry, Corporate Governance and IPO Under-pricing

15:30 Coffee

15:45

One Paper on the Nature of Currency

<u>Paper 18</u>

Paula Hernandez (Presenter)
Universidad de Guanajuato, Mexico

Ruy Valdés Benavides (Presenter)
Universidad de Guanajuato, Mexico

Virtual Currencies, Micropayments and the Payments Systems: A Challenge to Fiat Money and Monetary Policy?

16:15

Panel Discussion

Financial Investment by Individuals, Corporations and Government

17:00 Close

19:00 – 22:00
Conference Gala Dinner

Jerwood Roon, LMH, University of Oxford

Day Three

Sunday, February 3rd 2013

9:00 Coffee

9:15

Three Papers on the Economic Environment

Paper 19

Shala al-Abiyad (Presenter)
Tripoli University, Libya

Morrison Handley-Schachler
Teesside University, United Kingdom

Factors Affecting the Price of Banking Services: The Bank of the Republic Libya

Paper 20

Callistar Kidochukwu Obi (Presenter)
Delta State University, Nigeria

The Empirical Analysis of External Debt and Economic Growth in Nigeria

Paper 21

Ghada Mohamed (Presenter)
King Abdulaziz University, Saudi Arabia

Nisreen Al-Banawi
King Abdulaziz University, Saudi Arabia

Balance of Payments of Saudi Arabia

10:45 Coffee

11:00

Four Papers on Emerging Management Challenges

<u>Paper 22</u>

Peter Geczy (Presenter)
National Institute of Advanced Industrial Science and Technology, Japan

Noriaki Izumi
National Institute of Advanced Industrial Science and Technology, Japan

Kôiti Hasida
National Institute of Advanced Industrial Science and Technology, Japan
Getting the Most out of Your Hybrid Clouds: Adoption Management Strategy

<u>Paper 23</u>

Ghada Mohamed (Presenter)
King Abdulaziz University, Saudi Arabia

Saima Javid
King Abdulaziz University, Saudi Arabia

Foreign Direct Investment and Impact on Economic Welfare in Saudi Arabia

<u>Paper 24</u>

Muhammad Said (Presenter)
College for Islamic Studies, Indonesia

Abdul Djalil
University of Palangka Raya, Indonesia

Manager Perception of the Syariah Principles and the Effect of a Management Control Process

Three Papers on Management and Control

Paper 25

Ghada Mohamed (Presenter)
King Abdulaziz University, Saudi Arabia

Beta and Sigma Convergence among the GCC States

13:00 Lunch

14:00

Chairman's and Chief Executive's Closing Remarks

14:30 Conference Close

Acknowledgement

ECO-ENA, Inc. would like to thank all staff at the Lady Margaret Hall Conferences Services, Oxford for their great hospitality during the conference.

ECO-ENA, Inc. would like to thank Teesside University for great intellectual contributions to the conference.

ECO-ENA, Inc. would like to thank all participants at the conference.

ECO-ENA, Inc. Organizing team

<u>Conference E-Proceedings</u>

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We look forward to welcoming you again to ECO-ENA, Inc. Upcoming conference that will be held in Paris, France from January. 31st to Feb. 2nd, 2014 by God willing!

Our regards;

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The Third Annual Conference of Economic Forum of Entrepreneurship & International Business (TACEFEIB)

SELECTED PAPERS

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EFFECT OF LEVERAGE AND SELECTED CONTROL VARIABLES ON PERFORMANCE OF FIRMS LISTED ON BURSA MALAYSIA

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Abstract: The study focus on the effect of leverage, size, liquidity, market-risk and market-to-book ratio on the return-on-asset (ROA) of firms listed on Bursa Malaysia. Based on the existing literature, a conceptual model was developed to test the relationships of the variables under investigation. Data from 903 companies were used for analysis. Subsequently, both descriptive and inferential statistics were employed. For testing the research hypotheses, hierarchical regression was used. The results showed that leverage, size, liquidity, market-risk and market-to-book ratio jointly explained 22.9% variance in the level of ROA. All the variables except size have significant unique contribution in influencing the dependent variable - ROA. It was recommended that the policy makers of firm should not underestimate the effect of leverage on performance in strategic business decisions. Finally, the theoretical implications, limitations and directions for future studies were highlighted.

***Keywords**:* Leverage, Return-on-asset, Size, Liquidity, Market risk, Market-to-book ratio, Malaysia

1.0 INRODUCTION

Competitive nature of the business environment demands that companies should strive for higher performance not only to outperform competitors but also to satisfy the requirements of stakeholders. Hence, companies mobilize resources in order to achieve high level of performance which would eventually ensure their continuous existence in the market as well as satisfying the stakeholders. While high performance is the target of the companies, the concept, however, remains multidimensional with several indicators. Thus, a number of indicators are usually employed to measure performance. For instance, performance could be measured in terms of maximizing profit on assets, profit maximization, maximizing shareholders' benefits, growth in sales and growth in market share (Hofer & Sandberg, 1987).

Furthermore, it is argued that firms' performance is associated with the leverage or rather the capital structure. Hence, several theories have been advanced to explain the relationship between capital structure and firm performance. Capital structure is combination of debt, preferred stock and common stock which the companies employed to finance their investment. Although striking an optimal mix of capital structure is continuously becoming an issue of debate among the scholars and practitioners as well, companies try to decide on the right mix of debt and equity in order to maximize the wealth of shareholders.

Additionally, for companies to raise funds or rather to mould their capital structure, they must do so through the financial market. Financial market is where funds are mobilized from the saving surplus unit (SSUs) to the Savings Deficit Units (SDUs) in the economy (Obaidullah, 2005). Thus, SSUs mostly household and individuals provide funds to SDUs for the purpose of investment. This important function of re-allocating funds is done by both conventional financial system and Islamic financial system in a similar way. However, the most fundamental difference between the two is that the latter's process is done in a Shari'ah compliant manner (ISRA, 2011).

2.0 PROBLEM STATEMENT

Capital structure of a firm has been the subject for debate among researchers since the seminal publication by Modigliani and Miller's (1958, 1963). Their initial findings of irrelevance of capital structure and the subsequent optimal capital structure triggered an intensive research. Thus, several extensions have been made to the theory in different research such as Robichek and Myers (1965), Jensen and Meckling (1976), Ross (1977), Leland and Pyle (1977) and Myers (1977). For example, Trade-off theories of corporate financing are developed based on the concept of target capital structure that balances various costs and benefits of debt and equity. These include the tax benefits of debt and the costs of financial distress Modigliani and Miller, (1963), various agency costs of debt and equity financing (e.g., Jensen & Meckling, 1976; Myers, 1977; Stulz, 1990; Hart & Moore, 1995), and the costs and benefits of signaling with capital structure (Ross, 1977).

On the other hand, according to pecking order model of Myers and Majluf (1984), the costs and the benefits that might lead to the emergence of a target debt ratio are second order. Thus, corporate financing choices are influenced by the costs of adverse selection that arise as a result of information asymmetry between better-informed managers and less-informed investors. These costs are incurred only when firms issue securities and the costs are lower for debt than for equity; hence, firms prefer internal financing and prefer debt to equity when external funds have to be raised (Hovakimian, Hovakimian, & Tehranian, 2004). Hence, scholars continued to hold different views about whether the effects of firms' performance are as a result of trade-off or to pecking order financing decisions. Consequently, Shyam-Sunder and Myers (1999), argue that the negative relationship between profitability and leverage is consistent with the pecking order but not with the trade-off theory. Similarly, Fama and French (2002) found that the negative effect of profitability on leverage is consistent with the pecking order model. In the same vein, Nor and Ramlee (1997) in their investigation of the reaction of financial performance to capital structure discovered that there is negative relationship between the variables in question. However, they found a significant positive relationship between earning per share and debt to equity in the finance and property sectors in Malaysia.

On the contrary, Hovakimian et al. (2001) found that even though high level of profitability is related to low leverage, it is equally associated with a higher probability of issuing debt vis-a-vis issuing equity, which is consistent with dynamic trade-off models (e.g., Fischer, Heinkel, & Zechner, 1989; Leland, 1994). Therefore, they conclude that the negative effect of market-to-book ratios on both the observed debt ratios and the probability of debt versus equity issue choice are well in line with both the trade-off and the pecking order models. Furthermore, Baker and Wurgler

(2002) suggest that neither the trade-off nor the pecking order theory is consistent with the negative effect of market-to-book ratios on firm leverage. They stress that the observed capital structures reflect the cumulative outcome of timing the equity market.

3.0 LITERATURE REVIEW

3.1 The impact of Capital Structure on Performance

The relationship between the leverage and the performance of firms has become prominent in the late 1980s and early 1990s as the global competitiveness of U.S. firms has declined (Hill, Hitt, & Hoskisson, 1988; Porter, 1992). Similarly, there are a number of researches which suggest that leverage has a non-neutral impact on firms' performance, irrespective of whether or not arbitrage is possible (Majumdar & Chhibber, 1999). As a result, there are contradicting and divergent theories that provide explanation on the most appropriate policy for management (Simerly & Li, 2000). For instance, firms can improve bottom-line performance and discipline managers to run more efficient operations by increasing debt. Since debt financing is tax deductible a portion of the cost of capital is passed from the stockholders to the government (Lubatkin & Chatterjee, 1994). Moreover, in the instance where the firms are faced with resource constraint, the issue of raising capital through debt or equity becomes important (Jensen & Meckling, 1976). While equity dilutes an owner-manager's share of profits, and thereby entrepreneurial incentives, motivating on-the-job consumption; raising debt avoids the sacrifice of incentive intensity since the entrepreneur can internalize to a greater degree the benefits of superior profitability (Majumdar & Chhibber, 1999). To this extent therefore, the higher level of debt is directly related to a higher level of performance.

3.2 Determinants of Capital Structure

The extent to which firms' financing decisions are affected by the firms' characteristics rather than being the result of the country factors is considered as a vital issue in capital structure theory (Rajan & Zingales 1995; Hall, Hutchinson & Michaelas, 2004). To this end, the character of the firms' asset structure, the riskiness of the different types of debt, increasing financial distress costs, and the agency cost of outside debt associated with high debt levels have been established as the factors that drive firm-specific capital structures (Watson & Wilson 2002). Similarly, de Jong, Kabir, & Nguyen (2008) identify the firms' specific factors to include but not limited to tangibility, firm size, risk, profitability and growth opportunities. Some of these determinants or firms

characteristics are employed as the control variables in this research. In the following paragraphs the determinants of capital structure are discuss in relation to the underlying theories.
The relative size of individual firms is associated with the capital structure. Hence, a number of researchers found that there is a significant positive relationship between leverage ratio and firm's size (Huang & Song, 2006; Ozkan, 2001). Large firms more often than not prefer long-term debt while small firms usually go for short-term debt. This is because large firms could benefit from economies of scale in issuing long-term debt, and may even have bargaining power over creditors. Therefore, the decision by a firm on whether to issue short-term debt or long-term debt could have an effect on the firm's performance. Thus, there is a need to control for this variable.

Established theories on growth opportunities generally argue that there is an inverse relationship between capital structure and growth opportunities (Huang & Song; 2006 & Ozkan, 2001). This growth opportunity entails future investment opportunities, which has the potential of increasing the value of the firm when undertaken. For example Myers (1977) observes that the amount of debt issued by a firm is negatively associated with the growth opportunities. He argues that high-growth firms may hold more real options for future investment than low-growth firms. If high-growth firms require more equity financing to exercise such options in the future, a firm with outstanding debt may forgo this opportunity because such an investment effectively transfers wealth from stockholders to debt holders (Huang & Song, 2006). Hence, firms with high-growth opportunity may not issue debt in the first place. Although, growth opportunities are assets that add value to the firm, they are intangible in nature and could not be collateralized nor can they generate immediate income (Ozkan, 2001).

Several proxies are used for growth opportunities such as Rajan and Zingales (1995) use Tobin's Q and Booth, Aivazian, Demirguc-Kunt, & Maksimovic (2001) use market-to-book ratio of equity to measure growth opportunities. Wald (1999) employed a 5-year average of sales growth. Additionally, Titman and Wessels (1988) use capital investment scaled by total assets as well as research and development scaled by sales as a proxy to growth opportunities.

3.3 The Conceptual Framework of the Study

Result of past researches on the influence of capital structure on performance is mixed. Apart from the studies which confirm that capital structure is not relevant to the performance of firms, other research established that capital structure have some impacts on performance. For example, Majumdar and Chhibber (1999) stressed that leverage or capital structure has effect on the companies' performance regardless of arbitrage. Lubatkin and Chatterjee, (1994) argue in favour of higher debt because according to them it is tax deductible, and, thus, avoiding some cost of capital. Similarly, Jensen and Meckling (1976) observed that in a situation where a firm is faced by the problem of funds constraint, the question of whether to go for debt or equity becomes important. On the contrary, another explanation of the relationship between capital structure and performance is provided as well. This alternative hypothesis, states that high leverage is associated with long-term performance declines. Debt holders are assumed to be more risk averse than equity holders (Smith &Warner, 1979). Consequently, they force managers to abandon risky projects and cut back on R&D expenditures. Leverage is, therefore, associated with decline in firms' innovativeness and the long-run consequence of such decline in innovativeness is a decline in the level of performance. Similarly, Kim (2006) found that high leverage – low equity-asset ratio – has a negative relationship with some firms' productivity in Korea.

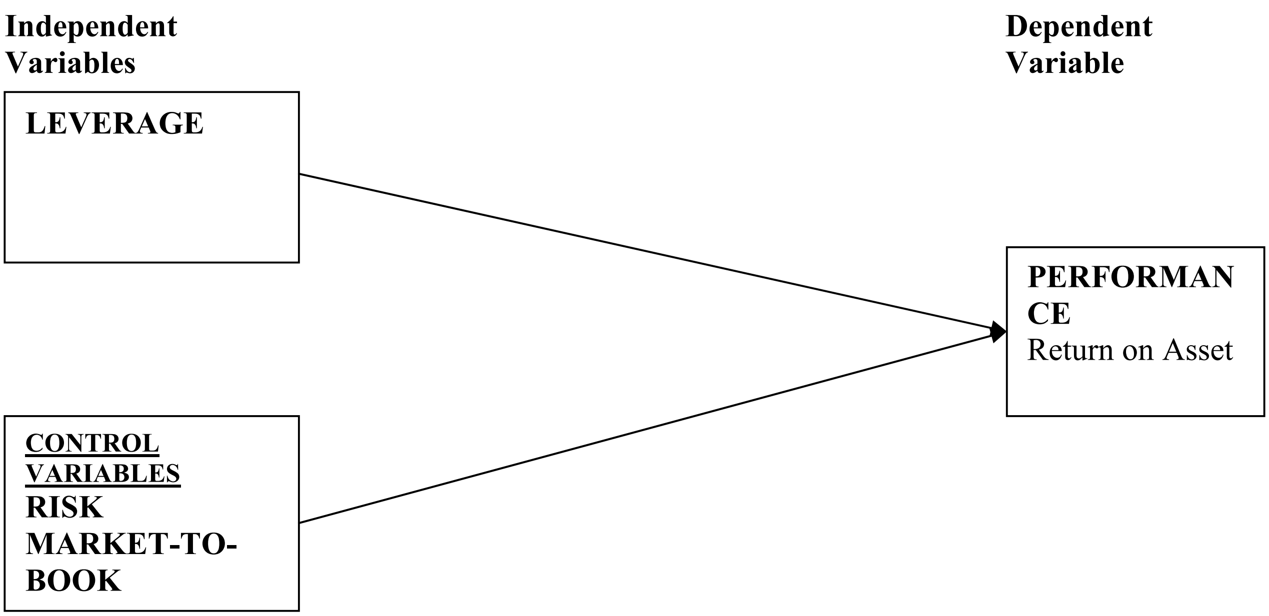

Figure 3.1
Conceptual Model of the Study

3.4 Statement of Hypothesis

Based on the relationships among the variables explained in the conceptual model above, the following hypotheses were formulated.

H1 Leverage has a significant effect on return-on-asset

H2a Company size has a significant effect on return-on-asset

H2b Level of risk has a significant effect on return-on-asset

H2c Liquidity has a significant effect on return-on-asset

H2d Market-to-book ratio has a significant effect on return-on-asset

3.5 Measures of Control Variables

The control variables used in the study were measured in different ways in line with the past studies. For instance, size of the firm is measured in terms of market capitalisation. Market capitalization which is the total value of the tradable shares of a publicly quoted company is equal to the product of share-price and the number of outstanding shares (Worldscope, 2010). Since outstanding stock is bought and sold in public markets, the investment community uses this figure to determine a company's size, as opposed to sales or total asset figures (Investopedia, n.d.). Similarly, capitalization could be used as a proxy for a firm's net worth and is a determining factor in some forms of stock valuation.

Market risk, also known as systematic risk or aggregate risk or undiversifiable, risk is the vulnerability to events which affect aggregate outcomes like broad market returns and total economy. In many contexts, events like earthquakes and major weather catastrophes pose aggregate risks—they affect not only the distribution but also the total amount of resources. This type of risk cannot be diversified away in return for risk-free rate (Lin & Hung, 2012). An important concept for evaluating an asset's exposure to systematic risk is Beta (Rozali & Hamzah, 2006). This is because Beta indicates the degree to which an asset's expected return is correlated with broader market outcomes; it is simply an indicator of an asset's vulnerability to systematic risk (Maginn, Tuttle, McLeavey, & Pinto, 2007). To this end, Beta value is used to measure market risk in this research.All the measurement of variables are summarize in Table 1 below.

Table 1: **Measurement of variables:**

Variables	*Measurement*
Market Risk (BETA)	Degree to which an asset's expected return is correlated with broader market outcomes (BETA)
Leverage (LevequtyLG)	Total Debt over Total Equity
Size of the firm (SIZE)	Market Capitalization
(ASSET)	Percentage of Independent Board of Directors
Market to book value (MTB)	Current closing price of the stock by the latest quarter's book value per share
(LiquidityLG)	Current Assets over Current Liability
Firm performance (ROALG)	Return on Assets (ROA)

4.0 METHODOLOGY

The population of the study consists of the all the firms that are listed on the main board of Bursa Malaysia as at November 2009. After data screening and removal of companies with substantial missing data, a total of 903 firms were used for the analysis. Hierarchical regression was conducted with the aid of Statistical Package for Social Science (SPSS) in order to ascertain the relationships of the variables under investigation. Before conducting the hierarchical regression, assumptions for multivariate analysis were checked. For instance, outliers cases were checked through Mahalanobis distance. Similarly, the test for normality was conducted using Skewness and Kurtosis output of descriptive statistics. The variables that were found to be non-nomal were transformed using Log10 as suggested by Tabachnick and Fiddel (2007).

Table 2: Descriptive Statistics

Variable	BETA	LevequtyLG	SIZE	ASSET	MTB	LiquidityLG	ROALG
Minimum	-2.50	-2.00	3.33	1.11	-0.80	-1.70	-1.70
Maximum	5.24	3.54	7.80	8.53	1.13	2.34	1.64
Mean	1.068	1.365	5.160	5.513	-0.082	0.114	0.701
Std. Deviation	0.980	0.775	0.759	0.732	0.298	0.433	0.420
Skewness	0.658	-1.378	0.718	0.457	0.363	0.222	-1.142
Kurtosis	1.712	2.759	0.599	2.424	0.171	2.042	3.345
Observation	821	799	889	903	884	815	722

From the Table 2 above, all the variables were confirmed to be normally distributed and, thus, appropriate for conducting multivariate as well as parametric statistics like hierarchical regressions and t-test. The normality of the variables is evident from the Skewness and Kurtosis values of the variables. From the above table the Skewness is well below +/- 3 and the Kurtosis is less than +/- 7. Given that the data used is ratio which consists of decimal values, the minimum and maximum for all the variables seem correct.

4.1 Hierarchical Regression

The presence of the control variables in the conceptual framework informed the decision to employ hierarchical regression. The process is that the variables will be entered into SPSS in steps. The variables that are being controlled for (Market risk, Liquidity, Market-to-book value and Size) are entered into the first block, and, then followed by the independent variable (Leverage) into the second block (Pallant, 2011). After entering all the variables, the model as a whole can be assessed based on the variance taken place because of the independent variables. In addition, the relative unique contribution of each variable can be assessed. Consequently, the influence of leverage, size, liquidity, asset, market-to-book ratio and beta on performance was assessed through hierarchical regression.

4.2 Return on Asset (ROA)

In the model, return on asset was employed as the measurement of performance; hence, the independents and control variables were regressed against it. The results revealed that, the control variables – level of risk, market-to-book ratio, liquidity and size – explained the variation in ROA for 22.9% as indicated by the R^2 in Table 3. After the inclusion of the main variable, leverage, the R^2 improves to about 24% thereby recoding about 2% change in the value of R^2. From Table 3, the overall model is significant (F = 34.441, P = .000). Analyzing the unique contribution of each independent variable reveals that all except size have statistically significant contribution in the model 1 and model 2 as shown in Table 3. Model 1 showed that Market-to-book ratio (β = 0.41, p = 0.000), liquidity (β = 0.165, p = 0.000) and level of risk (β = -0.101, p = 0.004). In Model 2 after LevequtyLG included to the second model the Market-to-book ratio (β = 0.41, p = 0.000), liquidity (β = 0.095, p = 0.039), level of risk (β = -0.096, p = 0.006), and leverage (β = -0.112, p = 0.014). In contrast, size does not have significant contribution in the model with values (β = 0.029, p = 0.505).

Table 3: Results of Hierarchical regressions of leverage, risk, market-to-book, liquidity, size and return-on-asset on return on assets:

Variables	Std Beta Model 1	Std Beta Model 2
Control Variables		
MTB	0.410***	0.407***
LiquidityLG	0.165***	0.095***
SIZE	-0.014	0.029
BETA	-0.101***	-0.096***
Independent Variables		
LevequtyLG		-0.112***
R square	22.9%	24.7%
Adjusted R square	22.4%	24.0%
F Value	46.838	34.441
F Change	46.838***	7.670***
Sig.	0.000	0.000
Durbin Watson		2.092

****p<0.01,**p<0.05, *p<0.10

5.0 DISCUSSION OF FINDINGS

From the regression results it is clear that the relationship between leverage and financial performance is negative. The implication of this is that the higher the leverage the lower would be the level of performance. This finding is in line with those of Shyam-Sunder and Myers (1999); Psillaki and Daskalakis (2009); and, Fama and French (2002) which are all consistent with the pecking order theory not the trade-off theory. Based on the pecking order theory, the choice of corporate finance is affected by the information asymmetry in favour of better informed managers against less informed investors. The negative result is perhaps related to the fact that most of the sampled firms are Shari'ah compliants companies which have maximum limit of leverage in line with Shari'ah provisions. Similarly, the investments in such companies are financed internally rather than using external borrowed funds.

Hypothesis, H2a which states that company size has a significant effect on return-on-asset, was tested and not supported based on the results of hierarchical regression. This means that company's size has no significant effect on financial performance. The implication of this is that whether a firm is large or small it would not have any significant effect on performance of the company. This finding is in line with the conclusion of several other previous researches. For instance, Capon, Farley, & Hoenig (1990) in their Meta-analysis observe that size of firm or business appeared to be unrelated to financial performance.

Hypothesis, H2b which states that, the level of risk has a significant effect on return-on-asset, was tested. The result shows that there is significant relationship between market risk and return-on-asset. Hence, this implies that the market risk has a significant influence on the firm's performance. Additionally, the negative relationship found implies that the lower the level of risk in the market, the better would be the level of firm's performance. This finding is quite in congruence with the general requirement of the investors who want their investments to be less risky.

Similarly, hypothesis, H2c which holds that liquidity has a significant effect on return-on-asset, was also tested using hierarchical regression. The statistical result shows that there is a significant relationship between the firm's liquidity and financial performance. Finally, the last hypothesis H2d under the second objective states that market-to-book ratio has a significant effect on return-on-asset. The hypothesis was subjected to hierarchical regression, and, subsequently, supported. Thus, there is a significant relationship between market-to-book ratio and firm's performance.

5.1 Managerial Implications

Given the negative relationship between leverage and firms financial performance, it is recommended that the policy makers should minimize their leverage ratio within the limit allow by the rules and regulation. The relationship between the two variables shows that high leverage ratio should be avoided. Hence, when a company is in need for financing capital, it should look for equity capital first and then consider debt only for the insufficient part. Findings of this research confirm that the more highly levered a firm is the lower would be its level of financial performance. In addition, the statistical significance of leverage on influencing performance suggests that managers should never underrate the importance of the former in formulating business strategy. The negative relationship between leverage and profitability is consistent with a number of previous literature such as Allen and Mizunot (1989); Barton and Gordom (1988);

Finally, out of the four control variables employed in this study, three were found to have a statistically significant influence on the level of firms' performance. Among the control variables that were found to have significant effect on performance, market-to-book and liquidity have positive effect while risk has negative effect. This suggests that policy makers should take particular concern about the variables in question. For instance, since market-to-book ratio and liquidity have positive influence on performance, the managers should strive to improve these variables which would eventually lead to higher level of performance. The fact that market risk has an inverse relationship with performance, the companies' policy makers should work towards reducing the level of risk by decreasing leverage. This is in line with the findings of Lin and Hung (2012). Systematic risk measured by Beta indicates the degree of uncertainty in the environment which can lead to an adverse effect on the performance. Hence, it is logical to find that the relationship between the risk and performance is negative. In contrast, firm's size showed no significant relationship with performance. This is quite in line with Capon, Farley, & Hoenig (1990) who concluded that bigness of a firm does not imply higher profitability.

5.2 Theoretical Implication

Given the conflicting views of researchers regarding the nature of relationship between capital structure/leverage on performance, this study takes a stand based on the empirical evidence. It should be noted that most of the investigation between the two variables were conducted on the conventional perspective. In contrast, this research used secondary data of companies listed on Bursa Malaysia with more than 80% being Shari'ah compliant. The outcome of this study confirmed that the leverage is inversely related with performance, and, this is consistent with the Pecking order theory. Furthermore, this finding corroborates those of Shyam-Sunder and Myers (1999),

5.3 Limitations and Directions for Future Research

This research just as other studies has faced with certain constraints, and, therefore, the findings should be adopted with caution. For instance, due to the large sample a cross-sectional data was used for the study instead of longitudinal. Given the nature of variables investigated in this research such as leverage and performance, changes in economic condition over time could affect them.

Therefore, it is hereby recommended that future research should focus on the use of longitudinal data as this would reveal all the possible changes that economic condition can cause over time.

6.0 CONCLUSION

Based on the extant literature review, a conceptual model was developed and subsequently tested using secondary data of listed companies on Bursa Malaysia. Consequently, the following conclusions were drawn:

First, leverage has a significant negative effect on the performance of companies. The regression results revealed that leverage consistently has a significant inverse relationship with the measure of financial performance, return-on-asset.

Finally, it is concluded that firms' characteristics such as risk, liquidity and market-to-book have significant relationship with financial performance. While liquidity and market-to-book have positive relationship with performance, risk has an inverse relationship which is quite logical and in line with the previous studies. In contrast, company size, has no significant relationship with performance.

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Strategic approach to Corporate Social Responsibility: A paradigm shift

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Abstract. The purpose of this paper is to justify the interdependency of business and the society and explore the benefit of integrating 'social responsibility' into the core strategy of business firms rather than practicing philanthropy. This paper offer an understanding of CSR, identifies the differences between traditional and strategic CSR and explores the concept and benefits of 'strategic CSR'. It concludes that businesses need to integrate the social responsibility and environmental challenges in to their core business strategy to become a good corporate citizen. In other words, by strategically practicing CSR, a company can make a profit and make the world a better place at the same time.

Keywords: Corporate Social Responsibility, business strategy, competitive advantage, social integration, strategic CSR.

1. Introduction

Over the past half century, business increasingly has been judged not just by its economic performance, but also by its social contributions. Today's business organizations are expected to exhibit ethical behavior and moral management and no corporations can operate only with traditional economic role. Now, not only are firms expected to be virtuous; they are being called to practice "social responsibility" or "corporate citizenship", accepting some accountability for societal welfare. Thus creation of shareholder wealth, once considered the ultimate corporate objective and yardstick of organizational value, is slowly becoming overshadowed by a broader conception of organizational success.

2. Relationship between 'business' and the 'Society'

Businesses are crucial members of society; in fact, many are also significant social institutions. The decisions they make and the actions they take reverberate throughout society. Society depends on businesses in their provision of jobs, investment, goods and services produced, and development of new technologies. By the same token, businesses depend on support and resources from society. So business and society are deeply and dynamically interdependent. Businesses can sustain their growth only if society is generally satisfied with their overall contribution to societal well-being. Michael E. Porter, a Harvard strategy guru, believes there is a "symbiotic relationship" between social progress and competitive advancement. (Porter and Kramer. 2006) This relationship "implies that both business decisions and social policies must follow the principle of shared value" (United Nations. 2009). In prioritizing social issues, Porter and Kramer's framework is a continuum from generic social issues to value chain social impacts through to social dimensions of competitive context that distinguishes how significantly a company's activities affect social issues, and how these issues in turn affect a company's competitiveness. (Lodge, E et al. 2009)

3. Emergence of the concept of CSR and its approaches: A literature review

Over the last few decades, corporate social responsibility (CSR) has grown from a very narrow and marginalized notion into a complex and multifaceted concept, one which is increasingly central to today's corporate decision making.

In 1979, Carroll differentiated between four types of corporate social responsibilities: economic, legal, ethical, and discretionary. The first category that Carroll delineated is a responsibility that is economic in nature. Business from this perspective is the basic economic unit in society and all its other roles are predicated on this fundamental assumption (Jamali, D. 2006). In terms of the effect of CSR on economic performance, Friedman clearly states that companies have no social responsibility at all, just a responsibility to increase their profits. (Lodge, E et al. 2009). What Friedman ignored was that a businessperson's decisions in the ethical and social responsibility realms could affect many different people, groups, and institutions, which, in turn, can influence the organization’s well being. (Lantos, G. 2001)
Modern CSR was born during the 1992 Earth Summit in Rio de Janeiro, as an explicit endorsement of voluntary approaches rather than mandatory regulation. (Christian Aid. 2004). CSR can be defined as “situations where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams, A et al. 2006). CSR is regarded as voluntary corporate commitment to exceed the explicit and implicit obligations imposed on a company by society's expectations of conventional corporate behavior. Hence, CSR is a way of promoting social trends in order to enhance society's basic order, which can be defined as consistency of obligations that cover both the legal framework and social conventions. (Falck et al. 2007)

The core idea of the CSR concept is that the business sector should play a deeper (non-economic) role in society than only producing goods and making profits. This includes society and environmentally driven actions, meaning that the business sector is supposed to go beyond its profit-oriented commercial activities and increase the well-being of the community, thereby making the world a better place. (Malovics et al. 2008). John Elkington, the sustainable business theorist, has suggested ‘triple bottom line’, which has been used in corporations as a tool for balancing economic goals with a view to ‘do better by the environment’. However, it seems that the concept tends to yield strategies that try to meet the triple bottom line by minimizing environmental and social liabilities. (Wilenius, M. 2005). In 2006, Porter and Kramer take the definition of CSR one step further by creating a corporate social agenda which “looks beyond community expectations to opportunities to achieve social and economic benefits simultaneously”. It moves from acting as good corporate citizens and mitigating harm from current business practices, to finding ways to reinforce corporate strategy by advancing social conditions. (Lodge, E et al. 2009)

A key point to note is that CSR is an evolving concept that currently does not have a universally accepted definition. Generally, CSR is understood to be the way firms integrate social, environmental and economic concerns into their values, culture, decision making, strategy and operations in a transparent and accountable manner and thereby establish better practices within the firm, create wealth and improve society.

4. The CSR debate

Because CSR has emerged from the tensions between business and society, the voices for doing good have overridden much of the complexity associated with actual implementation of social and environmentally good works. (Gill. 2007)

Christian Aid Report 2004 revealed the corporate enthusiasm for CSR is not driven primarily by a desire to do good for the communities in which companies work. Rather, companies are concerned with their own reputations, with the potential damage of public campaigns directed against them, and overwhelmingly, with the desire and the imperative to secure ever greater profits. (Christian Aid. 2004). According to the Corporate Watch Report 2006, over 80% of corporate CSR decision-makers were very confident in the ability of good CSR practice to deliver branding and employee benefits. For the example of simple corporate philanthropy, when corporations make donations to charity they are giving away their shareholders' money, which they can only do if they see potential profit in it. This may be because they want to improve their image by associating themselves with a cause, to exploit a cheap vehicle for advertising, or to counter the claims of pressure groups, but there is always an underlying financial motive, so the company benefits more than the charity. (Corporate Watch Report. 2006)

Furthermore, in "cosmetic" CSR reports companies' social and environmental good deeds are often presented that simply share 'aggregate anecdotes about uncoordinated initiatives' to demonstrate a company's social responsibility by telling what a company has done to reduce pollution, waste, carbon emissions, energy use, and so which are typically described in terms of dollars or volunteer hours spent, but rarely in terms of any actual impact. (United Nations. 2009)

5. Traditional Vs Strategic CSR – a paradigm shift.

Businesses can have a positive impact on society and development through three main avenues: (a) employment benefits, (b) community development and philanthropy, and (c) core business CSR strategy. The first two avenues can be broadly grouped together as traditional CSR. Traditional CSR activities that encompass community development and philanthropy are usually seen as distinct and unrelated to core business operations. Business could have a CSR programme of education and healthcare while polluting the environment and treating workers poorly. Strategic CSR is meant to address this problem by addressing any negative value-chain impacts while supporting the business strategy and the needs of the community. Thus traditional CSR is differentiated in motivation, implementation, and impact from Strategic CSR. (Werner, W. 2009)

Porter and Kramer observed in a recent Harvard Business Review article that though organizations have increased their emphasis on CSR, these activities are usually not connected to the organization's business strategy. The result is suboptimal economic or social impacts. When conducted with no clear strategic framework, CSR practice often results in a poor hodgepodge of uncoordinated CSR and philanthropic activities, disconnected from the company's strategy which neither makes any meaningful social impact nor strengthens the firm's long-term competitiveness. Porter and Kramer contend that organizations often develop CSR programs based on doing something good, creating programs in a reactive manner in response to external pressures from society, enacting activities that are aimed solely at public relations, or gaining a positive score on CSR scorecards which ultimately failed to connect CSR activities to their core business strategy. (Milliman et al. 2008.) In addition to the fundamental debate about CSR's relationship to the firm's bottom line, Porter argue that CSR requires a major focus, using a strategic analytic approach rather than reaction to outside pressures or good intentions. Using the same value chain, he proposed to map corporate strategy, and then propose the value chain that can identify the positive or negative social consequences of all a firm's activities. (Gill, S. 2007)

Corporations face an increasingly competitive and globalized environment where business activities and perceptions are placed under escalating scrutiny. CSR will only enhance a company's reputation or access to capital if the public is convinced that they really are having a positive impact on society.

6. Strategic CSR – a 'Win-Win' strategy

CSR is supposed to be win-win. The companies make profits and society benefits. Having identified social issues, Porter and Kramer make a bold claim: "The essential test that should guide CSR is not whether a cause is worthy but whether it presents an opportunity to create shared value—that is, a meaningful benefit for society that is also valuable to the business". As a result, they show how a company can create a corporate social agenda, composed of "strategic CSR." (Porter and Kramer, 2006)

The concept of "strategic CSR" by Porter and Kramer has been supported by several authors and there is general evidence that firms are beginning to benefit from strategic CSR activities. It provides an opportunity to measure the benefits of CSR in a broader context than simple correlations between philanthropic contributions and profits. Recent literature in the business-and-society field implicitly or explicitly takes a more strategic orientation to various components of CSR. (Burke, L et al. 1996)

Porter and Kramer's view is that organizations should carefully target CSR programs which are tightly linked to core business values. These authors reason that by linking the CSR approach with strategy these programs will provide a greater impact on both the organization and society. They claim that "the more closely tied a social issue is to a company's business, the greater the opportunity to leverage the firm's resources, and benefit society." Strategic CSR approach is particularly important because it creates social and economic benefits simultaneously which is designed to produce profits and social benefits rather than profits or social benefits. (Milliman et al. 2008.)

Werner argued that, strategic CSR is increasingly becoming integrated into core business operations. When properly designed and implemented to fit the needs of the community and corporation, CSR can become source of opportunity, innovation, and competitive advantage. Strategic CSR also ensures that a business is focused on minimizing potential negative impacts of its operations. (Werner, W. 2009)

Research findings by Husted et al, shows that firms that participate in CSR programs are highly central to their business missions are more likely to create business value because the firm develops resources and capabilities in the solution of social problems that can then be applied to its business activities. The more closely related the social projects are to the core business mission, the more easily transferable are these resources and capabilities. (Husted et al. 2009)

United Nations studies on trade and investment (2009) identified that many businesses realize that local environmental degradation, global climate change, poor labor standards, inadequate health and education systems, and many other social ills can add directly to the costs and risks of doing business domestically and globally. They can increase operating costs, raw material costs, hiring, training and other personnel costs, security costs, insurance costs and the cost of capital. They can create both short-term and long-term financial risks, market risks, litigation risks and reputation risks. Companies that understand and address these challenges can improve their risk and reputation management, reduce their costs, improve their resource efficiency and enhance their productivity which can make the highest impact to society and business's future. (United Nations. 2009)

Thus CSR is now a strategic imperative and embedded into companies' core business. Strategic CSR accomplishes strategic business goals, as well as social goals – it benefits both the business and society.

7. 'Corporate Social Responsibility' or 'Corporate Social Integration'

The practice of corporate social responsibility has evolved significantly over the past several decades to a point where it is becoming an important part of corporate strategy and evolved into a new paradigm of "corporate community involvement." Firms are increasingly devoting more resources to their social initiatives and making them a key factor in establishing a competitive advantage.

Corporate community involvement that entails a significant use of firm resources related to the organization's core competencies Hess, D et al. (2002) termed these programs "corporate social initiatives" or "corporate social integration" (CSI). The characteristics of corporate social integration distinguish them from their predecessors. First, CSI programs are connected to the core values of the firm. By their nature, they reflect corporate recognition of specific community problems or needs as expressed by relevant stakeholder groups. Second, CSI programs are linked with the core competencies of the firm which provide a greater benefit to corporate reputation assets than traditional corporate philanthropy. While widespread, the appropriateness of corporations' philanthropic contributions remains controversial. (Hess, D et al. 2002)

CSI is a long- lasting community involvement program which is more likely to improve the image of the corporation than after-profit cash contributions. This is a reflection of the basic sentiment that people need help solving their problems, not just money. Through socially integrated firms can take a proactive role in shaping their reputations and demonstrate commitment to their espoused values, it requires the firm to look at the expectations of the consumer, labor, and capital markets, and most importantly, of the entire local community. Being responsive to these expectations is the key to the success of any corporate social initiative. (Hess, D et al. 2002)

8. Conclusion

In his speech at the Johannesburg World Summit for Sustainable Development in 2002, the UN Secretary General Kofi Annan expressed the challenge of corporate responsibility in the following way:

> "I hope corporations understand that the world is not asking them to do something different from their normal business; rather it is asking them to do their normal business differently." (IISD. 2007)

Companies are now held accountable for the social consequences of their actions and are expected to consider social and environmental consequences along with their profit-driven priorities: The question is no longer 'whether' but 'how' organizations can combine the principles of social responsibility with profit generation (Dentchev, 2005. Gill 2007). The whole new paradigm shift from traditional to strategic CSR can be an answer to this question.

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The effect of corporate social responsibility on the relationship between corporate governance, internal audit and firm performance

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Abstract: The purpose of this study is to identify the relationship between corporate governance (audit committee, director remuneration and independent board of directors), internal audit and firm performance (ROE) of PLCs in Malaysia for year ended 2010. Furthermore, this study also attempts to investigate the moderating effect of Corporate Social Responsibility (CSR) towards the relationship between corporate governance, internal audit and firm performance. The study used Hierarchical Regression analysis to ascertain the relationship between corporate governance, internal audit and firm performance. The result of the study found that there is a significant relationship between the number of audit committee, percentage of executive director remuneration and internal audit fee with firm performance. However, for the moderating effect of CSR as a multiplier did not supported and did not strengthen the relationship between corporate governance, internal audit and firm performance of Malaysian public listed companies for the year ended 2010.

***Key words*:** Corporate Social Responsibility, Corporate Governance, internal audit, firm performance, Public Listed Companies, Malaysian.

1.0 INTRODUCTION

The Corporate Governance (CG) has been significantly important issue in corporate world after the unexpected collapse of several high profile companies such as the oldest bank in England Barring in 1995, Enron in UK in 2001 and WorldCom in 2002 in the US (Rashidah, 2006). The history of the past, course the investors to be careful in the future. McKinsey (2002) in his survey found that majority of the investors would be willing to pay more to invest in a company with good and effective corporate governance. The existent of CG in the company is very important because corporate governance is:

"*The process and structure used to direct and manage the business and affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long term shareholders value, whilst taking into account the interest of other shareholders"* (Finance Committee, 1999).

It is true that an effective CG practices is very important to the company since it has strong predicting power on company's performance. However, in order to achieve an outstanding CG performance the companies need to consider another important element that contribute to the company overall performance which is Corporate Social Responsibility Disclosure (CSRD). Therefore, the purpose of this study is to investigate the moderating effect of CSRD on the relationship between corporate governance and the firm performance of Public Listed Companies (PLCs) in Malaysia

Companies with effective CG practices can provide transparent financial reporting information to potential and existing shareholder. It also must implement an effective board governance process and effectives independent directors (Rashidah, 2006). This is because poor CG are related to weak investor relations, a low level of transparency in disclosing information (CSR) and ineffectiveness of regulatory agencies in enforcing legislation in punishing offenders and protecting minority shareholders (Mohamad,2002).

Furthermore, in Malaysia, there is no mandatory requirement by Bursa Malaysia to engage and disclose CSR information because most of the companies in Malaysia found that CSR is an extra burden to be bare by the company because it involves high cost and these will affect profitability of the company in the long run (Ahmad & Arsad 2012)

However, previous studies have found that CRSD reflected the corporate image and performance of the company (Adams & Zutshi, 2006; Ferns, Emelianova, & Sethi, 2008; Friedman & Miles, 2001; Kolk, 2005), since CRSD represent an expression of the corporation accountability to the society (Manasseh, 2004). Board of Directors as an agent to the stockholders (principal) not only needs to maintain a good corporate image but also responsibility to maximize the shareholder wealth as defined in agency theory by Jensen and Meckling (1976).

Agency theory is related to the relationship between principal and agents whereby the principal appoint an agent to act on behalf of them and have the right to make a decision on behalf of the company (Jensen and Meckling,1976).

However, this contractual relationship sometimes had been jeopardized by the agent when they seek self-interest rather than maximizing the shareholders wealth (Rashidah, 2006). This self-interest attitude will create an agency problem to the company when the agents fail to perform their duties. Shareholder or principal have to incurred extra monitoring cost, bonding cost and residual cost to monitor and control the behavior of the managers. In order to avoid all the extra costs a standard corporate governance policies and a strong internal audit policies are needed as a bonding and monitoring tool to the conflict between managers (agent) and shareholders (principal). However with the existent of CSRD, it will improve the monitoring system of the company and add value to the company's overall performance. Therefore this study will investigate the effect of CSRD on the relationship between corporate governance, internal audit and firm performance of public listed companies in Malaysia.

2.0 RESEARCH OBJECTIVES

This study is to identify the relationship between corporate governance, internal audit and firm performance of PLCs in Malaysia. Furthermore, this study also attempts to investigate the effects of CSR disclosure dimension towards the relationship between corporate governance, internal audit and firm performance.

3.0 RESEARCH QUESTIONS

Based on the above discussion, the following questions arise:

1. Is there any relationship between corporate governance, internal audit and firm performance of Public Listed companies in Malaysia?
2. Is there any effect of CSR disclosure towards the relationship between corporate governance, internal audit and firm performance of Public Listed companies in Malaysia?

4.0 LITERATURE REVIEW

A sound CG system is referring to the structured process in setting the policies and procedure for the companies' direction and control in order to provide an effective protection for shareholder and creditor (Rashidah & Norma, 2009). In Malaysia there is a body that responsible in setting the rules and regulation for the implementation of CG in Malaysia. They are known as Malaysia Code of Corporate Governance (MCCG). The Malaysia Code of Corporate Governance defines CG into two:

> *i. CG encompasses the relationship and ensures pattern of behavior between agents in a limited liability corporation the way not only managers and shareholder and the stakeholders. Their interactions form the behavioral side of CG.*
>
> ii. *CG also refer to the set of rules that frame these relationship and private behaviour , shaping corporate strategy formation which work as company law and securities regulation including private and self-governance. It mostly concerned on how managers should act.* Sources: MCCG (2007)

To increase the level of accountability and transparency, the PLCs need to implement CSR disclosure effectively in order to be competitive in the global market. There are many definition of CSR. In Malaysia CSR is defined as:

"Open and transparent business practices that are based on ethical value and respect for the community, employees, the environment, shareholders and other stakeholders are designed to deliver sustainable value to society at large" (Bursa Malaysia, 2006)

Therefore, Corporate Social Responsibility (CSR) framework was established by Bursa Malaysia on September 5, 2006 in order to guide the PLCs in implementing and reporting of CSR. This CSR framework focuses at four main areas which is environment, workplace, community and marketplace (Bursa Malaysia, 2012).

There are some basic theoretical aspects that relate to CG and CSR, where most of the theories focusing more on the role or responsibility played by the board toward the shareholders. Agency Theory introduced by Jensen and Meckling (1976) related to contractual relationship between the shareholders (principal) that provides capital to the company and Chief Executives Officer (CEO) including the top management team (agents) who have been given a duty to fulfill their obligation maximizing the shareholder wealth (Rashidah,2006). The conflict of interest issue or agency problem will cause the agent to bare additional cost to monitor the management's behaviors such as appointment of the watchdog group, hired external auditors and internal auditors. The existence of CSRD can reduce the agency problem and asymmetry information issues between agents and principals. However, based on a study done by Mohamed Zain and Mohammad (2006) found that the modesty and secrecy culture in Malaysian corporations make companies reluctant to disclose CSR in their annual report. Thus, directly it will effect to CG performance. Therefore, to find the answers for the question, this research will investigate the effect of Agency theory in PLCs in Malaysia environment in determining a good value of CG practices.

There are many factors that influence the CG performance. Based on Rashidah and Mohamad Yoosuf (2005) , the studies found that executives directors remuneration had a positive relationship with performance measured by operating cash flow to total assets. However, Rashidah and Mohamed Zawawi (2005), found that executives directors remuneration and company performance have no significant effect when the performance are measured by ROA , ROE and EPS. This inconsistent findings show that there is not suitable mechanism used by the companies to ensure the effectiveness of director remuneration to performance.

Audit committees were developed to ensure board play their fiduciary responsibilities to increase the level of accountability and trustworthiness to the shareholder and the public as a whole. MCCG (2011) required minimum three directors sit in audit committee board. Based on the survey done by Haron (2005) the level of compliance is high (92%) of the 126 companies in the sample followed the requirement of MCCG.

Internal Audit is a vital role to the firm performance. Internal Audit service play an important role in PLCs to increase level of transparency and credibility of financial reporting. It also helps to improve the effectiveness of risk management, control and governance process. Rashidah & Norma (2009) studied on 100 PLCs in Malaysia in 2006 using CSR-based Corporate Governance Score Checklist found that only 16 over 95 PLCs that achieved the score more that 50% point in managing their business risk and implementing internal audit system and reported it in their annual report. This shows that the risk management and internal audit awareness among PLCs in Malaysia is still low. Based on the previous studied done by Goodwin (2004) on the internal audit in Australia and New Zealand companies found that, average of $927,727 were spent for outsourcing internal audit by a private company in Australia and New Zealand. In Malaysia this huge investment on internal audit or outsourcing internal audit is very expensive for small company but not to the big PLCs. As a result, internal governance fails to be implemented effectively.

CSRD is an extension of non-financial information provided by companies relating to their activities, aspiration, public image with regard to their employee, environmental, community and consumer issue (R. Gray, Kouhy, & Lavers, 1995b). This extended have been supported by Malaysian Prime Minister, Dato' Sri Najib Tun Abdul Razak. He claimed that good CSR is the key towards ensuring the sustainability of business and Malaysian companies in the years ahead (Nor Mohamed Yakcop, 2004). Even though Corporate Social Responsibility Disclosure (CSRD) is a voluntary disclosure as it not required by any accounting regulation in Malaysia, but by participating and disclosing CSR activities will represent an expression of the corporation accountability to the society (Manasseh, 2004).

There are few studies related to the CSRD in Malaysia, one of the first published a study on CSR were Theoh and Thong in year 1984. They found that most of the companies are aware of their social roles because of top management philosophies. Therefore, having good corporate governance will give a positive impact to the level of CSRD. But, according to research done by Mustaruddin, Norhayah and Rusnah (2010) toward PLCs in Malaysia found that the growing level of involvement and CSR disclosure is still limited with general information and qualitative statements. These will affect the performance of the company because Loh (2002) found that higher level of voluntary disclosure may gain numerous benefits, including a better managed, increased management credibility, more long-term investors and better market performance. It was supported by research done by Hassan, Rashidah and Mahenthiran (2008). They found that when corporate governance mechanisms are strong, transparency is increased and lead to higher performance.

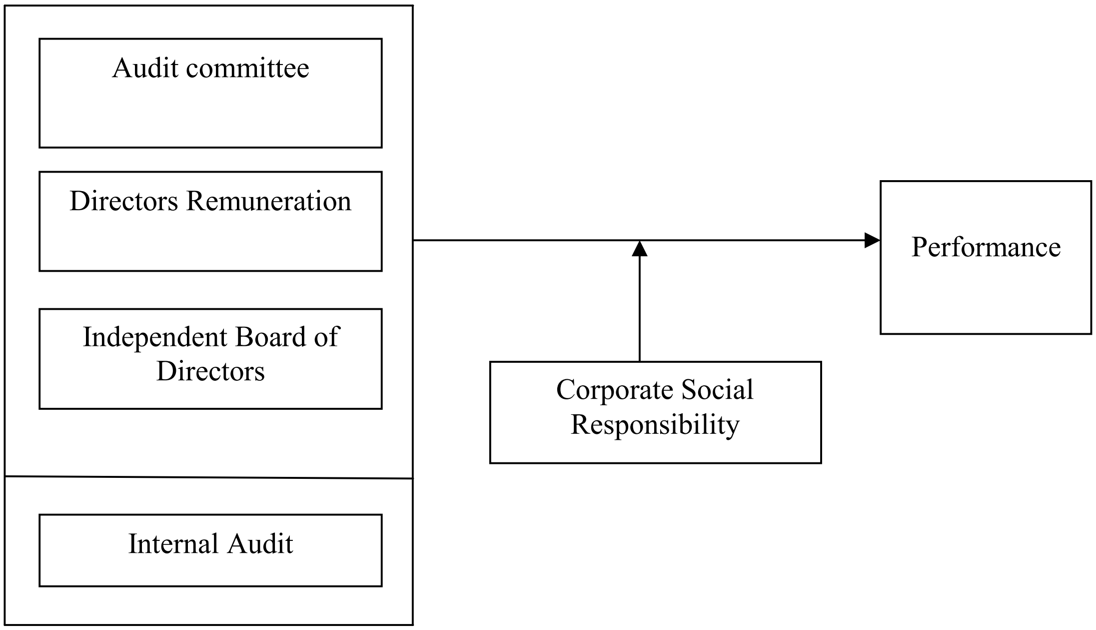


Table 1: Conceptual Framework

5.0 HYPOTHESES DEVELOPMENT

Previous studies identified that corporate governance has a positive effect over corporate performance (Haat, Rahman, & Mahenthiran, 2008). Most of the researchers found that the boards of directors play an important role in monitoring the internal governance of the company in solving the agency problems between management and shareholders. The board also has the power to hire, fire and compensate the top-level decision managers and to screen and monitor vital decisions of the directors. The development of good corporate governance depends a lot on the board of director management skill in creating succession in achieving company performance.

H1: Number of audit committee has a significant positive relationship with firm's performance (ROE).

H2: Percentage of executives' directors' remuneration has a significant positive relationship with firm's performance (ROE).

H3: Percentage of independent directors has a significant positive relationship with firm's performance (ROE).

H4: Internal Audit Fees has a significant positive relationship with firm's performance (ROE).

H5a: The higher the Number of audit committee, the higher the firm performance, if there is a higher CSR index in the company

H5b: The higher the percentage of executives' directors' remuneration, the higher firm's performance, if there is a higher CSR index in the company.

H5c: The higher the percentage of independence directors, the higher firm's performance, if there is a higher CSR index in the company.

H5d: The higher the internal audit fees, the higher firm's performance, if there is a higher CSR index in the company.

6.0 METHODOLOGY

The population of the study consists of the all the companies that are listed on the main board of Bursa Malaysia as at 31 December 2010. After data screening and removal of companies with substantial missing data, a total of 105 companies were used for the analysis. Hierarchical regression was conducted with the aid of Statistical Package for Social Science (SPSS) in order to ascertain the relationships of the variables under investigation. Before conducting the hierarchical regression, assumptions for multivariate analysis were checked. For instance, outlier cases were checked through Mahalanobis distance. Similarly, the test for normality was conducted using Skewness and Kurtosis output of descriptive statistics. The variables that were found to be non-nomal were transformed using Log10 as suggested by Tabachnick and Fiddel (2007).

7.0 MEASUREMENT OF VARIABLES

This paper divided into three types of variables based on past literature. Dependent variable is firm performance and measured by ROE. The independent variables are divided into two categories. First independent variables represent corporate governance mechanism including audit committee, director's remuneration and independent board of directors. Second independent variable represents internal audit of the company using internal audit fee. To test the strength of the relationship between independent variable and dependent variable, moderating variable is used and proxy by CSR.

Table 2: Measurement of variables

Variables	*Measurement*
Firm performance	Return on Equity (ROE)
Audit committee	Number of audit committee
Directors remuneration	Percentage of directors remuneration
Independent Board of Directors	Percentage of Independent Board of Directors
Internal Audit fee	Log Internal Audit fee
Corporate Social Responsibility	CSR Disclosure Index

From the Table 3 below, all the variables were normally distributed except for ROE the Kurtosis is 23.889. The normality of the variables is evident from the Skewness and Kurtosis values of the variables where all the variables have Skewness below +/- 3 and the Kurtosis less than +/- 7. Therefore to overcome the problem we standardized the value using the zscore to get normally distribution data and avoid multicollinearity problem when running the data later. Now it is appropriate to conduct a multivariate analysis as well as parametric statistics like hierarchical regression and t-test from the normal data above. This confirm that the data used is ratio which consists of decimal values, the minimum and maximum for all the variables were seem to be correct.

Table 3: Descriptive Statistic for Dependent Variable, Independent Variables and Moderating Variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Return on Equity	105	-237.82	467.04	22.656	65.049	1.864	23.889
Independent Director %	105	0.14	1.00	0.453	.1523	0.735	1.104
Independent Audit Committee	105	0.00	1.00	0.854	0.171	-1.282	3.939
Exe. Director Remuneration	105	0.04	0.99	0.763	0.226	-1.458	1.195
Corporate Social Responsibility	105	4.11	84.93	31.294	18.304	0.715	-0.191
LG Internal Audit Fees	99	3.70	6.56	4.972	0.636	0.297	-0.252
Valid N (listwise)	99						

7.1 Hierarchical Regression

The presence of the moderate variables in the conceptual framework informed the decision to employ hierarchical regression. The process required the variables to be entered into SPSS in 3 steps. The variables of CG proxy by audit committee, director's remuneration, and independent board of directors, followed by internal audit proxy by internal audit fee are entered into the first block, and, then followed by the moderated variable which is CSRD index into the second block. Lastly, the multiplier variables between CSRD and independent variables are entered into third block to test the strength of moderator variables (CSR index) toward the relationship between corporate governance, internal audit and firm performance.

7.2 Return on Equity (ROE)

In the model, return on equity was employed as the measurement of performance; hence, the independents and moderate variables were regressed against it. The results revealed that, the independent variables – percentage of directors' remuneration, percentage of independent directors, number of audit committees and internal audit fees – explained the variation in ROE for 4.7 % as indicated by the R^2 in Table 1 representing by model 1. After the inclusion of the moderate variable – CSRD, the R^2 improves to about 7.7% as in model 2. Finally, after the interaction term the R^2 increase 37.4%. From Table 4, the Hierarchical regression show that model 1 is not significant (F=1.156, P=0.335) and after moderating variables have been included in model 2, the model is still not significant (F = 1.559, P = 0.179). However, after the interaction term is included the model become significant with (F=5.913, P=0.000).

7.3 Corporate Social Responsibility

The moderating variable namely CSR was included in the regression model with all the independent variables. This model was run to know whether CSRD had any impact on independent predictor. The moderating effect of CSR on the relationship between CG mechanism and performance shown in model 2.Although the whole model 2 are not significant for this study CSR show a significant weak level of relationship with performance (ROE) at p=0.083. However, model 3 were found to be significant as the result show R square 37.4%, Adjusted R square 31.1% and R square change 29.7% . The F value is 5.913 and F change equal to 10.555. This indicate that CSR as moderator variable was found to be marginally significant (p<0.00) and fit to the model 3 in this study.

Further analysis done to determine whether the CSR act as pure moderator and found that CSR have significant positive relationship with performance at a significant level of p=0.000. Beside that, there were two interaction terms that have significant relationship with performance which is interaction term between CSR and percentage of audit committee ($\beta = -1.289$, $p = 0.000$) and interaction term between CSR and internal audit fee ($\beta = -3.153$, $p = 0.001$). Although both relationships are significant with performance, however they did not support Hypothesis H5a and H5d because the result is contradict with the hypothesis developed in term of the signed use. H5a is defined as the higher the number of audit committee the higher the firm performance if there is a higher CSR index in the company. However the result shows that the number of audit committee has a negative relationship with firm performance if there is a higher CSR index in the company. H5d also found contradict with the existent hypothesis developed in this study.

The result shows that, the existence of CSR index negatively and significantly moderates the relationship between internal audit fees and firm performance. Therefore H5d is not supported although it significant. We can conclude that, the existence of CSR index is not part of the relationship between CG mechanism, internal audit system and firm performance of PLCS in Malaysia. The existence of CSRD as moderator only influence model 3, however Hypothesis H2, H5a, H5b, H5c and H5d are not supported in Table 5.

Table 4: Regression Model

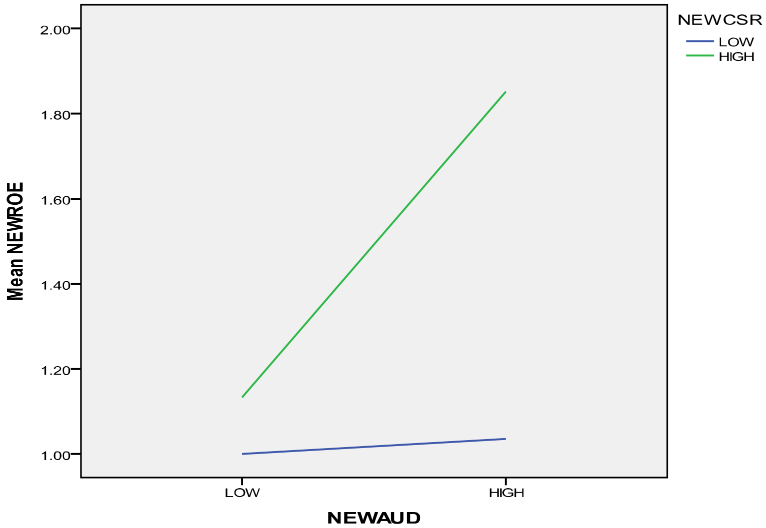
Variables	Std Beta Model 1	Std Beta Model 2	Std Beta Model 3
Independent Director %	0.016	0.011	0.306
Independent Audit Committee	0.038	0.040	0.548
Exe. Director Remuneration	-0.006	0.000	0.043
LGIAUDF	0.208**	0.116	0.759
Moderating Variables			
Corporate Social Responsibility		0.198*	4.722
Interaction terms			
NID X CSRD			-0.562**
AUD X CSRD			-1.289
EDR X CSRD			-0.159
LGIAUDFCSRD			-3.153
R square	4.7%	7.7%	37.4%
Adjusted R square	0.6%	2.8%	31.1%
F Value	1.156	1.559	5.913**
F Change	1.156	3.069	10.555
Sig.	0.335	0.179	0.000
Durbin Watson			1.810

****p<0.01,**p<0.05, *p<0.10

8.0 FINDINGS AND DISCUSSION

Based on our empirical result, we found that the relationship between corporate governance and performance is not supported accepted for H5. In order to understand further the relation several graphs had been developed to analyze the effect of moderator (CSR) to the relationship between CG mechanism, internal audit and firm performance.

Figure 1: Moderating effect of CSR on the relationship between number of audit committee and firm performance:



The graph above shows the role of CSR in moderating the relationship between audit committee and firm performance. Plotting the interaction term between CSR and Audit committee to firm performance shows that the lower the audit committee the lower the firm performance with the presence of high CSR. Or else, the higher the audit committee members in the board, the higher the firm performance but lower the CSR disclosure. This finding did not support hypotheses H5a. The study indicates that high audit committee will cause the firm performance become higher if the companies have low CSRD. The result are consisting with Chen, Srinidhi ,Tsang and Yu (2011) where they argue that auditors are less likely to issue a going concern opinion and less likely to resign from the firm that presence of high CSR. In addition, they found high CSR present lower risk to the auditors and will result in lower audit effort. If the companies have low CSRD, it present higher risk to the auditors and will result in higher audit effort and high audit committee needed.

Figure 2: Moderating effect of CSR on the relationship between percentage of executive directors' remuneration and firm performance:

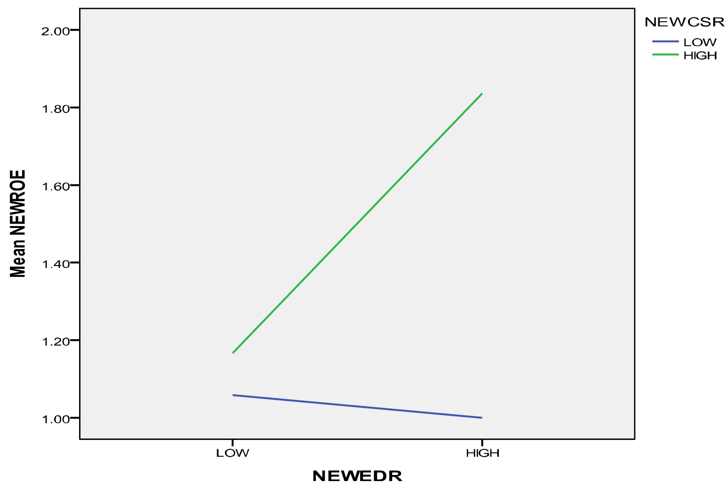
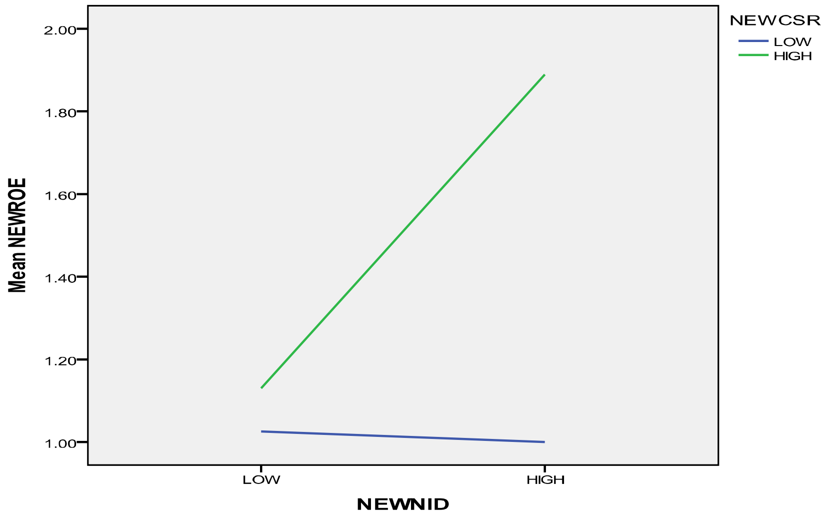


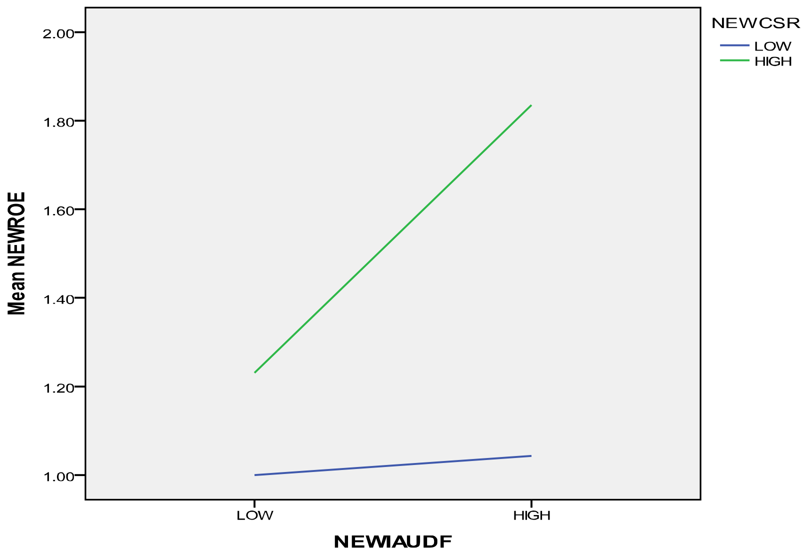
Figure 2 show that interaction term between CSR and percentage of executives directors remuneration to firm performance that show that the higher the percentage of executives directors remuneration the lower the firm performance and lower CSR disclosure. But when the percentage of executives' directors' remuneration is low the firm performance become higher and CSR disclosure also become higher. This finding did not support the hypotheses H5b may be because the percentage cost of paying the executives directors is to higher will reduced the firm retained profit of the PLCS and the company will reduce their CSR activity in order to save the companies money. This finding explain that director with high remuneration percentage will not help to improve the company performance because they are more on pursuing for themselves rather than to the company wealth. This finding contrast with Agency theory which clarify that the higher the director remuneration the higher the company performance. Jensen and Meckling (1976)

Figure 3: Moderating effect of CSR on the relationship between independent directors and firm performance:



Plotting the interaction term between CSR and percentage of independence directors with firm performance show that the lower the percentage of independence directors the lower the firm performance with the present of high CSR disclosure. Otherwise the result show that higher the percentages of independences directors the higher the firm performance with the present of lower CSR disclosure. Although the finding is significant but the H5c did not support the hypotheses developed based on previous study but the result indicate that company with high level of independency of board composition will show a good performance but will have low CSRD. This finding is consistent with the previous study done by Eng and Mak (2003); Barako, Hancock and Izan (2006) and Elinda and Nazli (2010). They found that independent directors prefer to focus more on corporate financial rather than social performance since in corporate governance context, independent directors are expected to perform a monitoring role by ensuring that shareholders interest on wealth maximization are taken into consideration. However, if the PLCS has low percentages of independences directors the low the firm performance they will strengthen the CSR disclosure to gain shareholder trust.

Figure 4: Moderating effect of CSR on the relationship between internal audit fees and firm performance:



Based Figure 4, the interaction term between CSR and Internal audit fees to firm performance explained that the lower the internal audit fees the lower the firm performance if CSR disclosure is high. However, the higher the internal audit fees the higher performance if CSR disclosure is low. The implication of this finding show that internal audit have positive relationship with firm performance if the CSR is negative. This finding is significant in the study but the negatives sign did not support the hypotheses developed in H5d. This result is consistent with the study done by Chen, Srinidhi, Tsang and Yu (2011), where they found that auditors tend to charge lower audit fees to the firm that disclosed higher CSR. According to Orlitzky and Benjamin (2001), higher CSR reduced firm's risk. It was consistent with study done by Starks (2009); also found that higher CSR will reduce firm's risk including regulatory, litigation, supply chain and product and technology risks. Therefore, the internal audit fees will be higher if CSR disclosure is low because the firm has high risk and they need extra effort to assess the quality of corporate governance.

9.0 CONCLUSION

Generally it can be concluded that corporate governance mechanism and internal audit should had a positive impact to the firm performance. In order to strengthen the company performance Bursa

Malaysia imposes the disclosure of CSR activities to be part of the company annual report so that the level of the company accountability and transparency to stakeholder will be achieved.
However based on our study we found that CSR disclosure in most of PLCs still low because the requirement for disclosing the CSR is not mandatory. The empirical result also show that CSR did not really improving the relationship between corporate governance mechanism, internal audit and firm performance although CSR as a moderator variable has significant positive relationship with firm performance as shown in table 4. Number of audit committee, percentage of executive directors' remuneration and internal audit fees also show a significant positive relationship with firm performance which supported our H1, H3 and H4 hypotheses.

However when CSR function became an interaction term to corporate governance, internal audit and performance; the finding show that CSR did not strengthen the relationship. That is why H5b and H5c are not supported although the Model is significant in this paper. H5a and H5d were significant but the signed is contradict with the hypotheses developed in Table 5.It seem that high percentages of Independent directors in PLCs with low CSR disclosure activities can still have high firm performance. Same as hypothesis H5d show that the higher the internal audit fees cost in PLCs with low CSR disclosure level still can perform well in the business. There are several reasons that influence the result of this study. Therefore for future research we suggest a further study should be done on the factors that influence the low disclosure of CSR in Malaysia and the impact of long run performance. Furthermore, we also suggest including more other variable that might influence firm performance and extent the data for several years since limitation of this study was based on one year (2010) period only.

There are some important implication from this study to regulatory body and Bursa Malaysia. Based on the result, it provides strong evidence to show that audit committee, independent directors and internal audit fee is a significant variable that can influence firm's performance. Therefore, Bursa Malaysia should enhance the independence of audit committee and directors in the companies because they are independent from management and independent from significant shareholders. Hence, they can discharge their role effectively in "check and balance" process of how the organization is managed, monitoring managers' performance and protecting shareholder interest without any fear and favour. Furthermore, Securities Commission should play their role to provide a certain range of amount that companies should be charged to the internal auditor. Since the internal audit play an important roles to improve the internal audit of the company, the rate of internal audit fee cannot be abandoned.

Table 5: Result on the Effect of Corporate Social Responsibility Disclosure in Corporate Governance and Performance:

Hypothesis	Description	Results
H1	Number of audit committee has significant positive relationship with firm's performance (ROE).	Supported
H2	Percentage of executives' directors' remuneration has significant positive relationship with firm's performance (ROE).	Not supported
H3	Percentage of independent directors has significant positive relationship with firm's performance (ROE).	Supported
H4	Internal Audit Fees has significant positive relationship with firm's performance (ROE).	Supported
H5a	The higher the Number of audit committee, the higher the firm performance, if there is a higher CSR index in the company	Significant but not supported
H5b	The higher the percentage of executives' directors' remuneration, the higher firm performance, if there is a higher CSR index in the company.	Not supported
H5c	The higher the percentage of independence directors, the higher firm performance, if there is a higher CSR index in the company.	Not supported
H5d	The higher the internal audit fees, the higher firm performance, if there is a higher CSR index in the company.	Significant but not supported

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THE LABOR MARKET IN LATIN AMERICA

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Abstract: This paper aims to present the labor market in Latin America, that even with the hardships of unemployment, have been fighting to reduce poverty and social inequality which still lives. Another problem faced by Latinos is the emigration of qualified workers, which should be encouraged to continue or return to their origin country. In this paper a follow-up model is suggested of some functions for labor development.

***Key Words*:** Latin America, unemployment, social inequality, qualified workers, emigration of qualified workers

Introduction

The purpose of this article is to show how Latin America still suffers from high unemployment even in countries that showed an economy improvement on the last few years. Facing the high number of unemployment, the wages paid to the unskilled workers are low.

The international society is impressed on the growth of employment in small firms, but in some countries the labor protection had decreased. Also what is happening is a high leads of emigration, affecting the labor market, since the qualified employees are leaving their home countries, seeking a better quality of life in another location.

Other problems in Latin America are the informality of the labor market, the lack of supervision and lack of structure, yet there was a slight improvement. The problems of unemployment in those countries are related to education, corruption, and the runaway of qualified people in the country. Latinos still seek a better quality of life, hoping that a plan can be created to change their lives for good.

The paper is organized by the literature review on the Labor market in Latin America, and it's methodology are based on introduction, the development of the article, showing graphics, conclusions about the matter and its implications.

THE LABOR MARKER IN LATIN AMERICA

Latin American labor markets are struggling for a long time. In this sense, could be possible to say that unemployment still reached its peak, even though some countries have greatly improved its economy related to the rate of employment, such as Brazil, through a slow process can increase wages and quality of lives of their workers.

In Latin America the salary offered to employees is not enough to increase quality of life, i.e., the public and private companies do not offer a chance for him (the employee) to get out of poverty and reduce social inequality. Currently this inequality in Latin countries is quite significant.

In the face of high unemployment, wages paid to unskilled workers are low, we can point out that these problems are common in such countries and it still occur because a very high rate of corruption, crime, among other social problems. Today, there are several public policies that encourage living wage for a worker and a labor law that although still fragile, has sought to improve for the good of the employee.

What has impressed international society is that the level of employment in small firms has increased, but in some countries the support that was sought to improve labor has declined, some authors have an opinion on this subject:

> Some analysts argue that trade reforms and privatization of state enterprises displaced workers from non-competitive manufacturing industries and good state-owned jobs, while new jobs were created in low productivity sectors. Others believe that trade reforms and the process of commerce globalization are behind the growing demand for skilled workers and the decline in relative wages of unskilled manpower. Some observers blame the trade integration process - globalization - the fall in the percentage of workers with social protection, as companies seek to reduce labor costs to remain competitive. Some point to the increasing adoption of new technologies - fueled in part by international trade and structural change - as part of the explanation, since these new technologies are, on one side, less intensive hand labor and, on the other side, require more skills than the old technologies. Another suggested explanation for the increase of unemployment is the higher participation of women on the workforce and the fast increase on the offer of skilled manpower. The excessive rigidity of labor laws and wages are also often mentioned as the cause of the problems of the labor market. (Development, B.I, 2004)

In 2010 the OECD (Organization for Economic Cooperation and Development), introduced us to a reality that has often happened in Latin America, which would be the fact that skilled workers are emigrating to other destinations searching for a better quality of labor and life.

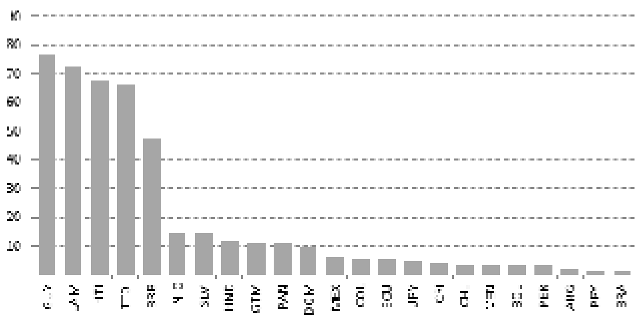
You can observe this fact by this figure:

Version 1 - Last updated: 07-Dec-2009

Figure 3.3. Emigration Rate of University-Educated to OECD Countries, 2000

(University-educated emigrants in OECD countries as a percentage of total number of university-educated nationals from the home country)

GUY	Guyana	76,9
JAM	Jamaica	72,6
HTI	Haiti	67,5
TTO	Trinidad and Tobago	66,4
BRB	Barbados	47,3
NIC	Nicaragua	14,3
SLV	El Salvador	14,1
HND	Honduras	12
GTM	Guatemala	11,2
PAN	Panama	11,1
DOM	Dominican Republic	9,8
MEX	Mexico	6,5
COL	Colombia	5,8
ECU	Ecuador	5,8
URY	Uruguay	5,1
CRI	Costa Rica	3,9
CHL	Chile	3,8
VEN	Venezuela	3,8
BOL	Bolivia	3,3
PER	Peru	3
ARG	Argentina	2
PRY	Paraguay	1,9
BRA	Brazil	1,6



Source: OECD Development Centre calculations based on data from Barro and Lee (2010) and OECD (2008a), database on Immigrants in OECD countries.

(OECD, 2010)

This emigration rate leads to various economic effects, impacting the labor market. Each country of Latin America has been investing so that these workers will return to their home countries, offering financial incentives and guarantees for infrastructure. However there is what is called "brain waste", i.e., when the worker already qualified, leave his home country, seeking for a better quality of life in another place, and ends up working in a different environment from which he was trained.

The Latin Americans still suffer from one of the highest unequal rate wages of the world, arising from the differences in the level of professional qualification, i.e., inherent of their experience and education. It is then suggested that there should be a greater number of incentives for the education level to rise in reference to children and education for adults. Even though the problem of poverty will not be completely solved, at least it will reduce the rate, creating better living standards.

High inflation and the disrespect of labor laws can result in high wage flexibility. When the levels of inflation fall, employment and unemployment rates get out of balance, the same occurs when the labor law is not respected.

The report on economic and social progress on the Latin American markets suggests some examples of progress towards a work improvement, that is:

> Governments can help by adopting policies that reduce macroeconomic volatility and create favorable conditions for stable growth. In countries where real wage rigidity increases the reaction of unemployment there is a growth decrease, mechanisms such as profit sharing or reducing the transaction costs of labor contracts could increase wage flexibility. But the quest for a better macroeconomic environment and a better response to macroeconomic shocks should not prevent policymakers stay tuned to the everyday demands that a labor market in good working order suggests to the labor policy. There is a need to reshape the agenda of labor policy, abandoning the workarounds in times of crisis and returning to structural policies, and to put aside the philosophy of "protect workers against the power of employers." A better performance of the labor market is compatible with a lower wage inequality. The new agenda requires a strengthened labor authority and a complex network of public and private institutions that meet the following specific functions.
>
> > a. Increase the efficiency of the matching process job-worker: The reform of these systems requires the promotion of a regulatory environment to nonprofit providers, improvement of information systems and expanding the range and coverage of services offered.
> >
> > b. Protecting workers against the risks of job loss: An important criterion would be to promote the smooth functioning of the labor market. After all, the best protection against unemployment is the possibility to find a good job quickly. But when that is not enough, each country needs to find a solution to these dilemmas that adequately reflects the characteristics of its economy and the preferences of its citizens. In this process, policymakers and legislators should continuously monitor the potential risk that protection systems bring to the performance of the labor market.
> >
> > c. Improving opportunities for workers: The goal is to leave aside the direct provision of training and increase incentives for firms, workers and training institutions to finance, seek and offer high quality training. (Development, B.I., 2004)

It is observed that all these questions presented by the report on economic and social progress about the labor market in Latin America is extremely important, with increased quality and productivity between the employee and the employer, resulting in the investment on companies for which their employees can get a better learning standard and so reach a better wage level. The

Latin Americans countries are developing, but still face problems like the informality of the labor market and lack of oversight. Here we see the considerable importance in training and increased education for adults, raising their qualification.

The labor market in Latin American as can be seen, is not structured, but even with all the problems of unemployment, low income and other social problems, it is possible to notice an improvement no matter how small.

> There is, for all Latin American countries, a growth of the economically active population (EAP) total, male and female, aged 15 years or older. In the period 1995 to 2000, the EAP grew at a rate of 3% per year, whereas in the period 2000 to 2005, there is a slight decrease of growth (2.3% per year). The growth of EAP is being pulled in two periods, the strong expansion of female labor force: 4.5% between 1995/2000 and 3% between 2000/2005. Is possible to see an elevation, for all Latin American countries, of the participation in economic activity rate? This growth is also driven by the expansion of female participation in the labor market. This trend can be understood, as mentioned earlier, from the 1970 and 1980, reflecting the restructuring process and the massive entry of women into the labor market. Analyzing the urban rate, between the period from 2000 to 2007, there was continued growth of this rate in most Latin American countries, except for Colombia and Honduras. Despite the greater male participation in the labor market - a common characteristic of most of the labor markets of developed and developing countries - there is, in this case again, this growth has been driven by increased entry of women into the labor market. It is worth noting, however, that women are introduced predominantly in sectors with less productivity, poor working conditions, low degree of social protection and inferior wage. (CEPAL, 2008)

The recent recovery of the economy, has contributed to a growth of the employment, even being low, but this improvement scenario over the rate of unemployment can only be seen after the 90s, in the case of Brazil, through economic growth, monetary stabilization and reduced inflation, new jobs were generated.

Throughout the whole study, we can verify the educational gap, the problems related to corruption, lack of business investment in their employees, as well as what we call "brain scape". It would be improbable to consider a short-term improvement of the labor market in Latin America, but as seen above there are several theories and improvement projects proposed by various authors, already mentioned in this article, suggesting the development of this topic.

Latin America, owner of progressive people, who struggle and seek a better quality of life have the right to have an immediate plan to enable its workers to exercise their professions in a formal, safe, with labor rights and the support of the public companies.

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DOES ACCOUNTING ACCOUNT FOR INNOVATION?

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Abstract:

The subject of innovation has been of interest to both researchers and practitioners of marketing and management for several years. Innovation has emerged as a significant field in tandem with the increasing attention being given by the companies to innovation process initiatives. Innovation business model has become the mantra of cutting edge business topics, however, the building block of accounting has never been fully integrated into innovation process, specifically, how to measure and report innovation initiatives. Given the recent development and restructuring of the "new economy and new business model", a reassessment of the logical components and reporting style of the accounting model is germane. Accordingly, the major focus of this research and discussions has been the establishment of innovation accounting. During the course of this paper, a careful framework integrating innovation drivers into the financial statements has been developed. A review of innovation, knowledge, and accounting literature develops the linkages between accounting and value creation, accounting and growth, and accounting and innovation cash flows. The paper ends with the suggestions to extend the research for frame working innovation accounting. Recommendations are proposed for new research directions in the field of innovation accounting.

Key Words**:** Accounting, Innovation, Creative Assets, Value Creation, Growth, Free Cash Flows.

Introduction:

Innovation is the word of the moment. Innovation is an important and urgent process which results from a rich mix of activities: strategic planning, research and development, creative thinking, project management, teamwork, and marketing. The processes that result in innovations seem often to be mysterious, magical, imaginative, and associative. Managing innovation is so complicated. It rarely proceeds in a straight line. The impact of innovation can be impossible to predict. Understanding this buzz lays a radical shift in the assumptions of the business model. The innovation (or soft) business model is quite different from the conventional one (or hard). An important dynamic of the innovation business model is the virtuous cycle of competition, invention, and productivity growth. Fierce competition spurs innovation, in both technology and business processes. These innovations spread quickly, improving productivity across the sector. As productivity rises, competition intensifies further, bringing a new wave of innovation. Innovation business model is a unique blend of three streams that are critical to the business. These include the value stream for the business partners and the buyers, the revenue stream and the logistical stream. In this way, the critical components of innovation business model are addressed: investment and how it is funded, the ongoing value creation, and the revenue and how it generated. Thus, any company to properly function in the innovation era, it needs an accounting model embodies these three components to cope with the implications of innovation necessities (Remenyi & Others, 2003). Accounting used to account for the operational work. The operational accounting describes ordinary, functional, maintenance, and day-to-day work. Such accounting operates according to certain standards, rules, and routines. According to Drucker, a commercial company has two and only two functions: to innovate and to market. All of its other activities are cost. This paper outlines the major logical components of what can be called innovation accounting model. The paper is structured in the following way: The first section of this paper briefly reviews the implications of the innovation economy and creative assets as an engine for such economy and framework the problems associated with accounting of such innovation assets. As a matter of fact, this section provides clear understanding for the lacks and shortcomings inherent in the conventional accounting model that related to innovation measurement and presentation. Section two presents an analysis for the methodology adopted in this paper. The third section is the core one and provides in depth analysis for the adaptation of the conventional accounting model to match innovation necessities. Section four concludes the paper.

Section1: Theoretical Perspective: Understanding the Innovation Era?

"We Live in an Innovation Economy". At the dawn of the second millennium, a new age with new economy, drivers, and mechanism is grounded. Innovation based economy is indeed a new economy with new rules and new ways of doing business. Value is the product of knowledge and information. Plus, any company cannot generate profits without the ideas, skills, and talent of people. Innovation is as much as social as technological. Drucker has outlined seven main sources of innovation opportunity: the unexpected, the incongruity, process need, changes in industry, changes in demographics, changes in perception, and new knowledge. Beside it is concentrated on intangibles, the innovation economy has characterized by it is networked, digital, virtual, fast moving, better performing, and innovation is the primary factor of production (Barker 2002). Thus impact of a new era is so huge and holistic to form what like a revolution (Innovation Revolution). According to (Stewart 2001); the innovation economy stands on three pillars. The first is knowledge as the most important factor of production. Creating value throughout innovation economy is imperative. The second pillar is innovation assets and the intellectual capital has become the most important one among them. Innovation assets are embedded in talent, skills, know-how, know-what, and relationships and machines that can be used to create value. The third pillar is adaptation to innovation economy in terms of adopting new practices, new management techniques, new technologies, and new strategies. The success in innovation based economy depends on new skills and required new style of business, management, and accounting models. The most fundamental change, however, concerns the dramatic shifts in the nature and figures of the legacy business. New ideas are the most critical success factor of innovation era. Creative thinking and invention are business dimensions of innovation economy. Because of the market of innovation economy are dynamic, competitive, and rise and fall over time, companies need to change rapidly, radically, and measurably.

Table No. (1): Dimensions of Exploitative Business Model vs. Exploratory Business Model (Fasnacht, 2009)

Dimension	**Exploitative Business**	**Exploratory Business**
Strategic Intent	Cost and Profit	Innovation and Growth
Customer View	Customer Value Economics of Scale	Customer Satisfaction Needs based Segmentation
Critical Tasks	Operations Efficiency Efficiency Incremental Innovation	Adaptability New Products and Services Breakthrough Innovation
Structure	Formal and Mechanistic	Adaptive and Loose
Competencies	Operational	Entrepreneurial and Systemic thinking
Control	Margins, Productivity, and Steady Revenues	Milestones, Growth, New Customers, and New Inflows
Culture	Efficiency, Low Risk, and Quality	Risk Taking, Speed, and Flexibility
Leadership Role	Authoritative and Top Down	Visionary, Open-minded, and Involved

Creative Assets:

"Ideas Are Capital. The Rest Is Just Money". One of the axioms of innovation economy (or economy of ideas) is the migration of competitive advantages from operational to creative assets. The most valuable truth in innovation economy is the competitive advantage of the company depends on their ability to build, utilize, and maintain relationship with customers. It is vital to understand that the terms of ideas, knowledge, intangibles, and intellectual capital are usually used interchangeably. The terms of intangibles in the accounting literature, knowledge assets by economists, and intellectual capital in the management and legal literature are refer essentially to the same thing: a nonphysical claim to future benefits. The nature of creative assets is nontradable (which means can not be readily bought or sold) and should be developed and practiced internally. The virtual nature of innovation (or creative) assets further complicates their management. According to (Prusak, 2001), there are three major nexuses of creative assets: discovery, organizational practices, and human resources. Accordingly, management of creative assets is based on generating, acquiring, transferring, and combining these assets to match customer needs. Unlike the physical (or operational) assets, the creative assets are characterized by increasing value creation return. Return is the outcome of value generated by innovation (discovery), unique organizational designs, or human resources practices. Discovery as an engine of creative assets is reflected by investment in R&D. Brands as a major form of creative assets are often created by a combination of innovation and organizational structure. The third nexuses of creative assets, those related to human resources, are generally created by unique personnel and compensation policies. As an example for discovery, the bulk of Merck and its creative assets that have been created by massive and highly successful innovation effort partially reflected by R&D expenditures conducted internally and in collaboration with other companies ($1.82 billion in 1998). In contrast, customer marketing of Dell is a unique organizational design. Dell's major value drivers are systems of built-to-order computers via telephone and the Internet. Specific organizational designs for Xerox's Eureka System are aimed to share information among twenty thousands of maintenance personnel and then to enhance the value of the human sources related intangibles (Prusak, 2001).

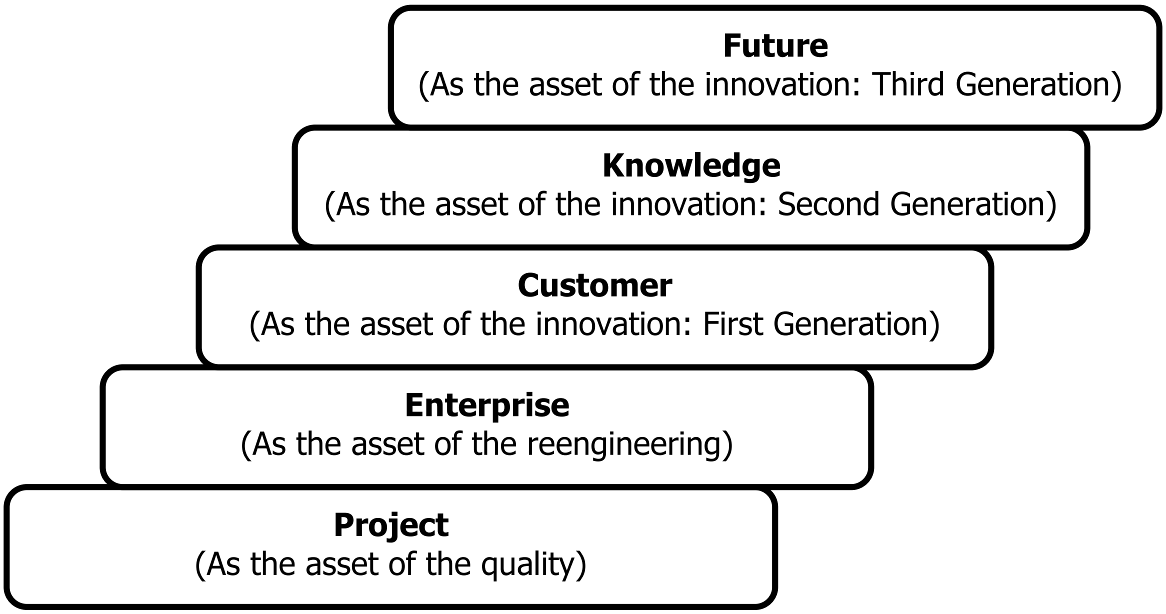

Figure (1): Transformations in the Asset Concept (Amidon, 2003)**.**

Understanding Innovation Accounting Model:

"Accounting, long dead, is not yet buried, and the situation stinks". The shift toward knowledge and innovation economy has altered the requirements of management and then declared the demise of Accounting. Knowledge and innovation research has been plagued by a variety of the accounting problems that can lead one to question the extent of validity of accounting model. Imperative problem of the conventional accounting is laid in its theoretical logic, philosophy, and mechanism. It is important to realize that, the theoretical logic of the conventional accounting has been established 500 years ago. This logic was set up to match the requirements of industrial or machine technology. In fact, the conventional accounting model looks backwards and focuses on tangible assets. It's a transaction-based evaluation model. Tangible (or hard) assets have considered driving engine of the industrial revenues such as physical capital, fixed assets and inventory (the assets of the industrial revolution). These assets always appear in the balance sheet at cost, which is the production side rather than customer side. The conventional accounting and its models has boiled to its bones. In an economy dominated by knowledge and innovation, the theoretical basis of the conventional accounting is outmoded. Accounting model is something of an anachronism in today's innovation age. It is a legacy of the industrial era (Despres and Chauvel, 2000). As result, if the current situation of the conventional accounting is going to be continuing, prestige of accounting will be lost (Durcker, 2000). Another part of the conventional accounting model problems resulted from its monetary based model. However, very little of innovation has to do with money. The problem of the conventional accounting model has two dimensions: the first is the asset (whether financial, technological, or intellectual) cannot be well determined. Plus, the measurement of the critical success factors of innovation business model cannot be defined in qualitative and quantitative terms. In relation to this, (Lev, 1997) a typical critic of the conventional accounting wrote that conventional accounting model performs poorly with internally generated intangibles such as R&D, brands, and employee talent the very items considered the engine of innovation business model. For instance, the conventional accounting model does not recognize internal innovation management initiatives and only recognize knowledge management assets purchased from others. Such accounting treatments underestimate financial performance of successful innovation management. To overcome the lacks of the conventional accounting models, considerable efforts has been devoted to establish alternative intangible accounting models. In fact, these models were only more rules and rules. In addition, these alternative models provide improvements in the conventional accounting models and are not calling replacing them. Secondly, these alternative models are based on discounted present value which makes it hold value as internal reporting models. Thirdly, these models are not providing comparable basis between innovation process across industries and business organizations. Table No. (1) shows a clear comparison between the conventional (or hard) accounting model and the innovation (or soft) accounting model.

Table No. (2): Conventional Accounting Model vs. Innovation Accounting Model (Despres & Chauvel, 2000)

Conventional (or Hard) Accounting Model	Innovation (or Soft) Accounting Model
Tangible	Intangible
Finance Focus	Balanced Set
Event Driven	Process Driven
Cost	Value
Periodic Reporting	Instant Access
Past Orientation	Future Orientation
Value in Things	Value in Flows
Production Statistics	Innovation Statistics
Metrics for Reporting	Metrics for Managing
Standards and Standard	Common yet Customized

Section 2: Methodology:

The present investigation is an exploratory study undertaken to explore and adopt the drivers of innovation process in the logical structure of accounting. The purpose was to examine lacks and shortcomings of the accounting model. The innovation core values have opened critic eyes about the myths of accounting and financial reporting. To cope with growing emphasis on innovation process, the accounting model needs to be restructured and carefully redesigned. The adopted methodology has been based on analyzing the logic of accounting practices in very critical aspects to innovation phenomena. The literature survey was considered the primary data source. Large bodies of literature are surveyed to exploring critics of the accounting model. However, diagnosing and analyzing lacks of the accounting model is desirable to gauge the extent of validity. The objectives of the current paper are outlined in the following points: (1) draw features of a new pattern of accounting model to match requirements of the innovation business model (See Figure 2 below); (2) show how the logical components of accounting model have become invalid and need to be replaced; (3) discus the logic of the accounting model; (4) provide realistic analysis for the benefits resulted from restructuring the accounting model; (5) draw milestone in the way of adapting (or replacing) logical components of the accounting model. The problem of this paper is summarized in the fact that advent of innovation age has shaken the logical basis of accounting. Accounting model by its state qua has become obsolete, outdated, and no longer valid to absorb business needs and purposes of the innovation companies. The treatments and disclosure of creative assets by the traditional financial statements are inadequate for the purposes of innovation economy. However, ignoring creative assets as result to rules of accounting (in particular, discovery and learning of the value chain) contributes to phenomena of "Information Asymmetry". Such phenomena usually associated with very undesirable consequences such as underestimating the financial position of innovation companies. Plus, deficient accounting model facilitates the release of biased and even fraudulent financial reports and information.

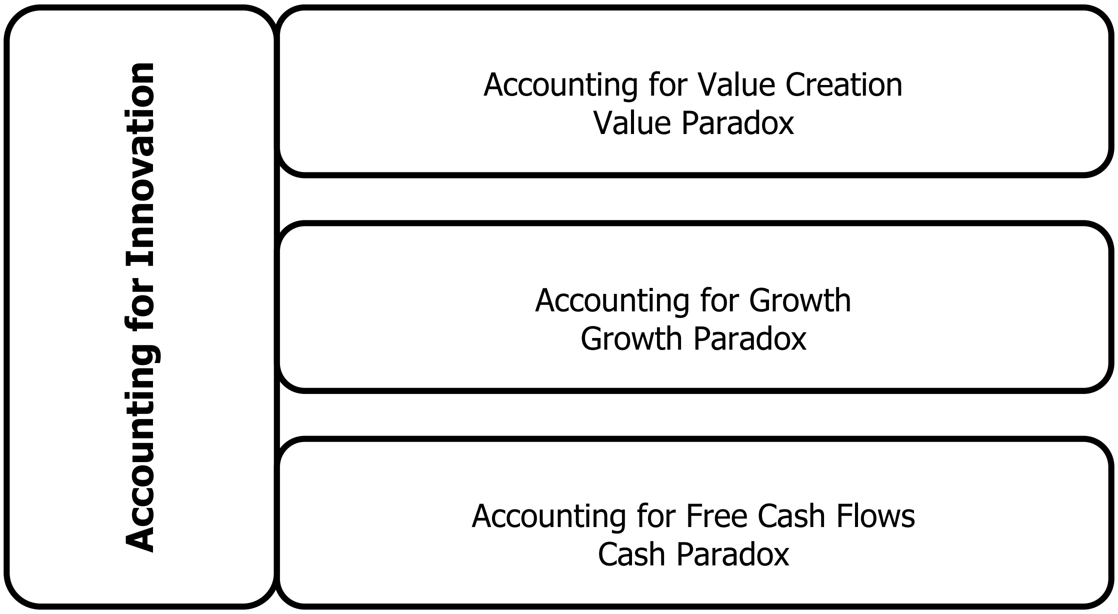

Figure (2): Theoretical Model of the Study

Section3: Analysis and Discussion

As postulated by most of knowledge and innovation management literature, accounting for innovation has to be grounded on the three more widely accepted terminology of innovation: value creation, growth, and free cash flows (Stewart, 2001), (Fasnacht, 2009), (Hakansson, Kraus, and Lind 2010).

Accounting for Value Creation

“The old coat of traditional accounting no longer fits”

Innovation is about adding value to invention. Value creation, however, varies between big and small companies, industries, and countries. Value creation process requires a more radical approach: not individual but collaborative, not adaptive, but generative. Value paradox is the title for the accounting of value creation. The creative assets and processes are the primary driver of accounting profit, but their absence from the financial statements rise a lot of question about the validity of these statements? The problem of accounting derived from the fact that there is no golden metric for the value paradox. The traditional accounting practices account for cost and based on the philosophy of value realization. Such style of accounting has been structured according to the balance equation of accounting: Assets = Liabilities + Equity. Accounting for the value creation entails the adaptation of basic accounting equation to be: Investments = Financings. According to Howell, the money invested in value creation assets and process has to equal the money raised for it. Some of reasons beyond the new equation are the terms of assets definition are inadequate and no longer valid to match the realities of innovation business model. The logical structure for the investment side of the new accounting equation can be drawn in Figure 1 below. The adaptation of accounting equation can be a typical alternative to change the objective of accounting metrics from value realization to value creation. The evaluation problem of creative assets can be solved by use of real options methods or net present value calculation.

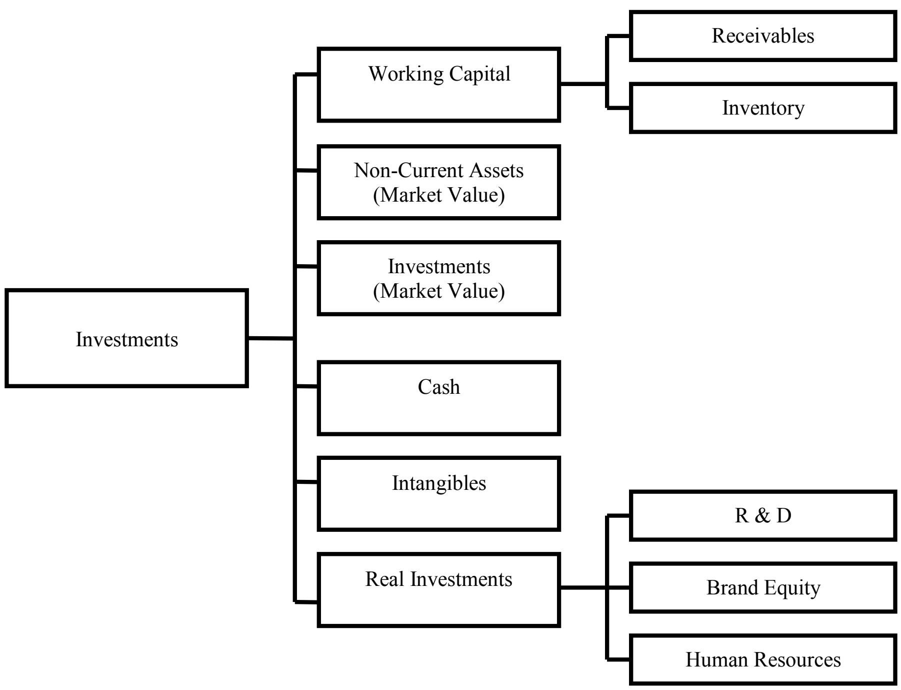

Figure (3): The Logical Structure of Investments in Innovation Accounting for Growth

"Cost of goods sold is no longer cost of revenue"

The growth and innovation is interdependent. Growth is an important driver to maintain competitiveness. The growth is required to retain and increase market share. Growth also compensates increasing cost through economics of scale. To improve growth and profitability, it is important to leverage synergy of people, process, and strategy. Under the assumptions of innovation economy, growth in assets consists of roughly half from net inflows, which means new money brought by customers, and half through improvements in investment performance of existing assets. Sustaining growth is a dilemma of most of the innovation economy companies. Longitudinal studies have confirmed that roughly 90% of all publicly traded companies in developed economics are unable to sustain growth for more than a decade (Fasnacht, 2009). This phenomenon has been called “Growth Paradox”. A good performance is reflected in the willingness of shareholders to invest in the company. Increasing total revenues alone is not enough, the company need to watch product and service profitability, customer profitability, and even employee profitability. The current structure of income statement is not matching the innovation necessities mentioned above. Howell suggests the operating statement as a substitute for income statement. The format of the new statement has been drawn in Figure-2 below. The logical reasoning for the new format derives from the fact that CGS for innovative companies is less than %15 in comparison to 70% for the industrial companies. Intra and inter-organizational relationships are the core assets of innovative companies. Accounting for growth views customers as important assets, and argue that these assets must be properly managed. Customer accounting identifies four different groups of customer relationships: transactional, facilitative, integrative, and connective. The connective customer relationship is the only one associative with life-time customer valuation analysis.

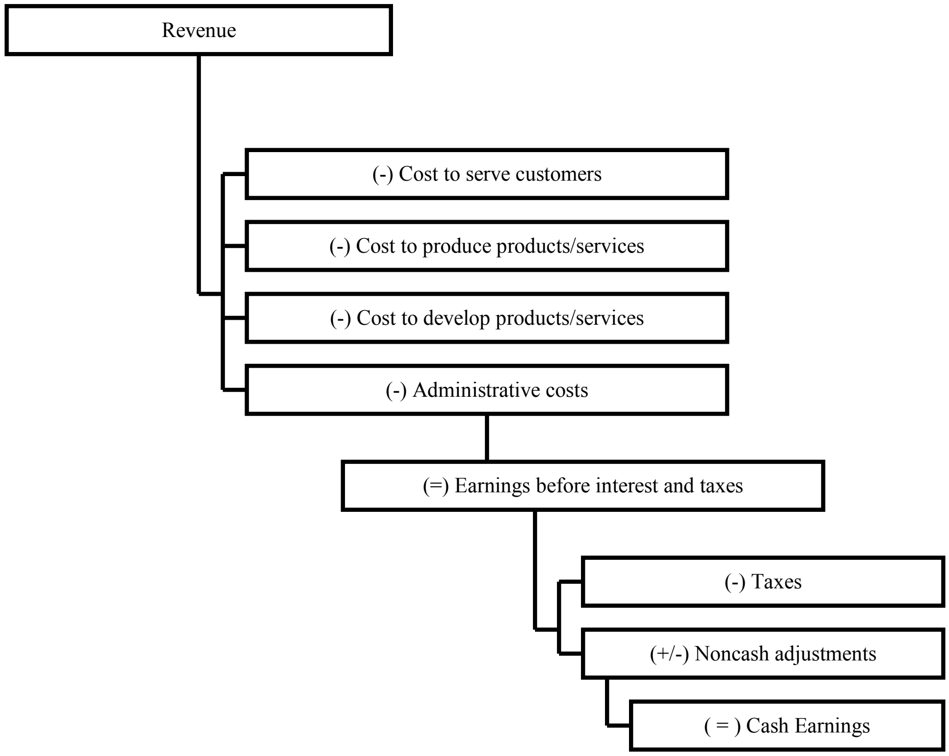

Figure (4): The Logical Structure of Operating Statement Accounting for Free Cash Flows

Innovation is generally accepted as being the golden route to building a growing and prosperous company. Innovation business model is horizontal, networked, integrated, collaborated, and strategic relationship based. Accounting for relationship is less about individual or collective sales and costs within each relationship and more about investment and returns. Under innovation age assumptions, the introduction of new technologies (T) is a source of new applications in the form of new products and services (A), the development of new markets (M), and/or the introduction of new organizational form (O). Such processes will increase net value for customers and, eventually, their loyalty. Developing new businesses can be a source to create extra cash flows and then increase shareholder value. Accordingly, the structure of statement of cash flows has become useless for innovation management purposes. Illuminating company liquidity and use of financial resources are the key purposes of statement of cash flows. Managers and investors of innovative companies need to know how much cash a business produces over and above what's needed to operate it-free cash flow. Free cash flows have to equal financing flows. A company either invests the money it makes or has to raise more. The new structure largely match the real concern of innovative companies: producing cash and creating value. Figure-3 below depicts the structure of statement of cash free. Innovation business model has another unique feature which is related to cash flows of the innovative companies. That feature is evident in transformation of the working capital concept from being financial asset to business liability. In the innovative set of financial statements, business goal is zero working capital or even negative working capital. The normal rate of the traditional working capital is 2:1. Sale policies of innovative companies aimed at rapid collection of accounts receivables. The result of such action is a balance sheet that shows accounts receivables with period of many days and accounts payable with time period of months. The cash surplus means that companies are probably not using adequate electronic means of investment and commerce. Large accounts receivable showed the inadequacy of the electronic payment, electronic data interchange, networking, and other concerned systems. However, large inventories, material and manufacturing goods are evidences of poor customer-supplier electronic links, and ignoring tools of just-in-time production and distribution.

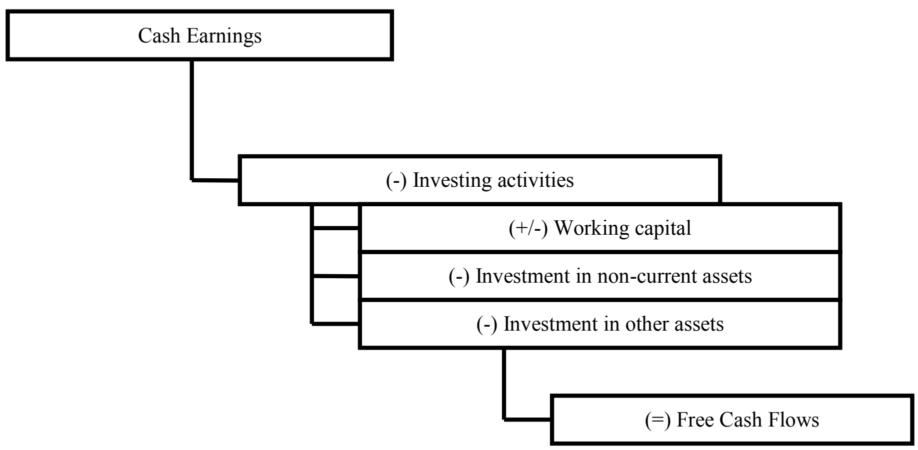

Figure (5): The Logical Structure of Statement of Free Cash Flows

Section 4: Conclusion

The new (or innovation) age has emerged. The subject of innovation has been of deep interest to both academicians and practitioners of marketing and management for more than a decade. The purpose of this paper is to provide a research agenda for extending the analysis of innovation business model. The innovation business model has totally different culture, drivers, and mechanism. This paper has adopted "Creative Destruction" approach to adapt and modify the traditional accounting model to match requirements and necessities of innovation age. While the financial statements may be applicable to companies of the industrial age, their applicability in the innovation age may also be theoretically questioned. The formats of financial statements have to be structured according to the drivers of innovation process. This paper has drawn milestones of innovation accounting. The paper has suggested new formats for the key accounting formulas (whether balance, income, or cash flows) to match imperatives of innovation business model. A new formula for the accounting equation and then a new structure for the balance sheet have been suggested to largely match and fit the innovation requirements and necessities. Further, the paper has re-structured income statement away from the concept of cost of goods sold and operating expenses. As the concept of cost of good sold is no longer cost of revenue. The operating statement as a substitute of income statement injects cost of managing customers and developing products as core assets of innovation age. The statement of cash flows has to be restructured to calculate free cash flows as imperative to manage results of innovation process. These new structures will change the accountant's community perception about innovation business model. It is an attempt to alter views and formats of the financial statements making them more in tune with innovation requirements and necessities. The ideas of this paper may clarify critical issues for the benefit of accounting academicians and practitioners. The opinion of the author is that the extension of this research over time will help to frame innovation accounting. The accountant community must begin to broaden the research to focus on the impact of innovation process on accounting theory.

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An Empirical Analysis of External Debt and Economic Growth in Nigerian

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Abstract.

The rationale for raising external loans has always been to bridge the domestic resource gap in order to accelerate economic growth and development. Nigerian government embarked on external borrowing just like other developing countries in other to accelerate economic growth and ensure sustainable economic development. This study tries to empirically establish the relationship between external debt and economic growth in Nigeria. Time series data ranging from 1971-2010, sourced from Central Bank of Nigeria Statistical Bulletin was used. It was analyzed using the Autoregressive Distributed lag method of co-integration. The result showed that external debt though having a positive sign or a direct relationship with growth; had not made any significant impact on the nation's economy. Also external debt service acts as a hindrance to economic growth as resources which would have been used for growth process are been diverted into servicing of debts. Based on these findings, it was recommenced that government should ensure that external loans contracted are channeled towards developmental projects that can help bridge these gaps. On the other hand, external loans contracted should be invested into a profit yielding venture or into an income generating project so that part of the profit/income from the investment can be used to service the debts.

Keywords: External debt, Economic growth, Nigeria

1.0 Introduction

Most countries in Africa are faced with the problem of the income, low savings and low level of productivity which calls for financial support from institutions like World Bank, IMF, UN and developed economies to bridge the resource gap. This external finance strongly influences the economic growth and development of the developing countries. External borrowing thus creates an avenue to reduce the obstacles posed to economic growth and investment by availability. Borrowing externally to finance projects often increases the borrower nation's ability to import due to the fact that projects selected for external loan financing appear promising in the estimation of both the borrower nation and her potential creditors. External borrowing is also seen as a means of enabling the country increase their rate of the real investment just as it is seen as an engine of growth. Although, Nigeria is blessed with rich natural resource endowment, modern statecraft and the process of development requires that it still needs foreign capital to augment its capital requirements for development. A country's total foreign capital investment can be measured as comprising of total foreign direct investment and total debt obligations to non-residents (Dinneya, 2009). Nigeria embarked on external finance so as to fill the domestic savings gap, foreign exchange gap and ensure economic growth and development. In the 1950s, Nigeria did not have the need to borrow much from abroad and so the external debt outstanding was minimal. At that time, substantial earnings from export of agricultural product coupled with external assistance (grants) from the United Kingdom made external borrowing unnecessary. Owing to the oil glut and a fall in foreign exchange earnings which exerted considerable pressure on government finances, government began to acquire loans not only from the official creditors (multilateral and bilateral) but also from private creditors in order to bridge the gap created from the fall in oil prices. Thus from 1983, Nigeria's external debt grew very fast and became very large in absolute magnitudes, rising from US$14.1 billion to US$33.6 billion in 1991, as shown in table 1.1 below.

As at December 2000, Nigeria external debt amounted to about 75.5% of GDP and about 180% of export earnings. Debt service due in 2000 was about US$ 3.0 billion and US$1.9 was used to service the debt. In 2001, debt service payment was US$2.13 billion. In October 2005, Nigeria and the Paris Club announced a final agreement for debt relief worth US$ 18 billion. The deal was completed on April 21, 2006 when Nigeria made its final payments and the books were cleaned of any Paris Club debt. The debt stock as at 2009 was US$ 32.9billion i.e 64.43% of the nation's GDP which translates to US$261.26 per capita. By cancellation of Paris Club debt and buy back of London Club debt in 2006, Nigeria's annual debt service due fell from US$2.6 billion to about 2.8 billion and debt stock stood at US$ 3.5 billion (DMO, 2009). As at 2009, the external debt stock stood at US$ 3.9 billion. More than 84% of the external debt now is borrowed from multilateral sources, and they have long term of 40 years with a 10 year moratorium. In 2010, external debt stock stood at US$4.6 billion. This means that government is already embarking on another journey to foreign sources for economic development. This study therefore is to investigate empirically the relationship between external debt and economic growth in Nigeria. Following the introduction is theoretical and conceptual issues on external debt. Next is the model and model specification. Analysis of data using the ARDL method will follow. Finally there will be conclusion and recommendation.

2.0 Conceptual Issues on external debt

The theoretical literature on the relationship between the stock of external debt and growth has largely focused on the adverse effects of debt overhang. Krugman (1998) defines debt overhang as a situation in which the expected repayment on external debt falls short of the contractual value of debt. If a country's debt level is expected to exceed the country's repayment ability with some probability in the future, expected debt service is likely to be an increasing function of the country's output level. Thus some of the returns from investing in the domestic economy are effectively 'taxed away" by existing foreign creditors and investment by domestic and foreign investors- and thus economic growth- is discouraged. According to Sachs (1980), the debt overhang theory states that beyond a point, high external debt acts as a tax on investment since a fraction of whatever is gained in increased output goes to the creditor in the form of debt service payment.

Debt overhang also depresses investment and growth by increasing uncertainty. As the size of the public debt increases, there is growing uncertainty about actions and policies that the government will resort to in order to meet its debt servicing obligations without adverse effects, on investment. This uncertainty makes potential private investors to exercise their option of waiting to see the policy government will adopt Foreign borrowing has a positive impact on investment and growth up to a certain threshold level, beyond this level, however, its impact is adverse. As indicated in Cohen (1993), the relationship between the face value of debt and investment can be represented as a kind of "Laffer Curve" as outstanding debts increases beyond a threshold level the expected repayment begins to fall The implication is that an increase in the face value of debt leads to an increase in repayment up to the "threshold" level; along the "wrong" side of the debt Laffer Curve; on the other hand, increases in the face value of debt reduce expected payments. Given the positive effects of capital accumulation on economic activity, a similar type of Laffer Curve; between external debt and growth would also be expected. In the same view, Pattilo (2002) found empirical support for a non-linear impact of foreign debt, on economic growth: at low levels, debt has positive effects on economic growth; but above particular thresholds or turning points, additional debt begins to have a negative impact on growth.

3.0 Theoretical Framework.

In modeling external debt and economic growth for Nigeria, we follow the lead by Green and Khan (1990) and Ariyo (1998) on debt cum growth model. According to G-K (Green and Khan) hypothesis, most developing countries face a shortage of capital and there is a strong presumption that foreign borrowing should be used to fill the gap created as a result of capital shortage, over and above domestic savings. A simple explanation of the above shows that a developing country like Nigeria should be a net foreign borrower. For there to be sustainability, the foreign income borrowed must contribute significantly to economic growth and development. The basic version of the debt cum growth model gy, G-K (1990), Ariyo (1998) is:

$$\dot{y}/y = f_k\,[S(1-t) + t - G/y] + (f_{k-r})\,D/y - rD/y.$$

where $\dot{y}/y$ is growth rate of income (GDP), f_k is marginal product of capital, S is savings, r is cost of borrowing from abroad, D is external debt stock, D/y is debt income ratio, t is tax, G is government expenditure.

The policy implication of the above estimated model is as follows:

1. A country can increase its growth of real national income by foreign borrowing as long as the marginal product of capital (externally financed) exceeds cost of foreign borrowing.
2. An increase in private saving through an increase in the average propensity to save would raise the growth rate;
3. An increase in fiscal deficit brought about either by a decline in tax revenues or an increase in government expenditure would have an adverse effect on growth.
4. A rise in the foreign interest rate would lower the growth rate (by the value of the debt-income ratio) as would a decline in external debt stock.

3.1 Data Description and Model Specification.

The data adopted for this study is annual time series data ranging from 1970-2009 on the selected variables for Nigeria. The variables used are in line with some studies on external debt. These variables include:

RY = Real Gross Domestic Product

DEBT = External Debt Stock

DS = External Debt Service Payment

Real gross domestic product measures economic growth. It takes into consideration price changes overtime and it gives a true picture of a nation's economy.

Based on the above, the following model is specified:

$$RY = a_0 + a_1 DEBT + a_2 DS + U_i$$

Where U_i is the error term

A priori expectation implies that $a_0>0$, $a_1>0$, $a_2<0$.

Data were obtained from Central Bank of Nigeria Statistical Bulletin and Debt Management Office.

3.2 Estimation Techniques

The issue of external debt has been considered by different researchers who applied different methods of analysis to establish the relationship between external debt and economic growth. Some applied co- integration approach and Granger causality test for data analysis on time series data (Ajisafe et al 2006, Adebiyi, M.A. 2002); ordinary least square (OLS) method (Omoruyi, S and Musa, B. 2003, Moshi and Khindo 1995); simultaneous equation model and simulation (Iyoha M.A. 2003, Adam, J.A. 2002); panel data (Fosu, A.K. 2002); Autoregressive distributed lag (ARDL) technique of co-integration (Zafar, et al 2008). Their findings showed that external debt has both positive, negative and bi-directional relationship with economic growth. For the purpose of this study, ARDL method of analysis in line with Zafar (2008), will be adopted using data from Nigeria. Various econometric advantages are associated with the ARDL approach. The main advantage lies in its flexibility that it can be applied when the explanatory variables are of different order of integration. Other advantages of this approach is that the model takes sufficient-numbers of lags to capture the data generating process in a general-to-specific modeling framework (Laurenceson and Chai, 2003). Moreover, dynamic Error Correction Model can be derived from ARDL through a simple linear transformation and it integrates the short-run dynamics with the long-run information.

3.3.1 ARDL Model on Economic Growth and External Debt.

In the ARDL framework, we summarize the bounds process for testing the existence of a long-run level relationship between external debt burden and economic growth. We begin, following the lead of a similar work done by Keong et al (2005); Omotor (2008); and Zafar et al (2008), with an Unrestricted Vector Autoregression (UVAR) of order p in levels for the following external debt burden on economic growth.

$$W_t=\mu\sum_{t=1}\beta_t W_{t-1}+e_t\text{………………………………………………….}(1)$$

Where W_t is the vector of X_t and Y_t. Yt is assumed to be the dependent variable i.e. GDP and X_t is the vector matrix which represents a set of explanatory variables in this model, $\mu(\mu_y, \mu_x)$, β is a matrix of VAR parameters for lag 1 and t is a time variable.

One condition for the application of the bound test is that Y_t (the dependent variable) must be 1(1) while the regressor X_t can be integrated of any order.

Using unrestricted intercepts; no trend (Pesaran et al, 2001:300), the ECM is estimated as

$$\Delta y=Co+\prod_{yy}Y_{t-1}+\prod_{yx.x}+X_{t-1}+\sum_{t-1}^{p-1}\phi_1\Delta Z_{t-1}+WX_t+U_t\text{…………….}(4)$$

Equation (4) is viewed as an autoregressive distributed lag (ARDL) of order p. In the above, the terms with the summation signs represent the error correction dynamics while the second part i.e. $a_9 - a_{16}$, corresponds to the long run relationship.

Given equation (4), the first differences reflects the rate of change of each variable, thus, this representation can be used to examine both the short run and long run relationships between the economic indicators. Secondly, it indicates that economic growth is influenced and explained by its past values, implying that it involves other shocks.

The model of interest for the external debt to growth relationship can be stated based on equation (4) as

$$\Delta RY = a_0 + \sum_{i=1}^{p} a_1\Delta RY_{t-1} + \sum_{t=o}^{p} a_2\Delta DEBT_{t-1} + \sum_{t=o}^{p} a_3\Delta(DS)_{t-1} + a_4 RY_{t-1} + a_5 DEBTt_{-1} + a_6 (DS)_{t-1}\ Ui\ldots\ldots(5)$$

In the above equation, the terms with the summation signs represent the error correction dynamics while the second part a_4=a_5=a_6 respectively corresponds to the long run relationship. The null hypothesis shows that a_4=a_5=a_6 =0 and it implies non-existence of long-run relationship. Alternate hypothesis a_4=a_5=$a_6 \neq 0$ (a long run relationship exist).

4.0 Presentation and Analysis of result.

This study uses annual time-series data for 1971 through 2010. The data set was sourced from the Central Bank of Nigeria and Debt Management Office.

4.1 Unit root tests

In order to test for the stationarity of variables used in this study, unit root testing of all the variables was carried out using the Augmented Dickey-Fuller (ADF) methodology. The ADF unit root test is widely considered as the most reliable test of stationarity for economic time series variables. The unit root tests were carried out using the MICROFIT 4.0 econometric software by Paseran and Paseran (1997) and the following results were obtained.

Table 2: Summary of Unit root tests using the ADF Criterion:

Variable	Order	ADF	Decision
LRY	1st difference	-5.13	I(1)
LDS	1st difference	-4.57	I(1)
LDEBT	1st difference	-4.08	I(1)

Note: 95% critical value for the Dickey Fuller statistics = -3.53

The above result shows that the dependent variable (LRY) is stationary at first difference as proposed by Pesaran, Smith and Shin (2001). Also, the explanatory variables (LDEBT and LDS) are stationary at first difference since their ADF values (-5.13, -4.08 and -4.57) respectively, is greater than 95% critical value of -3.53 as shown in table 2.

4.2. Test for Co-integration

Note that all the variables, viz., LRY, LDS, LDEBT and LDYR, are difference stationary, that is, they are I(1) variables. Since there is no variable integrated of order greater than I(1), the autoregressive distributed lag model and the Bounds Testing Approach (See Pesaran, Shin and Smith (2001)) can be used for the analysis. Here is the result using the ADF technique to test for the stationarity of the residuals from the OLS regression:

Table 3. Summary of the Unit Root Test for Residuals:

	Test Statistics	LL	AIC	SBC	HQC
DF	-3.1818	41.2056	40.2056	39.6379	40.0628
ADF	-2.4333	41.2641	39.2641	38.1286	38.9785

NB- 95% critical value for Dickey –Fuller statistics = -4.1314.

The observed DF and ADF test statistics is -3.18 and -2.43 respectively. The absolute value of these statistics falls short of the absolute value of -4.13, which is the 95% critical value for the Dickey-Fuller statistic. Hence, there is no evidence that the logarithm of real GDP is co-integrated with the logs of the other variables in the model. Therefore we accept the null hypothesis that there is no long-run relationship existing amongst the variables.

4.2 ARDL/Error-Correction Modeling

Note that when all the variables are co-integrated there exists a meaningful long-run relationship among them and the "Granger Representation Theorem" assures us that the short-run dynamics can then be aptly described by an error-correction model. The standard method of obtaining this is by using the autoregressive distributed lag (ARDL) model. However, it has also been shown that the ARDL model can still be used even when co-integration has not been established. See Iyoha (2004). Utilizing the MICROFIT 4.1 econometric software, and using the maximum R-bar squared criterion, we obtain: (i) estimated Long Run Coefficients using the ARDL Approach; and (ii) the parsimonious error-correction representation of the model:

Table 4

Estimated long-run coefficients using the ARDL Approach ARDL(1,3,3) selected based on R-BAR Squared Criterion.

Dependent Variable is DLRY

Regressor	Coefficient	t-ratio (prob)	standard Error
DLDEBT	0.10054	1.6827(0.118)	0.059748
DLDS	-0.17245	-2.3072(0.040)	0.074745
INPT	0.064459	4.4421(0.001)	0.014511

The result in table 4 which is the estimated long-run coefficient using the ARDL approach shows that debt services variable coefficient is negative. This conforms to apriori expectation that debt servicing affects economic growth negatively. The implication of the above is that as external debt service payment deters economic growth. Therefore, we reject the null hypothesis and accept the alternate hypothesis that external debt service hinders economic growth. The t-test of -2.3072 is statistically significant at 5% level, implying that external debt service is statistically significant in explaining the growth rate of the economy. External debt stock variable coefficient has a positive sign implying that a positive relationship exists between external debt and economic growth. Therefore, we reject the null hypothesis. But the t-test of 1.6827 is not statistically significant at 5% level i.e. it is not significantly different from zero. This may indicate the existence of a Laffer Debt Curve. See Cohen (1993). Despite its positive sign and given the coefficient value, a 10% rise in external debt stock will only increase economic growth by 1%. Therefore it can be said that it has not made a strong significant impact of growth. Therefore, we accept the null hypothesis that external debt stock has not made a significant impact on economic growth in Nigeria.

Table 5

Error Correction Representation for the Selected ARDL Model ARDL (1,3 ,3) selected based on R-Bar squared criterion.

Dependent Variable is dDLRY

Regressor	Coefficients	t-ratio (prob)	Standard Error
dDLDEBT	-0.018854	-1.0018(0.333)	0.018820
dDLDS	-0.26443	-1.6486(0.121)	0.016039
INPT	0.039673	2.7898(0.014)	0.014221
ecm(-1)	-0.161548	-3.2798(0.005)	0.18765

Given the absence of co-integration, we can interpret the parsimonious error correction model. The overall fit of each of them is fairly good since the R^2 is 0.653. This shows that between 65% of the systematic variations in the rate of economic growth (proxied by the growth rate of real GDP) is explained by the regressors. The F-value of the error correction model is 3.23 and is highly significant, easily passing the significance test at the 5% confidence level. This outcome shows that the hypothesis of a linear relationship between the logarithm of real GDP and the logs of the regressors cannot be rejected at the 95% confidence level. The coefficient of the error correction mechanism (ECM) is -0.615 and its t-value is -3.28 This t-statistic is highly significant, effortlessly passing the significance test at the 1% confidence level. The fact that the ECM is negative and highly significant means that the error correction mechanism will work properly to move the growth rate of real GDP towards equilibrium whenever the actual level deviates from the long-run equilibrium. The value of the coefficient portrays good dynamics since between one-half and two-thirds of the required adjustment to a new equilibrium is completed in a given year. The Durbin-Watson statistic of 2.04 indicates that there is no serial correlation. The estimated long-run coefficients using the ARDL approach are instructive. As earlier noted, there is an existence of a Laffer debt curve. The results of the ARDL model basically agree with this outcome as the debt service variables consistently show up with negative signs while the debt variables parade both positive and negative signs.

5.0 Summary, Conclusion And Recommendation:

The rationale for raising external loans has always been to bridge the domestic resource gap in order to accelerate economic growth and development. The accumulation of foreign debt is a common phenomenon among developing countries at the stage of economic development where domestic savings are low, current account deficits are high and capital imports are necessary to augment domestic resources. Nigerian government embarked on external borrowing just like other developing countries in other to accelerate economic growth and ensure sustainable economic development. This study tries to access the relationship between external debt and economic growth in Nigeria, with the aim of ascertaining if external borrowing made by government over the years had made any significant impact on the nation's economy. Result from the empirical analysis applied using the ARDL co-integration approach and a dynamic error correction model showed that external debt though having a positive sign or a direct relationship with growth; had not made any significant impact on the nation's economy. Also external debt service acts as a hindrance to economic growth as resources which would have been used for growth process are been diverted into servicing of debts. Having examined empirically the relationship between external debt and economic growth in Nigeria, it can be concluded that government embarked on external loans so as to boost economic growth and development. Although the contracted loans were said to be used for developmental purpose, it has made no significant impact on the growth and development of the economy as shown by the result. This can be attributed to the fact that most contracted loans were used for uncompleted and abandoned projects which successive governments did not include in their own budgets, or were not properly invested into a non-profit yielding venture. Another major factor that can be attributed to the non-significant impact of these loans is corruption. Most governments both at the federal and state levels are known for corrupt practices and mismanagement of fund. On the other hand, the empirical result also showed that debt service payment or interest payment made on these loans hindered economic growth and development. Resources which would have been channeled into growth process were diverted into servicing of contracted loans. This has made it difficult for the economy to record significant growth rate in the economy. The relief debt was to be channeled into good governance, economic growth and development and poverty reduction. Its effect has not been felt in the economy and now, there is a gradual and steady build-up of external debt stock again in Nigeria. The recent governments have been making frantic effort to ensure that the income from debt relief is channeled into economic growth and poverty reduction even after 6 (six) years (2006-2012) of the debt relief. Based on the findings of this study, the following recommendations are made:

1. Since it has been established that developing countries will to a large extent rely on external finance to bridge the resource gap created by low savings, low productivity level, fiscal deficit financing and low income; government should ensure that external loans contracted are channeled towards developmental projects that can help bridge these gaps.
2. External loans contracted should be invested into a profit yielding venture or into an income generating investment so that the profit/income from the investment can be used to service the debts.
3. Government should not contract loans indiscriminately but should have a very good reason for contracting loans external, which should be most foe capital projects.
4. Government should continue in their fight against corruption so that it can serve as a check to fund diverting from its original aim of borrowing to other private and selfish motive.

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**Markups, Productivity, and External Market Development:
An empirical analysis using SME data in the service industry**

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Abstract:

During the last decade, economists and policy makers have extensively discussed what types of firms can exploit external markets by exporting and what happens to domestic firms if external competitors penetrate into the home market. Although both theoretical and empirical studies have been dedicated to these issues, few have been carried out for the service sector. Since the service sector accounts for the lion's share of GDP, the lack of those studies indicates that a large part of the actual economy still remains veiled. Our study fills this gap. We examine whether or not the Melitz and Ottaviano (2008) model remains satisfied in the service sector, using data from Japanese SMEs. From our analysis, we confirm that larger market sizes are associated with higher productivity levels. On the other hand, firms with higher markups tend to develop their business in smaller markets, conditional of the simultaneity between production and consumption. These results reveal that further productivity growth in the service sector also requires markets to be larger and more integrated. In addition, the markup levels become lower in those markets.

Keywords: Productivity, Markup, External market development.

1. Introduction

As economic globalization develops, many economists and policymakers have discussed what types of firms can exploit external markets by exporting or foreign direct investment (FDI) and what happens to domestic firms if their external rivals penetrate into the home market. This is because the survival of firms in the globalized economy is one of the most important issues related to modern growth and industrial policies. For the last decade, many theoretical and empirical studies have been dedicated to this issue. These include theoretical studies that incorporate heterogeneity of productivity between firms and also pricing into growth and trade models. These models yield various implications concerning the relationship between external and internal competition and firms' performance in imperfectly competitive markets. On the other hand, empirical studies have carefully examined those implications. Most of these studies, however, focus only on the manufacturing sector although the service sector accounts for the lion's share of GDP[1]. In addition, relatively larger firms have been examined in these studies while small and medium enterprises (SMEs) make up the majority in actual markets. This means that the issue may still be veiled for large parts of economy in spite of the great contributions by the existing literature. The current paper attempts to fill this gap. We examine whether or not some theoretical implications of the heterogeneous firm models are still true for SMEs in the service sector.

Theoretically, Melitz (2003) incorporates firm heterogeneity into a trade model in a general equilibrium framework. This model assumes that the productivity levels vary across firms while their markups are homogenous in the monopolistic competition, and suggests that productive firms explore foreign markets while less productive firms stay in the home market. It is expanded by Helpman, Melitz, and Yeaple (2004) (henceforth, HMY) and their model predicts that more productive firms join foreign markets by FDI while the others become exporters. Furthermore, Melitz and Ottaviano (2008) (henceforth, MO) incorporate endogenous differences in the toughness of competition across markets into the trade model with firm heterogeneity. In this model, the toughness of competition is formed by the number and average productivity of competing firms, and it suggests that larger, more integrated markets exhibit higher productivity and lower markups.

These models are carefully examined in various empirical studies. For example, Wakasugi et al. (2008) examine the implications of the Melitz (2003) and HMY models using data from

[1] In Japan, the service sector accounts for 72.6% to GDP in 2009.

Japanese manufacturing firms and compare the results from those for selected European countries. Their results indicate that productivity of internationalized firms is higher than that of non-internationalized ones as the models predict. FDI firms are relatively more productive than exporters as the model also predicts. On the other hand, the difference between them in Japan is considerably smaller than those in European countries. As another example, Bellone et al. (2008) examine the key micro-level predictions derived from the MO model; (1) negative relations between firm markups and the domestic market size; (2) positive relations between markups and firm productivity; (3) negative relations between firm markups and import penetration ratio; (4) positive relations between firm markups and firm export intensity. Their study also examines whether firm markups are higher in the export market under certain conditions. Using French manufacturing industry data, they obtain favorable evidence for these theoretical predictions.

These contributions, however, have not been well applied to the service sector[2]. This is partly because data availability for the service sector is poor, and also partly because development of the external markets has been considered as an issue mainly for the manufacturing sector. The service sector is, in fact, significantly involved in the economic globalization as well. For example, many firms in developed countries now utilize information technology outsourcing (ITO) and business process outsourcing (BPO) in China and India[3]. Or, one can purchase books either from a downtown bookstore or from Amazon.com. These examples indicate that these issues also apply to firms in the service sector. The current paper tries to fill this gap. Using firm-level data, we examine the relationships between the firm performance and the development of the external market for the Japanese service sector. Following recent development of these studies, both productivity levels and firm markup are investigated.

Studying the service sector also provides an additional contribution to productivity analysis. Although services are usually distinguished from the manufactured products by the key features such as intangibility, perishability, inseparability, simultaneity and variability, it is not well examined how these features are related to the conditions of the market competition and the firm-specific performance in productivity literature[4]. Among those features, this paper examines the role of "simultaneity of production and consumption" in development of the external markets.

In relation to these issues, other than the models in international economics, Syverson (2004) also proposes an interesting framework into which the demand density, output substitutability and the market productivity and size distribution are simultaneously incorporated in productivity

[2] Kato (2010) discuss the service sector, but internationalization is examined only as difference in performances between domestic and foreign firms.

[3] Dalian in China and Bangalore in India are the centres of international ITO and BPO.

[4] Each of these characteristics is not always satisfied in all services.

literature. He applies this approach to U.S. ready-mixed concrete plants, which need simultaneity of production and consumption, and concludes that higher substitutability of firms excludes less productive firms and improves the average productivity of the markets. It is also worthwhile to examine this implication for the service sector because it seems to be applicable to discussion of productivity and markup performance in the home markets with or without competition against the rivals.

The outline of this paper is as follows. In Section 2, we briefly explain the model and estimation method which we apply. In Section 3, we describe the data used. In Section 4, we discuss the empirical results. In Section 5, we conclude by considering policy implications.

2. Estimation Method

This section briefly describes the methodology used for estimating the firm-specific productivity and markup simultaneously. In the empirical literature, total sales ($output \times price$) or value added ($output \times price - intermediate$) is widely used as a proxy of output because neither quantity nor price data is usually available, in particular for the service sector. Thus, if we assume heterogeneous markups across firms, we need to estimate both productivity and markup of each firm from revenue functions instead of production functions without price information. In this paper, we rely on an approach proposed by Martin (2010) (details are in Martin (2010) and Kato (2010)).

In this approach, the revenue function is represented as follows,

$$r_i - \sum_{X \neq K} \bar{s}_{Xi}\left(x_i - k_i\right) = \tilde{r}_i = \gamma \overline{\frac{1}{\mu_i}} k_i + \overline{\frac{1}{\mu_i}}\left(\lambda_i + a_i\right) + \tilde{\varepsilon}_i \qquad (1)$$

where the subscript i means firm i, and $i = 1, \ldots n$[5]. Lower case variables denote log of deviation from the reference firm for each variable. r, s, γ and μ are the total revenue, the revenue share of variable, the degree of returns to scale and the firm-specific markup, respectively. Here $\gamma > 0$ and assumed to be constant across firms. In addition, x is inputs except for capital (k). Following various existing models, capital is assumed to be fixed for the short run while other inputs are

[5] Our estimation implicitly assumes that the price of each input is identical across firms. Although this assumption is very restrictive and ad hoc, Eslava et al. (2005) reveals that ignoring input prices give little effects on productivity estimation using Columbian data.

temporarily adjustable. λ and a denote consumers' valuation of firm *i*'s product and technical efficiency. Using them, firm-specific quality adjusted productivity is represent as $\omega_i = (\lambda_i + a_i)$.

In equation (1), we cannot directly estimate ω because it is thought to be correlated with capital. Following the literature such as Olley & Pakes (1996), Levinsohn and Petrin (2003), Bond and Söderbom (2005), and Ackerberg et al. (2006), we estimate it by a control function approach. Here we use capital and net revenue to approximate ω. Because of data restriction, we can only estimate ω/γ. Since γ is assumed constant across firms, it gives no bias in discussion below. On the other hand, markup is represented as a function of revenue share and variable input factors without price information. That is,

$$\frac{1}{\mu_i} = s_{xi}\left(\frac{\partial \ln F_i}{\partial \ln X_i}\right)^{-1} = s_{xi}\Psi(\mathbf{X}_i) \qquad (2)$$

where F, X and $\mathbf{X}$ are the production function, temporary variable input factors and inputs, respectively. Since the functional form of $\Psi(\cdot)$ is also unknown, it is approximated in the same manner to ω. For markups, we obtain μ/γ as well as the firm-specific quality adjusted productivity.

Combining these estimates and results of questionnaire investigation, we examine the differences of the performances under varying conditions of competition.

3. Data

The data that we use in this analysis are obtained from *Basic Survey on Small and Medium Enterprises (BSSME)* and *Survey on Service Productivity Improvement (SSPI)*. Both surveys were conducted by the Small and Medium Enterprise Agency of Japan. BSSME is an annual survey targeting SEMs in almost all industry, while SSPI is a one-shot investigation targeting the companies in service industry in November, 2007. For temporal coincidence, we also use BSSME in 2007[6].

In estimation of equation (1), total sales are used as data of total revenues of firms. The proxies of capital and labor service inputs are the value of the tangible fixed assets and man hours, respectively[7]. We construct man-hour data of regular and part-time workers adjusted by average working hours respectively. In addition, the total wage is used as the labor cost. Since it is difficult to obtain a reliable proxy of intermediate inputs and costs, we construct it using financial data as follows,

$$Intermediate = COGS + SGA - \left(TW + Dep + WF + R + TD\right) \qquad (3)$$

where *COGS*, *SGA*, *TW*, *Dep*, *WF*, *R* and *TD* are the cost of goods sold, the selling and general administrative expenses, the total wages, the depreciation, welfare expense, rent and the tax and dues, respectively. The net revenue is total revenue – variable costs, where the variable costs are defined as the sum of the labor and intermediate costs. For estimation, we also use the revenue share of variable costs.

The firm specific productivity and markup are estimated by two-digit industry in Japan Standard Industrial Classification (JSIC). The sample size is 1036. Table 1 presents descriptive statistics for the data. The averages of productivity and markup are respectively -0.44 and 1.53. The average number of workers is 28.

Table 1 Descriptive Analysis

[6] To control exit probability, we also use BSSME in 2008. We assume that the firms exited from the markets if we find them in 2007 BSSME but not in 2008. Thus, the firms that refused to answer to this survey are also considered as exited firms, and our exit probability can be overestimated.

[7] The data of working hours are available from Monthly Labour Survey.

Variable	Obs	Mean	Std. Dev.
omega	1036	-0.44	1.95
markup	1036	1.53	0.70
Number of Employees	1036	28.37	38.76
Raio of Firms with 1-5 Employees	1036	0.20	0.40
6-20	1036	0.40	0.49
21-50	1036	0.24	0.42
51-100	1036	0.12	0.32
101-300	1036	0.04	0.20
301-	1036	0.00	0.06
Information and Communications	1036	0.09	0.28
Transport	1036	0.27	0.45
Wholesale Trade	1036	0.33	0.47
Retail Trade	1036	0.15	0.36
Real Estate	1036	0.08	0.27
Business Servies	1036	0.08	0.27

Tables 2 and 3 show that concerning the location of the customers 51 firms (5 percent of the total) have their customers in both domestic and foreign markets. 219 (21% percent) firms have them in the entire domestic market. 404 (39 percent) and 362 (35 percent) firms find their customers in home and neighboring prefectures and in home and neighboring municipalities, respectively. On the other hand, for the location of the business competitors, 55 firms (5 percent) compete with them in both domestic and foreign markets. In addition, 182 firms (18 percent) find competitors in the entire domestic markets while 305 (29 percent) and 455 firms (44 percent) have rivals in home and neighboring prefectures and municipalities, respectively.

Table 2 Matrix of location of the customers and business competitors (number)

		Location of the customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	20	21	12	2	55
	Group 2	13	85	63	21	182
	Group 3	12	62	208	23	305
	Group 4	4	38	112	301	455
	Group 5	2	13	9	15	39
	Total	51	219	404	362	1036

Note: "Group 1", "Group 2", "Group 3", "Group 4", and "Group 5" are "Both domestic and foreign market", "Entire domestic markets", "Home and neighboring prefectures", "Home and neighbouring municipalities", and "No competitor", respectively.

Table 3 Matrix of location of the customers and business competitors (ratio)

		Location of the customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.02	0.02	0.01	0.00	0.05
	Group 2	0.01	0.08	0.06	0.02	0.18
	Group 3	0.01	0.06	0.20	0.02	0.29
	Group 4	0.00	0.04	0.11	0.29	0.44
	Group 5	0.00	0.01	0.01	0.01	0.04
	Total	0.05	0.21	0.39	0.35	1.00

Note: "Group 1", "Group 2", "Group 3", "Group 4", and "Group 5" are "Both domestic and foreign market", "Entire domestic markets", "Home and neighboring prefectures", "Home and neighboring municipalities", and "No competitor", respectively.

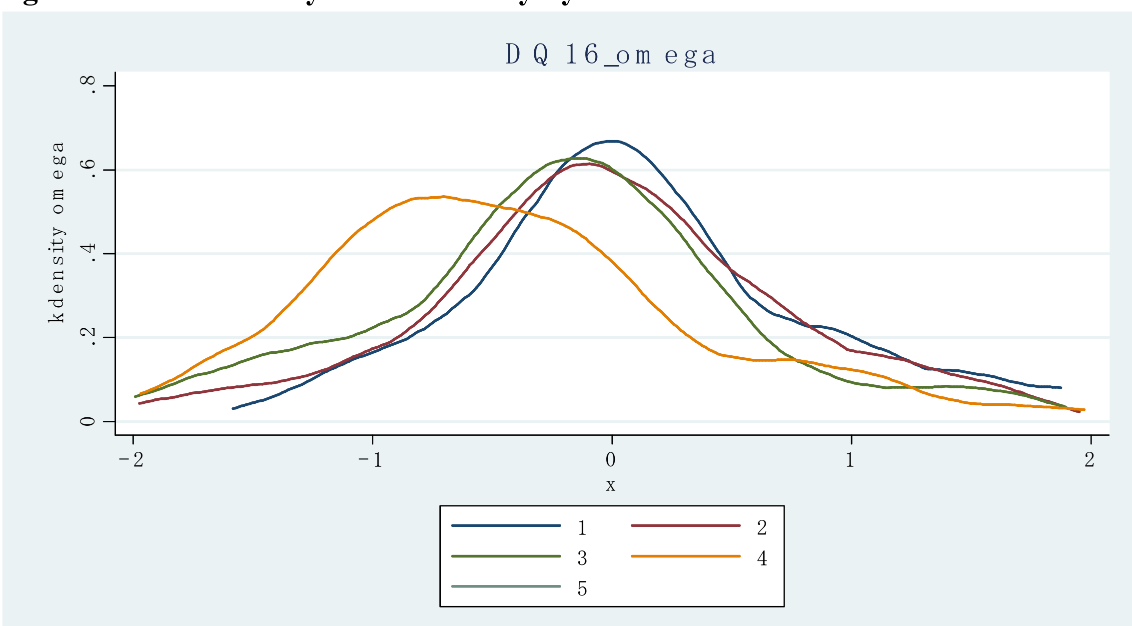
Table 3 is a matrix of the locations of customers and competitors. It shows that both customers and competitors are in foreign markets for 20 percent. 3 percent of firms have their customers in the domestic markets and rivals from the foreign markets. On the other hand, 2 percent of firms find their customers in the foreign markets while competitors in the domestic markets. For more local firms, the firms whose customers and competitors are in home and the neighboring municipalities amount to 29 percent. The cases that customers are in home and the neighboring municipalities while rivals in larger areas reach 4 percent. On the contrary, 15 percent of firms find their customers in larger areas while competitors in home and the neighboring municipalities. It confirms that 59 percent of firms have their customers and competitors in the same markets. In addition, the case that the customers are found in the larger markets than rivals dominates the opposite one.

4. Empirical Results and Discussion

This section describes our empirical results and discusses the interpretations of them. Figures 1 and 2 show the kernel density plots of productivity and markups, by the location of the customers, respectively. According to Figure 1, the firms whose customers are in home and neighboring municipalities obviously have the lower average and the larger distribution of productivity levels than the others. To the contrary, Figure 2 indicates that the firms who have their customers in the wider areas are likely to have the lower markups. This finding indicates that larger markets exhibit higher productivity and lower markups. It is also possibly interpreted that more productive firms develop the external markets.

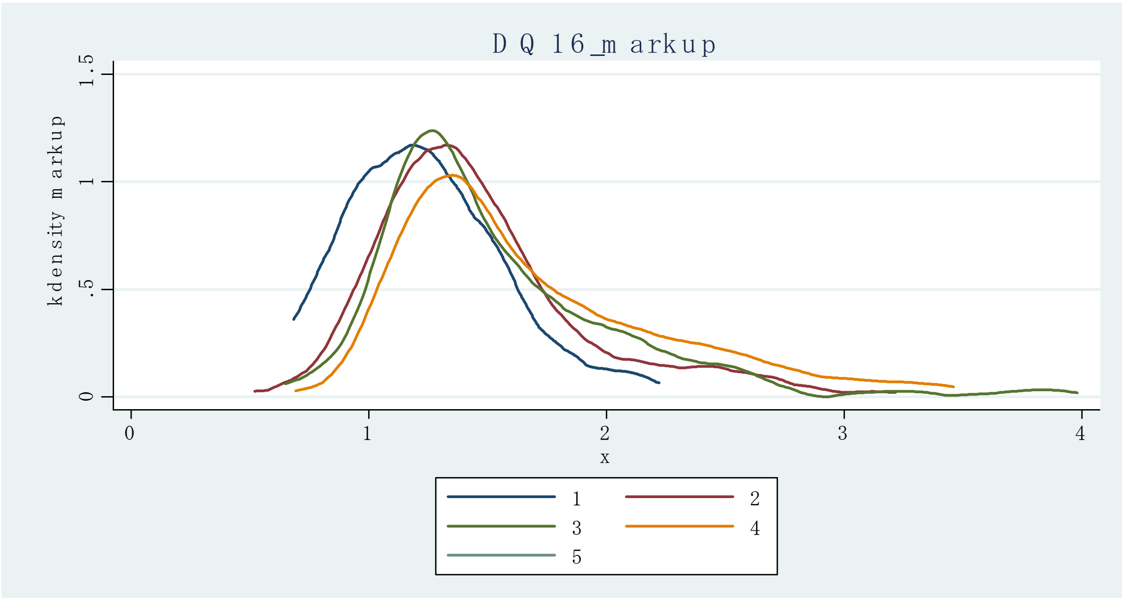
One may be concerned over whether or not our findings just reflect the differences in the industry-specific features rather than the differences in individual firms. That is, our findings just mean that the industries with wider markets are consistently more productive than those with narrower markets. In order to examine it, we control for the industry and the size of firms and carry out the statistical test. The result is in Tables 4

Figure1. Kernel Density of Productivity by Location of the Customers



Note: The groups of 1, 2, 3, 4 and 5 indicate "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", "Home and neighboring municipalities", and "No competitor", respectively.

Figure 2. Kernel Density of Mark-up by Location of the Customers



Note: The groups of 1, 2, 3, 4 and 5 indicate "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", "Home and neighboring municipalities", and "No competitor", respectively and 5. Those tables reveal that the firms whose customers are in home and neighboring municipalities are statistically significantly less productive than those whose customers are in both the domestic and foreign markets even after controlling for the industry and the size.

Table 4. Differences of Productivity by Market Size (Location of the Customers)

omega	Coef.	Std.Err	t	P>|t|
Group 2	-0.25	0.25	-0.99	0.32
Group 3	-0.37	0.24	-1.53	0.13
Group 4	-0.48	0.25	-1.89	0.06
Constant	-1.10	0.31	-3.51	0.00
Number of obs	1036			
F	22.94			
Prob > F	0.00			
Adj R-squared	0.34			

Note: "Group 1", "Group 2", "Group 3", and "Group 4" are "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", and " Home and neighboring municipalities", respectively.
Preference Group is "Group 1". All specifications include industry and size variables.

Table 5. Differences of Markup by Market Size (Location of the Customers)

omega	Coef.	Std.Err	t	P>|t|

Group 2	0.02	0.07	0.32	0.75
Group 3	0.09	0.06	1.42	0.16
Group 4	0.08	0.07	1.18	0.24
Constant	1.36	0.08	16.25	0.00
Number of obs	1036			
F	74.72			
Prob > F	0.00			
Adj R-squared	0.63			

Note: "Group 1", "Group 2", "Group 3", and "Group 4" are "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", and " Home and neighboring municipalities", respectively.
Preference Group is "Group 1". All specifications include industry and size variables.

Even if we use the location of competitors, instead of the location of customers, it is still found that productivity is higher and markups are lower in larger markets. As for this finding, Table 6 is the result of regression analysis. The firms whose competitors are in the foreign markets are more productive than those whose rivals are in the home markets. On the other hand, regression analysis seems to show that the firms with their competitors in the entire domestic market obtain higher market power than the firms with foreign rivals although the estimates are statistically slightly insignificant. This finding means that more integrated markets are associated with higher productivity and lower markups. It possibly indicates that higher penetration of external competitors result in higher productivity and lower markups.

Table 6. Differences of Productivity by Market Size (Location of the Competitors)

omega	Coef.	Std.Err	t	P>|t|
Group 2	-0.24	0.25	-0.98	0.33
Group 3	-0.19	0.24	-0.78	0.43
Group 4	-0.43	0.24	-1.79	0.07
Group 5	0.04	0.34	0.11	0.91
Constant	-1.21	0.30	-4.08	0.00
Number of obs	1036			
F	22.15			
Prob > F	0.00			
Adj R-squared	0.34			

Note: "Group 1", "Group 2", "Group 3", "Group 4", and "Group 5" are "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", " Home and neighboring municipalities", and "No competitor", respectively.
Preference Group is "Group 1". All specifications include industry and size variables.

Table 7. Differences of Markup by Market Size (Location of the Competitors)

omega	Coef.	Std.Err	t	P>|t|
Group 2	0.11	0.07	1.65	0.10
Group 3	0.04	0.06	0.60	0.55
Group 4	0.08	0.06	1.31	0.19
Group 5	0.00	0.09	0.04	0.97
Constant	1.36	0.08	17.16	0.00
Number of obs	1036			
F	71.75			
Prob > F	0.00			
Adj R-squared	0.60			

Note: "Group 1", "Group 2", "Group 3", "Group 4", and "Group 5" are "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", " Home and neighboring municipalities", and "No competitor", respectively.
Preference Group is "Group 1". All specifications include industry and size variables.

These findings may also imply that the prediction by Syverson (2004) is true even for the service sector. Suppose that the number of competitors which is thought to be equivalent to substitutability is positively correlated with the size of market. In that case, our result means that the higher substitutability there is, the higher the average productivity and the lower markups are as the Syverson model expects.

Next, we examine whether or not the distinguishing characteristics of services yield some effects on the relations examined. Among various characteristics, we examine simultaneity between production and consumption. In order to discuss it, we analyze the case that the areas of customers equal to those of competitors. We assume that firms in this case hold "simultaneity" because production and consumption are in the same market. According to Table 8, there is no firm in this case both of customers and competitors are in the home and neighboring municipalities for the information and communication (ICT) industry while 66 percent of firms are included. Thus, it is thought that simultaneity is largely satisfied in the retail trade industry but not in the ICT industry.

Table 8. Matrix of Location of the Customers and the Business Competitors by Industry: Information and Communications

		Location of the Customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.04	0.08	0.02	0.00	0.14
	Group 2	0.03	0.19	0.06	0.02	0.30
	Group 3	0.03	0.17	0.19	0.01	0.40
	Group 4	0.00	0.07	0.02	0.00	0.09
	Group 5	0.01	0.03	0.01	0.01	0.07
	Total	0.12	0.53	0.30	0.04	1.00

Transport

		Location of the Customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.02	0.01	0.00	0.00	0.02
	Group 2	0.01	0.07	0.05	0.00	0.13
	Group 3	0.01	0.07	0.24	0.02	0.34
	Group 4	0.01	0.05	0.16	0.24	0.46
	Group 5	0.00	0.01	0.01	0.01	0.04
	Total	0.05	0.21	0.47	0.27	1.00

Wholesale Trade

		Location of the Customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.03	0.01	0.02	0.00	0.06
	Group 2	0.02	0.11	0.09	0.02	0.24
	Group 3	0.01	0.05	0.24	0.02	0.32
	Group 4	0.00	0.03	0.10	0.22	0.36
	Group 5	0.00	0.01	0.00	0.01	0.02
	Total	0.06	0.21	0.45	0.27	1.00

Table 8. Continued

Retail Trade

		Location of the Customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.00	0.01	0.01	0.01	0.03
	Group 2	0.00	0.04	0.00	0.04	0.08
	Group 3	0.00	0.03	0.08	0.03	0.13
	Group 4	0.00	0.03	0.05	0.66	0.74
	Group 5	0.00	0.00	0.00	0.02	0.02
	Total	0.00	0.10	0.14	0.76	1.00

Real Estate

		Location of the Customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.00	0.04	0.01	0.00	0.05
	Group 2	0.01	0.04	0.10	0.04	0.18
	Group 3	0.00	0.05	0.17	0.06	0.28
	Group 4	0.00	0.01	0.11	0.30	0.42
	Group 5	0.00	0.00	0.02	0.05	0.07
	Total	0.01	0.13	0.41	0.45	1.00

Business Services

		Location of the Customers				
		Group 1	Group 2	Group 3	Group 4	Total
Location of the business competitors	Group 1	0.02	0.04	0.02	0.00	0.09
	Group 2	0.00	0.04	0.05	0.01	0.10
	Group 3	0.01	0.05	0.19	0.00	0.25
	Group 4	0.00	0.00	0.14	0.36	0.49
	Group 5	0.01	0.04	0.01	0.01	0.07
	Total	0.05	0.16	0.41	0.38	1.00

Note: “Group 1”, “Group 2”, “Group 3”, “Group 4”, and “Group 5” are “Both domestic and foreign markets”, “Entire domestic markets”, “Home and neighboring prefectures”, “ Home and neighboring municipalities”, and “No competitor”, respectively.

Tables 9 and 10 are results of regressions of the market sizes on productivity and markups in the case that the locations of the consumers are the same as those of the competitors. Table 9 shows that, in the case that the locations of the consumers are the same to those of the competitors, the firms in the foreign markets have higher productivity levels than those in the home markets although the difference is not statistically significant.

Table 9. Differences of Productivity by Market Size:
In the case that Location of the Consumers is the same as that of the Competitors

omega	Coef.	Std.Err	t	P>|t|
Group 2	-0.54	0.46	-1.18	0.24
Group 3	-0.42	0.43	-0.96	0.34
Group 4	-0.71	0.43	-1.63	0.10
Constant	-1.16	0.51	-2.30	0.02
Number of obs	614			
F	14.55			
Prob > F	0.00			
Adj R-squared	0.21			

Note: "Group 1", "Group 2", "Group 3", and "Group 4" are "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", and " Home and neighboring municipalities", respectively.
Preference Group is "Group 1". All specifications include industry and size variables.

On the other hand, table 10 shows that the markup levels of firms in the foreign markets are lower than those in the entire domestic, in the home and neighboring prefecture, and in the home and neighboring municipality with statistical significance. Thus, in this case, markup is more associated with the size of the market than productivity. It shows the possibility that it is important to more differentiate their services in the case that there is simultaneity between production and consumption.

Table 10. Differences of Productivity by Market Size:
In the case that Location of the Consumers is the same as that of the Competitors

omega	Coef.	Std.Err	t	P>|t|
Group 2	0.32	0.15	2.13	0.03
Group 3	0.34	0.14	2.42	0.02
Group 4	0.59	0.14	4.25	0.00
Constant	1.04	0.16	6.36	0.00
Number of obs	614			
F	18.19			
Prob > F	0.00			
Adj R-squared	0.25			

Note: "Group 1", "Group 2", "Group 3", and "Group 4" are "Both domestic and foreign markets", "Entire domestic markets", "Home and neighboring prefectures", and " Home and neighboring municipalities", respectively.
Preference Group is "Group 1". All specifications include industry and size variables.

5. Concluding Results

In this paper, we confirm that larger, more integrated markets exhibit higher productivity as the HMY and the MO models predict even for the service sector. In the service sector, there is a higher barrier to obtain customers in the larger areas even in a certain country because of an intrinsic characteristics, simultaneity between production and consumption. In this condition, our results reveal that the markups decrease as the market size expands from the home municipality to the foreign markets. Our results also indirectly confirm that the average productivity levels are higher and the dispersion of them is smaller if the number of rivals is larger as Syverson finds for the ready-mixed concrete plants that also have simultaneity between production and consumption.

From these findings, we also discuss the validity of the report by McKinsey Global Institute (2000). The report said that the less productive local SMEs in the Japanese service sector have reduced aggregate productivity growth. Thus, liberalizing their markets and introducing competition-friendly policies to get rid of such inefficiency should be carried out. Our findings seem to be supportive for this view although our study does not explicitly identify what allows some firms to survive with higher markups in the local markets.

Our results suggest that larger, more integrated markets should be formed for productivity growth. Such markets are also useful for welfare improvement because markups are lower there. A remaining question is what allows some firms to manage their business in the narrow local market with higher markups although their productivity is poorer. If those firms successfully differentiate their service from their competitors and obtain market power in such narrow markets, it is just a result of fair market competition and there is no room for the administration to intervene with it. But if their monopolistic power stems from anti-competition regulation or lack of appropriate business models, the government possibly plays an important role to remove such obstacles.

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STRATEGY IN ENCOUNTERING THE RISING RATE OF UNEMPLOYMENT

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Abstract

This study aims to study the perspective of the minimum wage laws gazette by the government of Malaysia besides explaining their underlying incentive structure. Workers in Malaysia celebrate Labor Day knowing the minimum wage that will be paid to workers in the private sector, which will be RM900 per month for employees in the Peninsulaand RM800 for those in Sabah, Sarawak and the Federal Territory of Labuan. Prime Minister Datuk Seri Najib Tun Abdul Razak when revealing details of the minimum wageon 30 April 2012, said it complements the National Transformation Policy that is meant to drive Malaysia towards becoming a high-income nation. With some exceptions, this will be implemented in six months after the Minimum Wages Orderis gazetted. Finally, Malaysia will have a minimum wage policy in place. However, the minimum wage policy is not a guarantee of better things to come. It has to be matched with hard work, innovation and vigilance. Labor productivity has to improve consistently across the board. Employers had, naturally, been lukewarm about Malaysia having a minimum wage policy. Butthe sooner the employers understand the overall benefits of minimum wages, the better. Malaysia cannot be a develop nation if a significant portion of its workers have salaries that keep their household income below the poverty line. A high-income economy does not rely on low-cost labor to speed up progress. Instead, it is prompted by ideas and value enhancement. This research was done to explore how the government started of the minimum wage law policy and how the market conditions favor this policy. Several data were obtained from the Ministry Of Finance to make an inference whether the policy either helps or hurt the workers. Some of the response from the people was positive while some shows great concern over the minimum wage laws especially on the increase of unemployment rate.

Keywords: Minimum, Wages, Employment, Income, Expenses

Background of the Study

A **minimum wage** is defined through lowest hourly, daily or monthly remuneration that employers legally pay to workers. It is the lowest wage at which workers may sell their labor. In the past several years, there were many differences of opinion that exists about the benefits and disadvantages of setting a minimum wage although minimum wage laws are seen effective in many cases. Some of the people support the minimum wage laws as it increases the standard living of workers, reduces poverty, and making the business more efficient. In the other hand, the minimum wage laws was opposed by some of the peoples claiming that if it is high enough to be effective, why does it increases unemployment, particularly among workers with very low productivity due to inexperience or handicap, thereby harming less skilled workers and possibly excluding some groups from the labor market besides it is less effective and more damaging to businesses than other methods of reducing poverty.

The public policy is allegedly based on the implication of the economic theory proposed by the economist. Unfortunately, the economic analysis of government policy is often abided for the political reasons. Such a great example would definitely be the minimum wage laws gazette by the government of Malaysia. In Malaysia, every politician wanted to decrease the double-digit teenage unemployment by setting the minimum wage laws. But, when economist claims the it may cause a regretful outcome, their voice is not heard by the politicians in Malaysia. It is undoubtful that the politicians will pay their attention to economist's advice in framing out the economic policies but such advices will not stay too long when it conflicts with the political reality of winning votes.

According to the National Wage Consultative Council (2012), the government has set a minimum wage of RM900/month for Peninsular Malaysia and RM800/month for Sabah, Sarawak and Labuan. This will benefit 3.2m private sector workers (25.8% of total employment) other than those in domestic services. The minimum wage will take effect six months from the date of the Minimum Wages Order is gazetted. Small firms with no more than five workers will be allowed to defer it for a further six months.

Lee HengGuie (2011) stated the RM900 minimum wage is 49.9% of the national mean wage of RM1,804.43 in 2010. In setting the minimum wage, the government took into account social and economic considerations: cost of living, productivity, competitiveness and employment. In Malaysia, almost 33.8% of about 1.3m private sector workers still earned less than

RM700/month in 2009, well below the RM800/month that is considered the poverty line. Wages have been lagging behind productivity growth, rising 2.6% p.a. versus productivity growth of 6.7% p.a. over the past decade. The new wage rate will have a bigger impact in Sabah (RM800 vs. the current average salary of RM577), followed by Sarawak (RM800 vs. an average of RM758). For Peninsular Malaysia, the new rate of RM900 is 20.4% below the current average salary of RM1,131.

Arguably, the higher wage will have a net positive impact on the economy as any potential small loss of jobs will be more than covered by its multiplier effect as it puts more money in the hands of workers, thereby releasing pent-up consumption, albeit with some inflationary impact. There is strong empirical evidence that countries which implement a minimum wage tend to see a positive wage effect and a small negative employment effect among workers covered by the minimum wage legislation.

Minimum Wages for Peninsular, Sabah, and Sarawak (RM/month)

State	Minimum wage	Current average salary	2010 mean wage	2009 poverty line income
Peninsular	900.00	1131.00	1739.16	763.00
Sabah	800.00	577.00	1565.93	1048.00
Sarawak	800.00	758.00	1630.48	912.00

Source: Ministry Of Human Resources

Research on Minimum Wage Laws

We focus our attention on this more recent literature, which has become known as the “new minimum wage research.” Because the earlier literature on the employment effects of the minimum wage was carefully and extensively summarized by BGK, it seems unnecessary to repeat that review in this monograph. In contrast, there is no comprehensive review of the extensive literature that has emerged over the past 15 years. We thus begin our review with how the government of Malaysia started the new minimum wage policy. Next, we bring up some issues on how the market conditions favors the government policy. Thus, we review that the advantages of the minimum wage policies gazette by the government. We also identify the economic impact such as the small negative employment rate and investment impact.

Our intent in reviewing this literature is threefold. First, most of the political debate surrounding proposed changes in the minimum wage concerns the potential effects on employment. Although we do not view that focus as entirely appropriate, the fact that the employment question takes on such importance means that the answers should be based on a comprehensive survey of the literature, recognizing that minimum wage effects may differ across different segments of the population and in different economic circumstances and contexts. We therefore attempt to draw general conclusions about the effects of the minimum wage on employment that are relevant to policymakers, pointing out, in particular, in what context and for which workers the minimum wage will have consequences.

Second, we hope that our review will help readers assess alternative models of the labor market. The recent literature has reopened the debate about the appropriate theoretical description of the low age labor market, with some of the empirical research characterized as rejecting the competitive model in favor of other formulations. As we note throughout the monograph, economic theory often fails to make an unambiguous prediction about the employment effects of minimum wages.

Even in the neoclassical model, the effect of the minimum wage on any given set of workers will depend on, among other things, the elasticities of substitution across different types of workers and cross elasticities of demand across different types of goods. However, some empirical tendencies tend to match up better with one model or the other, and we try to provide a sense of what these tendencies are.

Third, many economists or policymakers perusing the literature may find it quite difficult to draw conclusions from the existing evidence. More than 100 studies have been published on the effects of minimum wages on employment since the 1990s, and the findings from this newer research are summarized differently in different places. Income cases, the new minimum wage research are described as failing to find evidence of disemployment effects.

For example, Bazen (2000) states that "(t)he latest studies of the experience of the USA and the UK in general find no evidence of negative effects on youth employment"(p. 64). Somewhat more cautiously, Flinn (2006) writes that "these recent studies have been particularly useful in indicating that the "textbook" competitive model of the labor market . . . may have serious deficiencies in accounting for minimum wage effects on labor market outcomes . . . " (pp. 1013–4). In contrast, others summarize the findings as more ambiguous, suggesting that *no* conclusions can be drawn, and that positive effects may be as likely as negative effects.

Lemos (2004), for example, asserts that "there is no consensus on the direction and size of the effect on employment" (p. 219), while Stewart (2002) notes that some studies find employment effects to be “absentor positive” and that others find “significant negative effects” (p. 585).2In contrast, much of our own work tends to find negative employment effects for the lowest-skilled groups.

David Neumark (2001) states that given the differences in the conclusions one might draw depending on what one reads, and the difficulties of wading through the mass of recent studies, we thought it would be useful to present a comprehensive review of the more recent minimum wage literature that provides an accurate accounting of the range of estimates in existing studies, and attempts to understand some of the sources of differences in results across studies, in addition to determining what conclusions can be drawn.

FINDINGS OF THE STUDY

In Malaysia, there are three mechanisms that determine the wages of workers in the private sector 1) the Wages Council Act 1974 (WCA), 2) collective bargaining (CA), and 3) market forces. The WCA and CA fall under the definition of minimum wage. But these minimum wages do not provide a decent standard of living and cover only a small number of workers. The existing CAs do not cover the majority of low-paid workers. As a result, wages in Malaysia are largely determined by market forces. Real wages have been low or stagnating because of price controls, subsidies and the influx of cheap unskilled foreign workers.

Sector	Total number of CA			No. of CA deposited and taken cognisance by Industrial Court					
	2008	2009	2010	2008		2009		2010	
				No.	% with PLWS	No.	% with PLWS	No.	% with PLWS
Manufacturing	153	159	195	108	70.59	116	72.96	144	73.85
Services	112	108	116	81	72.32	80	74.07	88	75.86
Agriculture	5	9	17	5	100.00	9	100.00	15	88.24
Others	-	-	2	-	-	-	-	2	100.00
Total	**270**	**276**	**330**	**194**	**71.85**	**205**	**74.28**	**249**	**75.45**

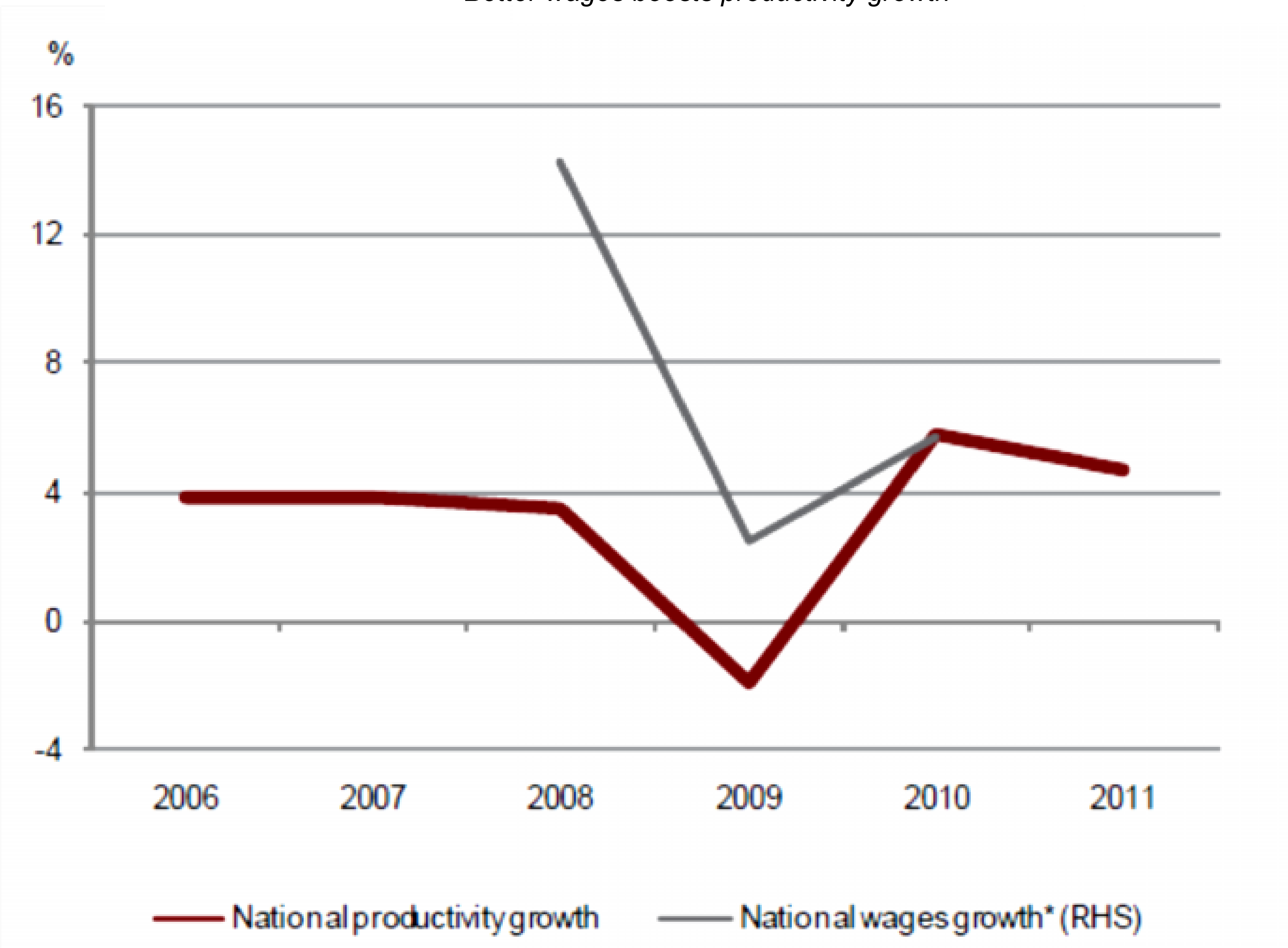
Distribution of collective agreement (CA) with productivity-linked wage system (PLWS) by sector 2008 – 2010

The Malaysian Trades Union Congress (MTUC) has been asking for a wage policy for decades. The minimum wage policy was announced by the Prime Minister cum Finance Minister in the Oct 2010 budget speech. On 30 Mar 2010, the New Economic Model (NEM) proposed the formulation of a minimum wage policy to meet the inclusiveness agenda of the NEM. The objective is to rectify the dysfunctional wage-setting mechanism for low-paid workers. In Jul 2011, the National Wages Consultative Council Act 2011 (Act 732) was passed by the Parliament and gazetted on 15 Sep 2011, repealing the WCA 1947 (Act 195).

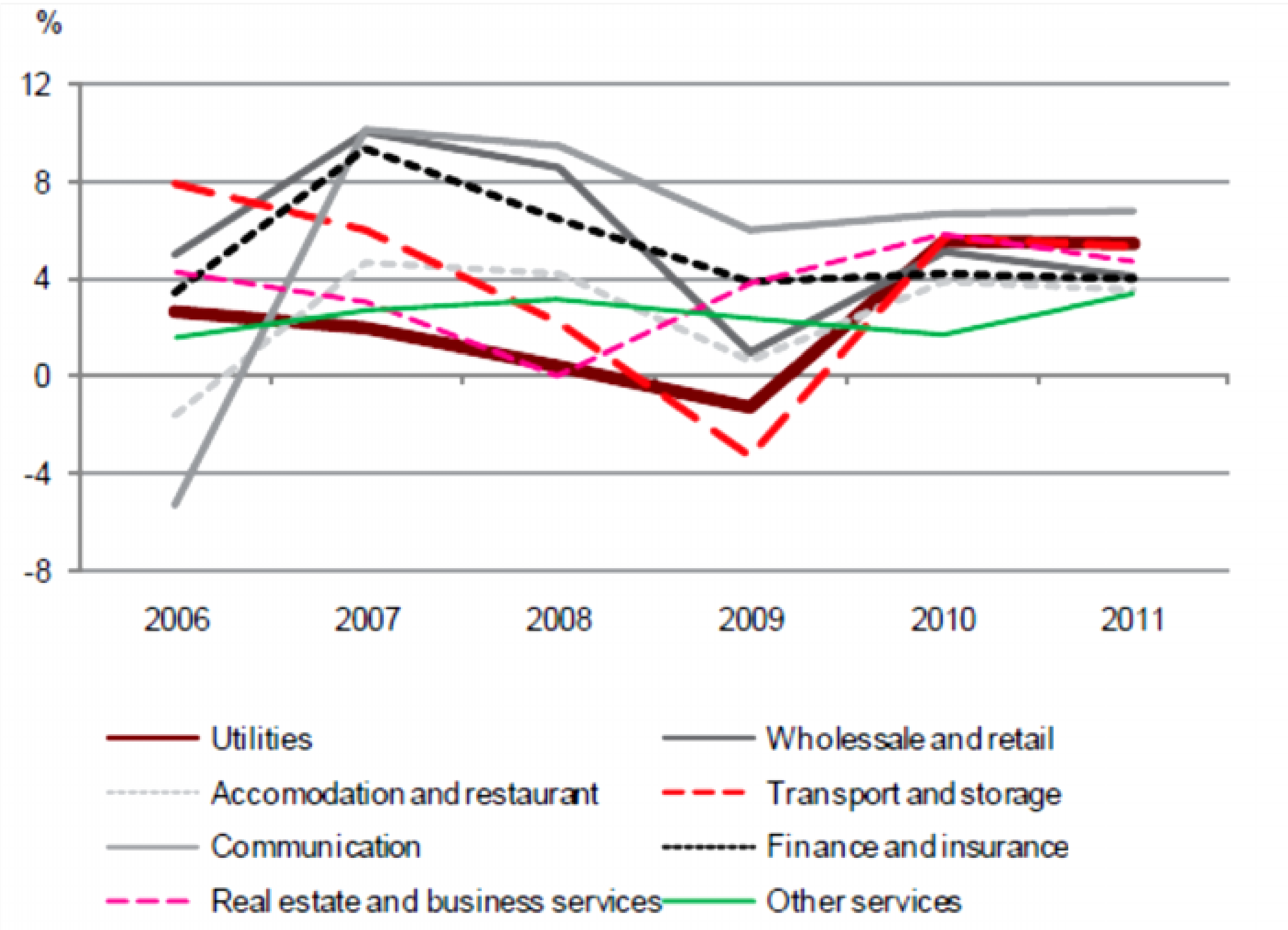
Various measures showed that Malaysia's labor market is characterized by 1) a high presence of low-skilled workers (70% of labor force), significantly higher than in Singapore (51%), Taiwan (67%) and South Korea (65%), and 2) over-reliance on low-cost, unskilled foreign workers, which have sustained the profitability of low-value-added business activity, giving businesses no incentive to move up the value chain. It also largely contributed to a dampening effect on wages. The National Employment Returns 2009 study initiated by the Human Resources Ministry revealed that 33.8% (Peninsular Malaysia=27.2%, Sarawak=48.1% and Sabah=63%) of around 1.3m private sector workers in Malaysia still earned less than RM700/month. Wages lag behind productivity growth. A study by the World Bank that shows that wage growth was 2.6% p.a. in the past 10 years compared to productivity growth of 6.7% p.a., suggesting suppression of wages, especially for low-paid workers, and also an inefficient labor market.

There are arguments for and against a minimum wage. The implementation of a minimum wage policy signals the government's commitment to greater inclusiveness and reduces poverty as the income of at least 30-40% of workers currently puts them below the poverty line. Better wages arguably boost productivity growth, which is positive for employers. Meanwhile, those against the minimum wage argue that it interferes with market forces in wage setting, increases business costs and leads to some inflationary impact as higher costs will be passed to consumers.

Better wages boosts productivity growth

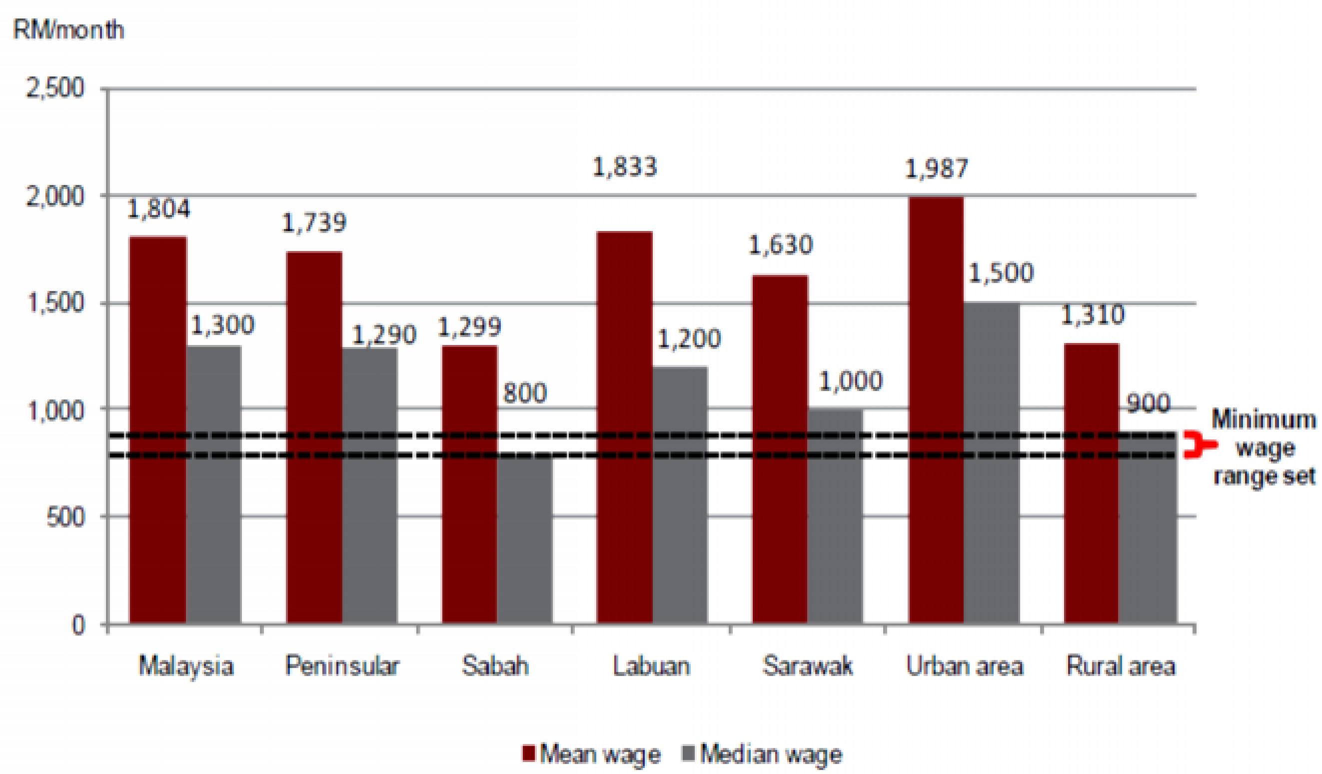


Services sub-sector's productivity growth



In setting the minimum wage, the National Wages Consultative Council (NWCC) took into account social and economic considerations: cost of living, productivity, competitiveness and employment. Other points that it considered include geographic (different states, regions), economic sectors/industries as well as demographic. The extent to which these factors are balanced can be approximated by some rough indicators such as the level of the minimum wage relative to the median or mean wage or the proportion of workers whose wages are affected by the statutory minimum. As stipulated under the National Wages Consultative Act 2011, minimum wage means the basic wage, i.e. the lowest hourly, daily or monthly wage that employers legally pay employees. Part of allowances or fixed payments will be allowed in calculating the minimum wage. The NWCC set a minimum wage of RM900, which is around 49.9% of the national's mean wage of RM1,804.43 in 2010. In the UK, for example, the minimum wage corresponds to about half the median wage, lower than 60% of median wages in France but considerably higher than the 32.4% of median wages in the US.

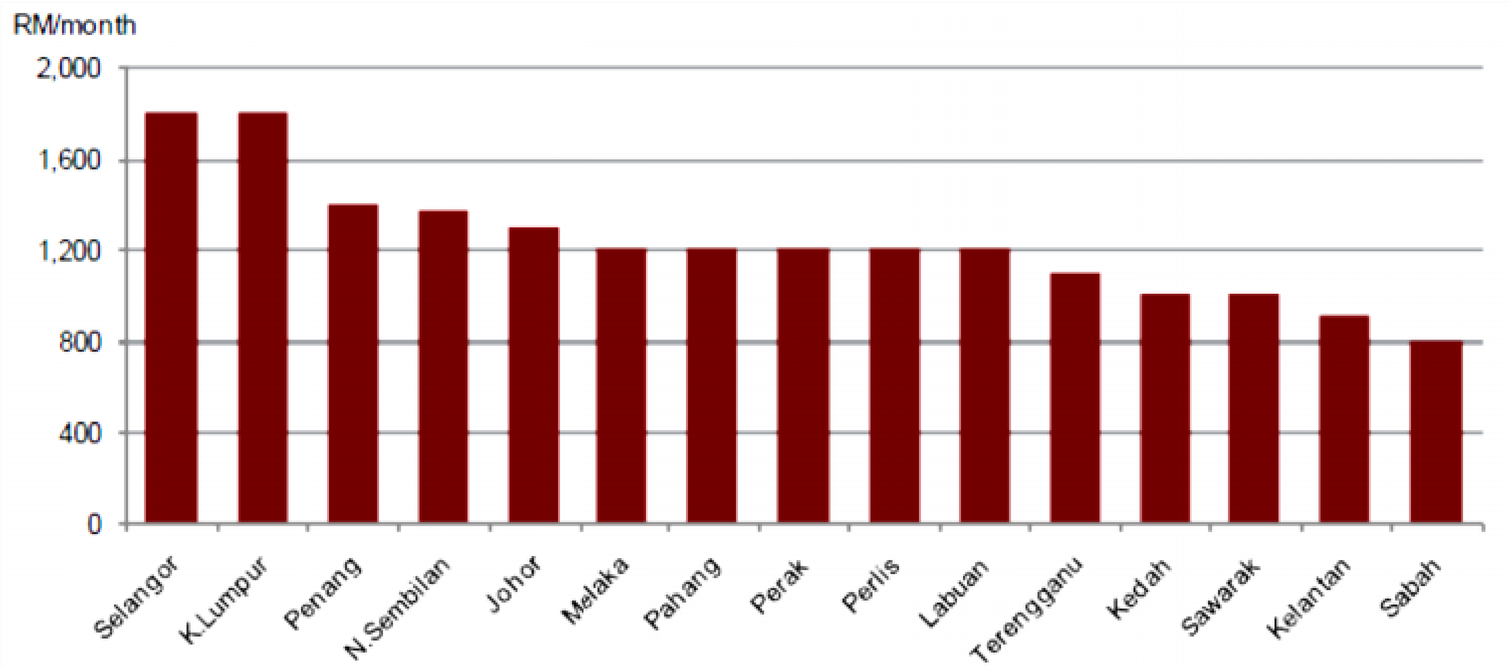
According to Sonia Pereira (2003), there is no universal answer as minimum wage effects depend on a host of country-specific factors such as labour market conditions and variation in worker productivity across regions, industries and occupations. The RM900 minimum wage is a reasonable threshold, being 49.9% of the national mean wage. A minimum wage that is too high or above the market-clearing level would lead to employment reduction and an increase in unemployment. The minimum wage should not be increased when unemployment is high or rising and is concentrated among low-skilled workers. As a rule of thumb, in developing countries, the national minimum wage should be probably less than 40% of the average wage and roughly not more than one-third of the average or mean wage. The proposed increase in minimum wage should take into account inflation, productivity as well as employment growth.



The reasonable minimum wage range

Some 3.2m private sector workers or about 25.8% of total employment will benefit. Many will be from low-to middle-income households. The wage rate will be distributed unevenly, with a

RM100 difference between the Peninsular Malaysia and Sabah, Sarawak as well as the Labuan Federal Territory. The new rates will have a bigger impact in Sabah (RM800 vs. the current average of RM577), followed by Sarawak (RM800 vs. average of RM758). For Peninsular Malaysia, the new rate of RM900 is 20.4% below the current average salary of RM1,131.

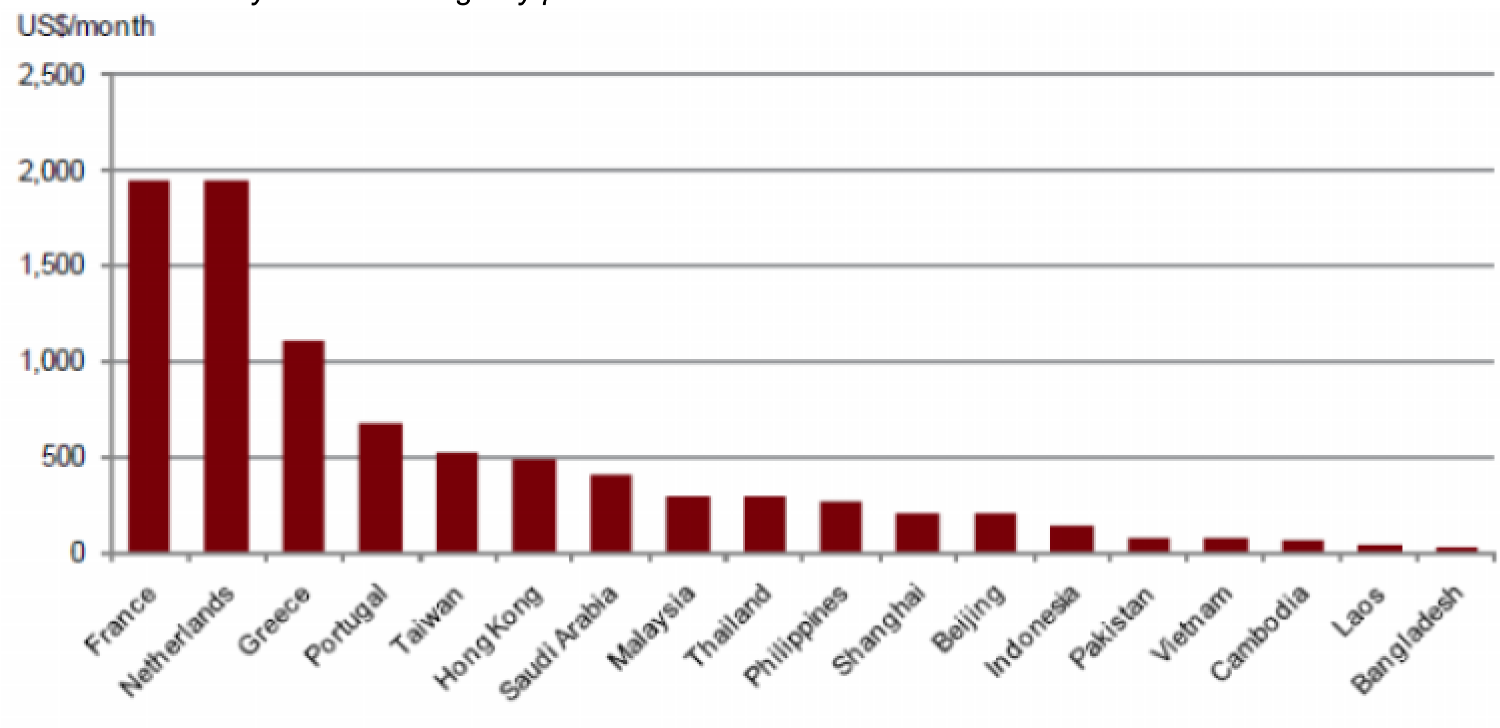


Median monthly salary and wages paid by states in Malaysia

A grace period will be given to employers to restructure their wage schemes once the new minimum wage is implemented. The minimum wage will take effect six months from the date the Minimum Wages Order is gazetted. Most firms with five workers or fewer, so-called small-time employers or micro-enterprises will be allowed to defer it for a further six months. The 12-month grace period does not cover professional outfits such as dental and medical clinics and legal, architecture and consultant firms. SMEs will be given the opportunity to apply to the wage council for an extension before the commencement date. In practice, there are several reasons why the effectiveness of minimum wages may be limited. One obvious factor which can limit the impact of minimum wages is weak enforcement. Other factor is simply the risk of mismanagement – when minimum wages are set at an unrealistically high level, leading to either non-enforcement or displacement of low-paid workers into unemployment or informal employment. In Malaysia, employers which do not comply with the minimum wage policy risk a maximum fine of RM10,000 per worker. For continuous offenders, they will be fined RM1,000 per day and repeat offenders would face a RM20,000 fine or five years' jail or both.

We do not think that the minimum wage will hurt Malaysia's competitiveness as some 90% of the countries in the world have minimum wage policies. They include Malaysia's regional peers such as China, Taiwan, South Korea, Thailand and Indonesia. Furthermore, the minimum wage scheme will only applicable to low-paid workers.

Monthly minimum wage by private sector



Malaysia's competitiveness is a function of a conducive investment climate, predictable economic policies, an array of business-friendly incentives as well as the provision of good infrastructure and skilled workers. The impact on the cost of doing business will be manageable as 1) wages constitute 9.2% of the total cost of doing business, and 2) the minimum wage covers lower-income category, which represents about 20% of total manpower in a company. If labor productivity rises faster than wages, capital and stock owners will benefit. Companies may increase the budget for the training of their workers.

CONCLUSION

There is strong empirical evidence that countries which implement a minimum wage tend to see a positive wage effect and a small negative employment effect among workers covered by the minimum wage legislation if the wage is set above the market equilibrium level. The precise magnitude of the negative effect on employment is a subject of debate and is likely to vary depending on time, place and the type of job. The NWCC/MOHR studies showed that a minimum wage is expected to reduce the demand for migrants workers by 0.4-6.1% over next four years (2012-15) under monopsony and competitive models if the minimum wage is set at RM900/month and above. Under perfect competition market, the RM900/month minimum wage is expected to increase the country's unemployment rate by an average 0.4% pt in 2012-14. The impact on investment is very mild with an estimated less than 0.05% decline in total investment rate during 2012-14 when the minimum wage is set at RM900/month.

An appropriate minimum wage level would over time achieve a big push, i.e.

Hypothetical wage level (per month)	◄------ Monopsony model (%) ------►				◄------ Competitive model (%) ------►			
	2012	2013	2014	2015	2012	2013	2014	2015
RM700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RM800	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
RM900	-0.6	-0.4	-0.5	-0.4	-0.9	-0.7	-0.6	-0.4
RM1000	-0.8	-1.8	-1.6	-1.3	-2.5	-2.2	-2.0	-1.7
RM1100	-1.0	-1.8	-1.2	-1.7	-4.3	-4.0	-3.7	-3.4
RM1200	-3.9	-3.9	-2.3	-3.0	-6.1	-5.6	-5.3	-4.9

move the low-wage, low-consumption and informal labor market to a high-wage, high-consumption and formal labor market. As the adjustment of the minimum wage will be carried out on a staggered basis, the inflationary impact, i.e. the cost pass-through to consumers, is likely to be manageable. If the rise in productivity growth matches the rise in wages, this will result in a lower cost of production and companies may absorb the rise in unit labor cost.

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FDI, Exports and Economic Activity of India: A Macro Analysis

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Abstract: The past two decades evidenced that the emerging market countries especially India have become the most favoured destinations for FDI and investor confidence in these countries has soared and exports have grown much faster than GDP. India's economic reforms of 1991 had generated strong attention in foreign investors and made India as one of the favourite destinations for world FDI flows. In different studies, several factors appear to have contributed to growth phenomenon including FDI. However, as of yet there have not been many attempt to investigate the long run impact of FDI, real export on real economic activity (real GDP) for India.

This paper aims to analyse long run relationship among FDI, exports and economic activity in India. And this empirical study has applied VAR technique to examine the long run effect of FDI inflow and real exports on real economic activity (Real GDP), the impact of real GDP growth as the common factor that drives growth on other variables such as exports and FDI and to assess the effect of foreign direct investment (FDI) in a host country's export performance (UNCTAD, 2002), since exports have been for a long time viewed as FDI promotes exports of host countries by augmenting domestic capital for exports, transfer of technology, higher productivity and new products for exports and facilitating access to new and large foreign markets (Chakraborty and Basu, 1997). It is proved widely that exports has positive impact on real GDP but not FDI. Conversely, cheaper price of exported goods due to the low input cost and large number of consumers in domestic market attract foreign investors in these countries. This study was done using annual data for 40 observations from 1970 to 2009. Several econometric tools are used in this study such as Unit Root tests, Lag length criteria, Co-integration tests, Granger Causality and VAR (Vector Auto-regression).

The findings of the study reveal that there is a long-run relationship among GDP, exports and FDI. But as per the results of VAR model, FDI did not have a significant impact on GDP of India but, the GDP positively influenced by its own activity and exports. This study suggests the policy makers to adopt stable and sensible measures to encourage inward FDI especially in retail because it may have negative impact also. Labour reform measures, improving infrastructure, non-discriminatory regulatory environment and incentive based policies that are suggested to attract FDI. Consequently, these policies and strategies that will lead to have better infrastructure, human resources, good governance, business environment and overall economic growth.

Keywords: FDI, GDP, Exports, Cointegration, VAR, India

Introduction

Foreign Direct Investment occurs when a firm invests directly in facilities to produce and market a product in a foreign country. Once a firm under takes FDI, it becomes a Multinational enterprise. FDI takes on two main forms. The first is a Greenfield investment. This involves the establishment of a new operation in a foreign country. The second involves acquiring or merging with an existing firm in the begging country. This paper aims to identify the economic rationale that underlies foreign direct investment. Outflows of FDI, means flow of FDI out of country and inflows of FDI means the flow of FDI into a country. FDI also facilitates international trade and transfer of knowledge, skills and technology. Most developing countries consider FDI as an important channel for accessing resources for economic development. UNCTAD's world investment report defines foreign direct investment (FDI) as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor.

Foreign direct investment is a component of a country's national financial accounts. Foreign direct investment is investment of foreign assets into domestic structures, equipment, and organizations. It does not include foreign investment into the stock markets. Foreign direct investment is thought to be more useful to a country than investments in the equity of its companies because equity investments are potentially "hot money" which can leave at the first sign of trouble, whereas FDI is durable and generally useful whether things go well or badly. Foreign direct investment is that investment, which is made to serve the business interests of the investor in a company, which is in a different nation distinct from the investor's country of origin.

Foreign direct investment (FDI) is a measure of foreign ownership of productive assets, such as factories, mines and land. Increasing foreign investment can be used as one measure of growing economic globalization. The largest flows of foreign investment occur between the industrialized countries (North America, Western Europe and Japan).

But flows to non-industrialized countries are increasing sharply. In the years after the Second World War global FDI was dominated by the United States, as much of the world recovered from the destruction wrought by the conflict. FDI has grown in importance in the global economy with FDI stocks now constituting over 20% of global GDP. In the last few years, the emerging market countries like India have become the most favored destinations for FDI and investor confidence in these countries has soared. A foreign direct investor may be classified in any sector of the economy and could be any one of an individual, a group of related individuals, an incorporated or unincorporated entity, a public company or private company, a group of related enterprises, a government body, an estate (law), trust or other societal organization, or any combination of the above.

The foreign direct investor may acquire ten percent in an economy through incorporating a wholly owned subsidiary or company, by acquiring shares in an associated enterpriser, through a merger or an acquisition of an unrelated enterprise and participating in an equity joint venture with another investor or enterprise. Foreign direct investment may be initiated by low corporate tax and income tax rates, tax holidays, other types of tax concessions, preferential tariffs, special economic zones, investment financial subsidies, soft loan or loan guarantees , free land or land subsidies, relocation and expatriation subsidies, job training and employment subsidies, infrastructure subsidies, R&D support and derogation from regulations (Sridhar V. and Vijay Prasad, 2007).

India has recently emerged as a very competitive player and FDI into various sectors have taken off. Given India's large domestic market opportunities, FDI in several sectors is bound to take off in the coming years. The important point is that policies and investment facilitation are (Wei (2005), part of larger set of factors that influence FDI, they cannot substitute hard economic considerations. A good example that supports this argument of FDI dynamics influenced by global market opportunities coupled with diasporic expertise and networks is the IT and ITES sector in India. Therefore, in this study an attempt is made to see the impact of FDI growth on real economic activity. Based on the results from this study, government can take initiative measures in infrastructure, various sectors such as agriculture, industrial and service sectors to increase the FDI. Further this study attempts to see the impact of liberalization policy on real economic activity.

FDI is most important factor to increase a country's output. FDI after liberalization is increased considerably. Many developed countries have invested in India. Through this study, FDI in world countries can be observed. So this study reveals India's FDI position and helps to understand it's share on total economic activity of India. Through this study, it can be observed that FDI's contribution to the growth of India.

Many believe that foreign capital in India has played a largely positive role in India's economic development during the liberalization process. FDI inflow to India can generate more benefits apart from solving the capital shortage problem. FDI will provide better access to technologies for the domestic economy. Moreover, FDI leads to indirect productivity gains through spillovers. For instance, MNCs increases the degree of competition in host-country markets which will make firms to invest more in physical or human capital.

The major objectives of the paper are: (a) to analyze the long rub relationship between foreign direct investment inflow, exports, and real economic activity (Real GDP growth). (b) to study the long run impact of FDI, exports on real economic activity (Real GDP growth) of India; and (c) to suggest the suitable policy suggestions to the policy maker. The author used only annual analysis to see the long term impact. As the study is based entirely on secondary data, it is best with certain limitations which are bound to arise while dealing exclusively with secondary data. The paper is based on assumption of cetris peribus, i.e. all other factors that are having impact on Indian economy are considered to be constant.

Magnitude of India's FDI inflows, Exports and GDP growth

Foreign Direct Investments

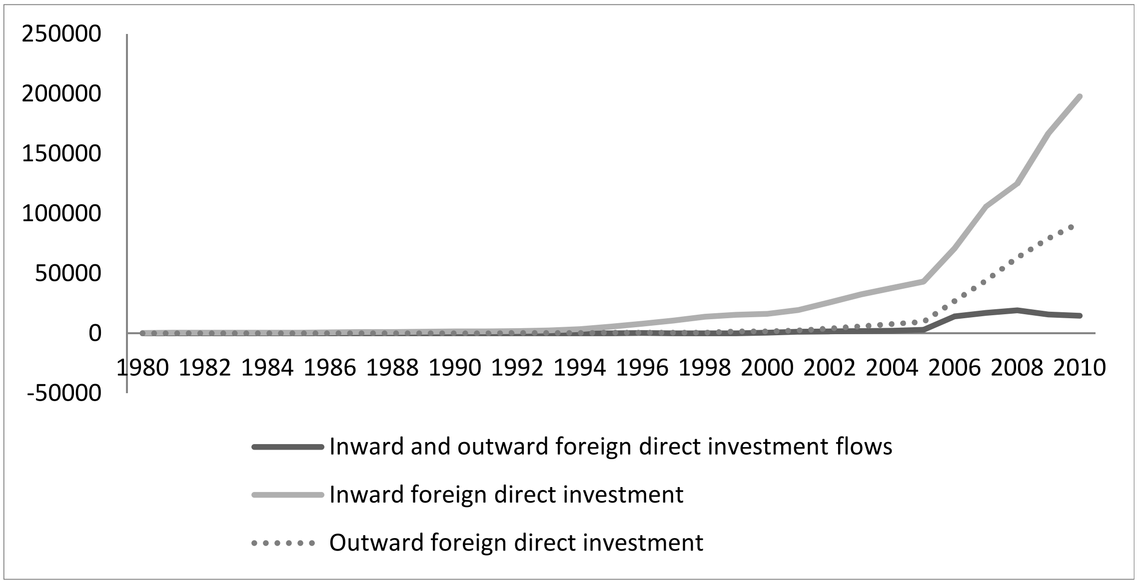
Table 1: Foreign Investment Inflows

Year	A. Direct investment (Rs crore)	B. Portfolio investment (Rs crore)	Total (Rs crore)
1991-92	316	10	326
1992-93	965	748	1713
1993-94	1838	11188	13026
1994-95	4126	12007	16133
1995-96	7172	9192	16364
1996-97	10015	11758	21773
1997-98	13220	6794	20014
1998-99	10358	-257	10101
1999-00	9338	13112	22450
2000-01	18406	12609	31015
2001-02	29235	9639	38874
2002-03	24367	4738	29105
2003-04	19860	52279	72139
2004-05	27188	41854	69042
2005-06	39674	55307	94981
2006-07	103367	31713	135080
2007-08	140180	109741	249921
2008-09	161536	-63618	97918
2009-10	176304	153511	329815

Source: UNCTAD Statistics

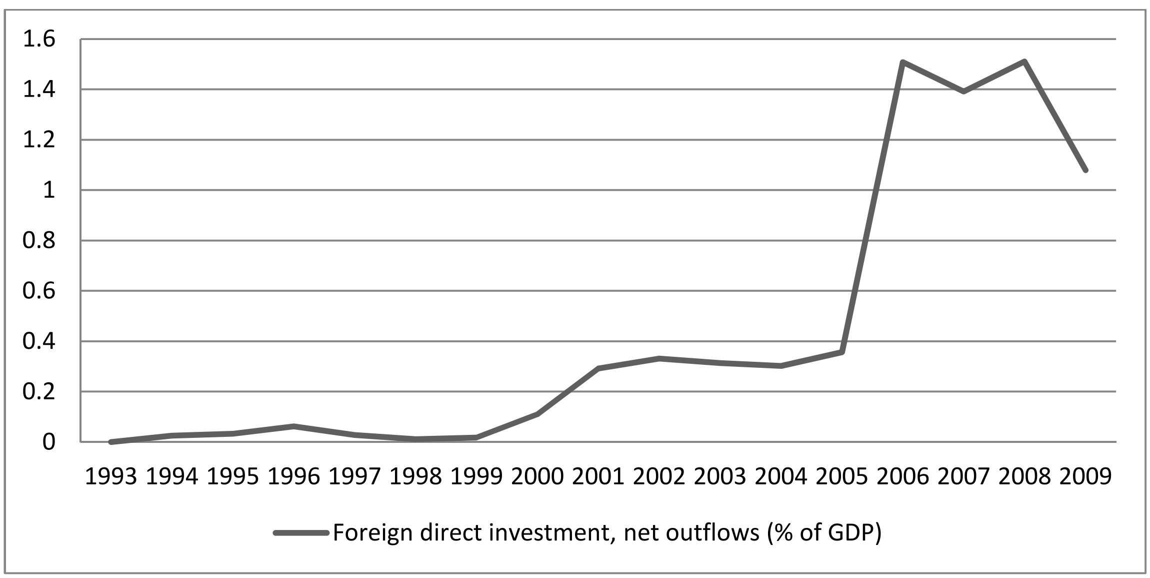
Figure 1: India's foreign direct investment 1980-2010

(In US Dollars Millions)



Source: IMF, World Economic Outlook Databases

Figure 2: Foreign direct investment, net outflows (% of GDP)



Source: IMF, World Economic Outlook Databases

India was one of the lowest recipients of FDI among the developing countries until 2000s. During the 1980s cumulative inflows of FDI was about US$ 451.75 million.

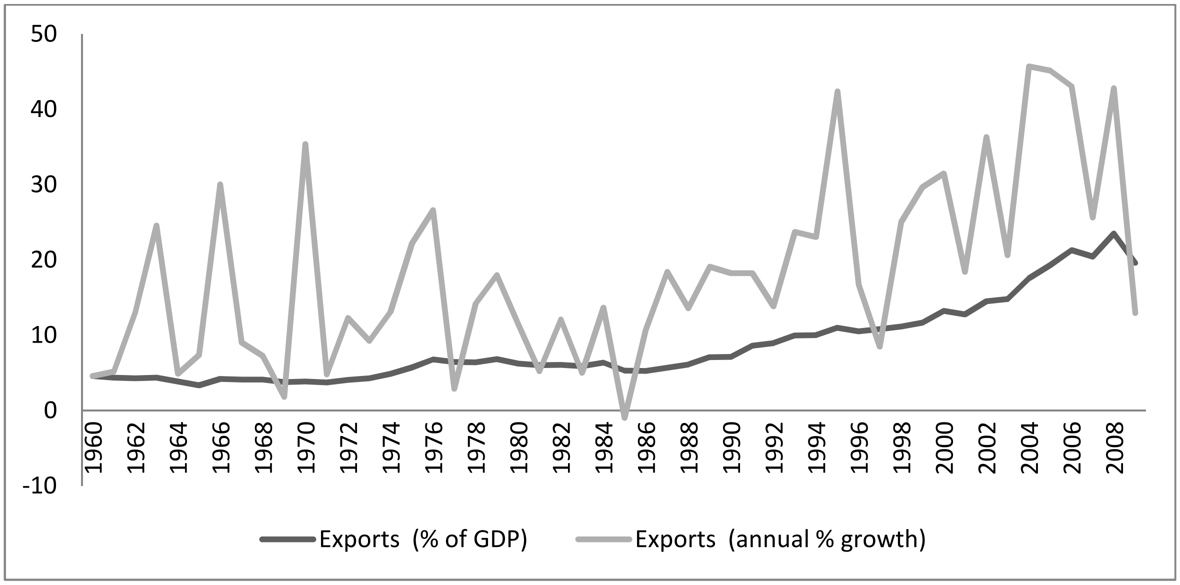
Different causes contributed to a lower level of FDI in India which include high transactions costs of entry and operation for foreign investors, high inflation, economic instability, lack of protection of intellectual property rights, insufficient legal structure, inadequate infrastructure, internal conflicts, animosity towards foreign economic presence and lack of sufficient FDI promotion. Table 1 and Figure 1 depict that FDI in India has expanded slightly following the liberalization initiated in the end of 1990s. In 1991, India is liberalized its current and capital account in order to increase her attractiveness to foreign investors. The absolute value of FDI rose sharply in 2000s in comparison with the earlier decade. It was only in 2000s India experienced a significant inflow of foreign capital in the form of both FDI and portfolio capital. Figure 2 shows clearly that FDI net outflow share in GDP is more that 1 % after 2005 which is impressive improvement.

Exports of India

Two notable developments have taken place in India's export front since 1970's. First, India's exports have grown much faster GDP. Second, there has been a substantial change in India's export mix. Factors like the real depreciation of exchange rate, liberalization in investment policy even from the early 1980's and the provision of export subsidies in the form of duty drawback, subsidized credit and direct subsidies to encourage the exports have contributed to these developments (Jayaraj R, 2007).

India's trade has increased significantly since reforms began in 1991, largely as a result of staged tariff reductions and elimination of non-tariff barriers. The outlook for further trade liberalization is mixed. India has agreed to eliminate quantitative restrictions on imports of about 1,420 consumer goods by 2001 to meet her World Trade Organization (WTO) commitments. The U.S. is India's largest trading partner; and bilateral trade in 1998-99 was about $10.9 billion. Principal U.S. exports to India are aircraft and parts, advanced machinery, fertilizers, ferrous waste and scrap metal, ready-made garments, agricultural and related products, leather products and chemicals (Jayaraj R, 2007). Figure 3 depicts that India's share of exports in total GDP peaked in the year of 2008 and showed its declining trend afterwards.

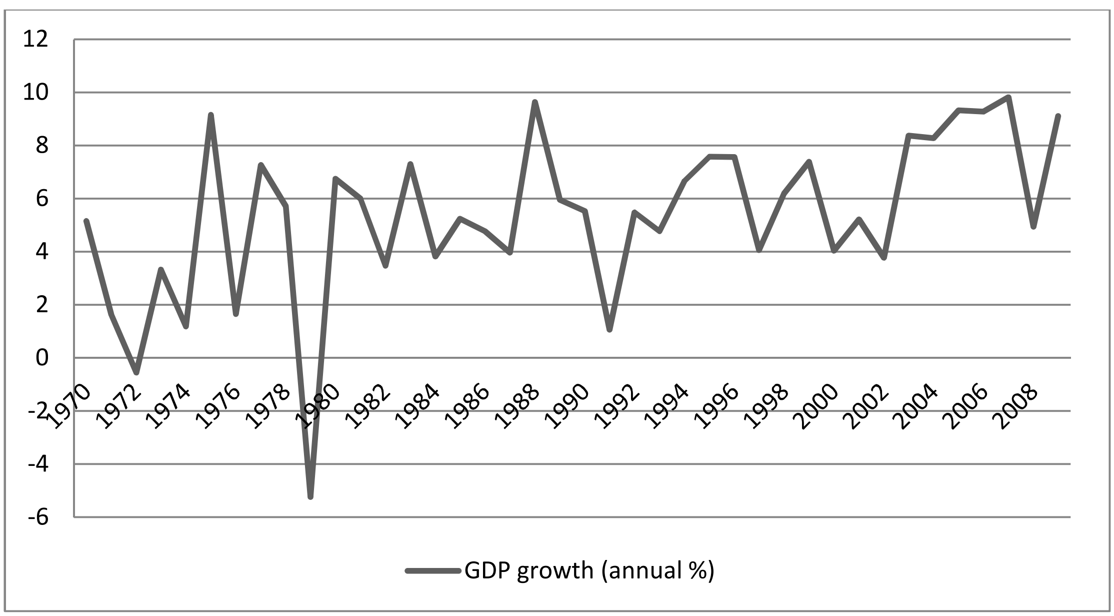
Figure: 3 India's Exports of goods and services (Percentage share in GDP and growth)



Source: IMF, World Economic Outlook Databases

GDP growth of India

Figure 4: India's GDP Growth (%)



Source: IMF, World Economic Outlook Databases

The drive of the 1991 reforms was made to move the economy on to a higher growth path. Accordingly India went through a wide ranging reform process covering the areas of fiscal stability, industrial policy, foreign trade policy, flexible exchange rate, strengthening the financial sector, capital market, privatization, growth in infrastructure and agriculture. The economy is being bumped towards attaining the higher productivity and efficiency. In fact, India's growth performance in the year of 1979 was in negative, after the beginning of reform measures was better than almost all developing countries that have gone through such a reform process. The economy was inching towards the attainment of more than 7 per cent growth path in the mid-1995, 1996, and 1999, significantly increased around 9 per cent achieved in 2007 and 2009 respectively (Figure 4).

Literature Review

Kogut and Singh (1988) suggested that cultural distance can play a important role in determining the nature of foreign investment and Larimo and Tahir (2004) studied that overseas investors are more likely to invest in areas with a low cultural distance from their home country. As India is a large and diverse country but with a degree of political and economic cohesion, the paper examined whether cultural factors play a role in determining the locations that attract FDI. Due to different cultural and religious groups within the culture, may have greater or lesser cultural distances from different countries in the outside world.

Wang and Blomstrom (1992) constructed a model of strategic interaction Between FDI-firms and the domestic enterprises which not only uses Findlay's Assumption of a positive relationship between the technology gap and spillovers, but also stresses the importance of competition. If the FDI-enterprises face strong Competition from domestic firms, they have to bring in more advanced technology from the parent country in order to remain their market shares. The conclusion is that the tougher the competition is, the larger the potential spillovers will be.

The empirical studies on relationship between FDI and export are mixed. The impact of FDI inflow on export performance is mixed in several studies. Some cross-country studies found that there is a negative relationship between FDI and export (Jeon 1992). Sharma (2000) did not find any statistically significant impact of FDI on Indian exports. In contrast, Cabral (1995) and Blake and Pain (1994) found that FDI has a positive effect on export performance of host countries.

Balasubramanyam et.al (1996) had tested the hypothesis, that export promoting (EP) FDI in countries like India confer greater benefit than FDI in other sectors. They have used production function approach in which FDI is treated as an independent factor input in addition to domestic capital and labor. As FDI is a source of human capital accumulation and development of new technology for developing countries, FDI captures such externalities as learning by watching or doing various spillover effects. Exports are also used as an additional factor input in this production function. Once FDI enters a country some of the era while imports become domestic products. Hence, their output becomes a part of GDP which needs consideration as a part of output or growth effect of FDI.

Krugman (1998) studied the benefits associated with foreign acquisition of domestic firms, arguing that in financial crises foreigners can take advantage of liquidity constrained domestic investors' fire sales of assets. In this context, foreigners are less efficient than domestic investors, since foreigners acquire local firms because of their superior cash position as opposed to a special know-how or technology advantage. Razin, Sadka and Yuen (2000) studied that foreign investors' asymmetric information might lead them to over-invest. Borensztin et al. (1998) studied the absorptive capacity of recipient country, which is measured by stock of human capital required for technological progress; it takes place through 'capital is deepening' associated with new capital goods brought into an economy by FDI. The fructification of growth effect of FDI requires adequate infrastructure as a pre-requisite. For example, if there are frequent power cuts, it will reduce growth effect.

De Mello (1999) have studied on the FDI-led growth hypothesis, when time series analysis and panel data estimation for a sample of 32. OECD and non- OECD countries covering the period 1970-1990 were made. He estimated the impact of FDI on capital accumulation and output growth in the recipient economy. Two notable developments have taken place in India's export front since 1970s. First, as stated earlier its exports have grown much faster than GDP. Second, there has been a substantial change in India's export mix. Four major items (namely gems and jewellery, readymade garments, engineering goods, and chemicals and allied products) dominate its manufactured exports. The role of FDI in export promotion in developing countries is ambiguous and crucially depends on the motive behind such investment. If the motive behind such investment is to bypass trade barriers in the host country, then it is highly unlikely that such investment would result in better export performance. Over the past few decades India's exports have grown much faster than GDP. Several factors appear to have contributed to this phenomenon including FDI. However, as yet there has not been any attempt to investigate the role of FDI in India's export performance (Kishore Sharma, 2000). Girma and Wakelin (2001) explain the positive spillovers from FDI in the UK12. The relatively skill-intensive domestic establishes the most positive spillovers. The results from this study confirm that spillovers from FDI are lower in the less developed regions. Regarding the causal relationship between FDI and economic growth, strong evidence of considerable heterogeneity across countries has also been found in the data. Knoldy (1995), Weinhold, Diana and Eustaquio J. Reis, (2001) and Nair-Reichert and Weinhold (2001) studied the Granger causality between FDI and growth to overcome the endogeneity problem. The variable openness for trade is proxies by the ratio of exports to GDP. The reason for proxy openness to trade by the ratio of exports to GDP is not clear. The more conventional measure used was to (which among others, Alfaro et al 2004 have used) proxy the variable by the ratio of the sum of exports plus imports to total GDP.

Ram and Zhang (2002) studied the complementarily of FDI and human capital (measured as mean years of education for the population aged 15 years and older) but find no evidence of such a relation. The FDI parameter is positive and statistically significant at the 5 % level in four of the six variants of the equation without the interaction term between FDI and human capital. As in the analysis by Alfaro et al (2004) the interaction term most often appears with the negative sign and there is no case where the interaction term has a positive and significant coefficient value. Their analysis does include different decades (than the two decades observed by Borenstein 1998) but a complementarily between FDI and human capital should not disappear from one decade to another, if it did exist one from the beginning. Their analysis thus indicates that there is no complementarily for the 1990s, although they conclude that this aspect may need further study. They also choose to exclude several variables that a number of other scholars have included in growth regressions. They motivate this with that the FDI terms they use capture most other variables that may reflect "openness" or other "policy distortions". Charles Adams and Yu Ching Wong (2002) reviewed global and regional trends in FDI with particular emphasis on developments in Asia. The review has been conducted against the background of recent increased focus on FDI as a stable source of financial capital and a means by which countries can upgrade their technology, skills and management knowhow. Rather than seek to summarize the main trends identified in the paper, they conclude with three observations (technology, skills and management) that may be of relevance to countries as they consider their policies towards FDI. Sahoo and Mathiyazhagan (2002) concluded that FDI does not matter in the growth of the economy. It implies that India's progress towards 'market oriented economy' through policy reforms in 1991 has not worked properly. Khanna (2002) examines the macro economic impact on Indian capital market as well as the corporate sector and what are the macro economic effects on inflows of capital to Indian and micro economic effects on the capital market during 1989 to 2002.He took the macro variable as FDI, Foreign Portfolio Investment (FPI), NRI deposits, external assistance and GDP/GDS/GNP. He tells that entry of international capital flows helps to provide greater depth to the domestic capital market and reduce the systematic risk of the economy. He argues that advanced for liberalizing capital market for liberalizing capital market and opening them to foreign investor are to increase the availability of capital with domestic industries and commercial firms. Liu. And Wang (2002) examines the kinds of FDI inflows contributing significantly to economic growth. Using the data from 12 Asian economies over the period of 1987-1997, it is found that only FDI in the manufacturing sector has a significant and positive impact on economic growth and attributes this positive contribution to FDIs' spillover effects. Hsiao, F. S. T. & Hsiao, M. C. (2006) find a feedback association between FDI and GDP in their time series analysis of the data from China. Using data on 80 countries for the period 1971–95, Choe (2003) detects two-way causation between FDI and growth, but the effects are more apparent from growth to FDI.

Frimpong and Oteng-Abayie (2006) also use Toda-Yamamoto no- causality methodology. In the case of Ghana a causality relationship from FDI to GDP growth only during the post-structural adjustment program period. Grog and Greenaway (2003) says that focus on vertical FDI spillover effects three find positive backward FDI spillovers; one finds positive forward FDI spillovers. In addition Javorcik et al (2004) and Blalock and Gertler (2008) found positive vertical FDI spillovers in Latvia and Indonesia. Among the 24 studies using firm level panel data, which Grog and Greenaway (2004) argue to be using the most appropriate estimating framework, only 5 studies obtain positive and significant FDI spillover effects, with 4 from developed countries. For transition economies, only one out of the 8 studied results appear more conclusive for vertical spillovers. Among the five studies discussed in Grog and Greenaway (2003) that focus on vertical FDI spillover effects three had positive backward FDI spillovers, one have positive forward FDI spillovers.

The policy of the Government of India is to maximize the developmental impact and spin-offs of FDI. Foreign investments in equity capital of an Indian company under the Portfolio Investment Scheme are not within the ambit of FDI policy and are governed by separate regulations of RBI /Securities & Exchange Board of India (SEBI). This report also shows Country-wise FDI Inflows from August 1991 to December 2005 (Department of Industrial Policy & Promotion ministry of Commerce and Industry, Government of India, 2006).

Singh, Lakhwinder (2007) Department of Economics, Punjabi University, and Patiala did a study on “India’s Economic Growth and the Role of Foreign Direct Investment”. Foreign direct investment policy of the government of India has been gradually liberalized. As early as in the year 1948 and 1956 (two industrial policy resolutions) government policy clearly reflected the need to supplement foreign capital and technology for rapid economic growth. The FDI policy of 1991 proposed to achieve objective of efficient and competitive world class Indian industry. He also mentioned Top 10 Investor Countries in India, 1991-2004. The most significant result of the study is that high technological capability firm’s benefited from the presence of MNEs and domestic firms with large gap of technological capabilities became victims.

Jayanta Roy and Pritam Banerjee (2007), Principal Adviser, Trade and Globalization Research, Confederation of Indian Industry (CII) investigated some of the major themes as to why diasporic FDI has been so modest and provides some important policy recommendations that will allow for greater FDI from the Indian Diaspora. FDI into India has mostly not been of the export oriented variety that leverages India's labor cost arbitrage as far as the manufacturing sector is concerned. The most visible impact of FDI in the manufacturing sector has been in expanding the range of products available to Indian domestic consumers. Ozturk, I (2007), Foreign Direct Investment Growth Nexus: The literature dealing with the effects of FDI on Growth. Numerous empirical studies have been conducted to investigate whether growth is influenced by FDI. The overall evidence is best characterized as mixed as the results are regarding to the importance of labor costs, openness, investment climate, countries considered (developed vs. developing) and fiscal incentives. However, free trade zones, trade regime, the human capital base in the host country, financial market regulations, banking system, infrastructure quality, tax incentives, market size, regional integration arrangements and economic and political stability are very important determinant for FDI that creates a positive impact on overall economic growth. In summary, consensus has been reached among academia and practitioners that FDI tends to have significant effect on economic growth through multiple channels such as capital formation, technology transfer and spill over, human capital (knowledge and skill) enhancement, and so on.

Srinivas Subbarao (2008) examined the FDI and Human Capital Development, Indian Institute of Management Ahmedabad. Foreign Direct Investment (FDI) has much sought after by countries all over the world-developed and developing alike. Some view it as an engine of economic growth and development while others look it as a panacea for all ills. This paper explains importance of human capital skilling, the relation between the FDI and Human Capital development besides the experiences of these two in different regions of the world i.e., Asian and Latin American experiences.

FDI inflow of India has been increasing over the past few years in the country. Jayaraj R (2011) found that FDI had a positive impact on nominal GDP of India by using OLS estimation. Inversely, global recession would have impact on FDI flow. Bozena

Leven (2012) studied that increased market apprehension caused by the global recession resulted in a substantially decreased foreign direct investment (FDI) in Poland.

The Methodology

The objectives of the study have necessitated the collection of published secondary annual data - pertaining to FDI inflow in India. This has been taken for the analyses due to their dominant shares in India's GDP. This empirical study has applied on an econometric model to examine the effect of FDI inflow and exports on economic activity (GDP) of India using annual data for 40 observations from 1970 to 2009. This study explores the FDI and exports consequences and India's GDP growth over the years.

Model

In this analysis, the influence of FDI and exports on the real economic activity can be examined by running a linear regression by taking the GDP as the dependent variable which is a function of multiple independent variables (FDI & exports).

$$lnGDP_t = \beta_0 + \beta_1 lnFDI_t + \beta_2 lnEX_t + E_t \qquad (1)$$

t	Denotes time
GDP	Gross Domestic Product
FDI	Foreign Direct Investment
EX	Exports
E	Error Terms

The results of this regression would indicate that growth of FDI and export growth are positively related to GDP when lagged for one-year period. As a result, it is concluded that there is a relationship between past values of FDI, exports and the real economic activity. Thus, the results from this regression would suggest that past values of FDI and Exports do lead growth of Indian economy.

The study includes the following tools, namely,

- *Augmented Dickey-fuller Test*
- *Lag Length Criteria*

- *Pairwise Granger Causality Results*
- *Johansen's Cointegration Model*
- *Vector Auto-regression*

Stationarity Test

The Augmented Dicky-Fuller (ADF) (Fuller (1996), Dickey and Fuller (1979, 1981)) Test constructs a parametric correction for higher-order correlation by assuming that the 'y' series follows as AR (p) process and adding 'p' lagged difference terms of the dependent variable 'y' to the right hand side of the test regression:

$$\Delta y_t = \alpha y_{t-1} + x_t' \delta + \beta_t \Delta y_{t-1} + \beta_2 \Delta y_{t-2} + \ldots + \beta_p \Delta y_{t-p} + u_t \qquad (2)$$

Dickey and Fuller (1979) show that under the null hypothesis of a unit root, the statistic does not follow the conventional Student's t-distribution, and they derive asymptotic results and simulate critical values for various test and sample sizes. More recently, MacKinnon (1991, 1996) implements a much larger set of simulations than those tabulated by Dickey and Fuller. In addition, MacKinnon estimates response surfaces for the simulation results, permitting the calculation of Dickey-Fuller critical values and p -values for arbitrary sample sizes.

Cointegration Test and VAR

The co-integration comes out of concern on spurious regression in time series analysis. To specify a relation in terms of level of economic variables $Y_t = a + bX_t + U_t$, often produce empirical results in which R^2 value is high but Durbin- Watson statistic is low. This is because of smoothing of time series in long term trends. That is variables behave individually as non- stationary random walks. Testing the hypotheses that there is statistically significant connection between the variables can be done by testing the existence of co-integration relations. VAR (Vector Auto-Regression) based co-integration tests using the methodology developed in Johansen is applied (Johansen, S., (1988, 1991, 1995a, 1995b, 2002a and 2002b), Johansen, S. and K. Juselius (1990, 1992 and 1994) and Johansen, S. and E. Schaumburg, (1999)). A VAR of order p,

$$y_t = A_1 y_{t-1} + \ldots + A_p y_{t-p} + Bx_t + \varepsilon_t \quad (3)$$

Where, y_t is a k-vector of non-stationary I (1) variables, x_t is a d-vector of deterministic variables, and ε_t is a vector of innovations.

$$\Delta y_t = \Pi y_{t-1} + \sum_{i=1}^{p-1} \tau_i \Delta y_{t-i} + Bx_t + \varepsilon_t \quad (4)$$

$$\Pi = \sum_{i=1}^{p} A_i - I, \quad \tau_i = -\sum_{j=i+1}^{p} A_j \quad (5)$$

Granger's representation theorem (Engle, R, and C.W.J. Granger, 1987) asserts that if the coefficients matrix Π has reduced rank $r < k$ then there exist $k \times r$ matrices α and β each with rank r such that $\Pi = \alpha\beta'$ and $\beta' y_t$ is $I(0)$. r is the cointegrating relations (the cointegration ranks) and each column of β is the cointegration vector. The elements of α are known as the adjustment parameters in the VEC model. Johansen's method is to estimate the Π matrix from an unrestricted VAR and to test whether it can be rejected the restrictions implied by the reduced rank Π. For deterministic trend, the scholar had believed all trends are stochastic. The level data y_t have linear trends but the co-integrating equations have only intercepts:

$$H_1(r): \Pi y_{t-1} + Bx_t = \alpha(\beta' y_{t-1} + \rho_0) + \alpha_{\perp}\gamma_0 \quad (6)$$

The trace statistic for the null hypothesis of r co-integrating relations is computed as

$$LR_{tr}(r \mid k) = -T \sum_{i=r+1}^{k} \log(1 - \lambda_i) \quad (7)$$

For the Maximum Eigen value statistic tests, null hypothesis of co-integrating relations against the alternative of $r + 1$ co-integrating relations is computed. The test statistic computed based on

$$LR_{MAX}(r \mid r+1) = -T\log(1-\lambda_{r+1})$$
$$= LR_{tr}(r \mid k) - LR_{tr}(r+1 \mid k) \qquad (8)$$

for $r = 0,1,...k-1$

Results and Analyses

Stationarity Tests

The Stationary condition has been tested using Augmented Dickey Fuller (ADF). The unit root test results on the individual data series is shown as below:

Table 1. Unit root test results for GDP at first difference

Null Hypothesis: D(GDP) has a unit root Exogenous: Constant Lag Length: 0 (Automatic - based on AIC, maxlag=9)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.478245	0.0010
*MacKinnon (1996) one-sided p-values.		

Table 2. Unit root test results for FDI at first difference

Null Hypothesis: D(FDI) has a unit root Exogenous: Constant Lag Length: 5 (Automatic - based on AIC, maxlag=9)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.093759	0.0368
*MacKinnon (1996) one-sided p-values.		

Table 3. Unit root test results for Exports at first difference

Null Hypothesis: D(EXPORTS) has a unit root Exogenous: Constant Lag Length: 0 (Automatic - based on AIC, maxlag=9)		
	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.540807	0.0121
*MacKinnon (1996) one-sided p-values.		

From the above tables, the tall the three variables considered are stationary. The estimated values of parameters of GDP, FDI and EX at first difference, reported by the ADF test statistic at the first difference are -4.478245, -3.540807 and -3.540807 respectively. The test statistics exceed the critical values at 1%, 5% and 5% respectively and hence the null hypothesis is rejected. Therefore all the variables, GDP, FDI inflow and Exports are said to be stationary and ready for testing the Granger Causality test.

Selection of Lag length

The selection of lag length is the biggest challenge in VAR modeling. Various lag selection criteria are used to select the optimum lag length of variables in the system. These are noted as Likelihood ratio (LR), Final prediction error (FPR), Akaike information criteria (AIC), Schwarzn information criteria (SIC) and Hannan - Quinn information criteria.

Table 4. The results for VAR lag order selection

VAR Lag Order Selection Criteria
Endogenous variables: GDP FDI EXPORTS
Included observations: 39

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-85.48044	NA	0.018758	4.537459	4.665425	4.583372
1	55.69989	253.4006*	2.14e-05*	-2.241020*	-1.729155*	-2.057367*

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

From the table, it is inferred that the lag length 1 is found to be significant under likelihood ratio, Final prediction error, Akaike information criterion, Schwarz information criterion and Hannan-Quinn information criteria. Therefore, lag length of 1 is chosen for testing the pairwise causality in terms of all the tests for the full sample period.

Granger Causality

Table 5. Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
FDI does not Granger Cause GDP	39	2.98331	0.0927
GDP does not Granger Cause FDI		5.04091	0.0310*
EXPORTS does not Granger Cause GDP	39	8.37188	0.0064**
GDP does not Granger Cause EXPORTS		1.79451	0.1888
EXPORTS does not Granger Cause FDI	39	7.55612	0.0093**
FDI does not Granger Cause EXPORTS		2.62951	0.1136

Results of P-value (0.0927 and 0.0310) suggest that there is no a bidirectional causality using 1 period lag between the GDP and the FDI inflow. This would imply that FDI does not “Granger cause" GDP but interestingly GDP has Granger cause on FDI. Exports of India do “Granger cause" GDP and FDI.

This result shows that an increased domestic economic activity will attract foreign investors to invest i.e., GDP has an impact on FDI in India. Increased export has a positive impact of GDP due to the share of exports on GDP and increased export would attract more FDI.

Cointegration Test

Johansen’s method allows the testing of hypotheses by considering them effectively as restrictions on the co-integrating vector. The first thing to note is that all linear combinations of the co-integrating vectors are also co-integrating vectors. Therefore, if there are many co-integrating vectors in the unrestricted case and if the restrictions are relatively simple, it may be possible to satisfy the restrictions without causing the Eigen values of the estimated coefficient matrix to change at all. However, as the restrictions become more complex, “renormalisation” will no longer be sufficient to satisfy them, so that imposing them will cause the Eigen values of the restricted coefficient matrix to be different to those of the unrestricted coefficient matrix. If the restriction(s) implied by the hypothesis is (are) nearly already present in the data, then the Eigen vectors will not change significantly when the restriction is imposed. If, on the other hand, the restriction on the data is severe, then the Eigen values will change significantly compared with the case when no restrictions were imposed. In applying the Johansen procedure, the scholar allowed for a linear deterministic trend.

Table 6. Unrestricted Cointegration Rank Test (Trace) results

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.413939	44.72633	35.01090	0.0034
At most 1 *	0.378705	24.42174	18.39771	0.0064
At most 2 *	0.153570	6.335656	3.841466	0.0118

Trace test indicates 3 co-integrating eqn (s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigen-value)

Hypothesized No. of CE(s)	Eigen value	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None	0.413939	20.30460	24.25202	0.1530
At most 1 *	0.378705	18.08608	17.14769	0.0365
At most 2 *	0.153570	6.335656	3.841466	0.0118

Max-eigenvalue test indicates no co-integration at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The trace test results are shown above Table and consider each row in it. At the first one first, the test statistic is found greater than the critical value. The null hypothesis is rejected when $r = 0$ against the alternative hypothesis of $r \geq 1$. The same is true of the second and third row. The null hypothesis is rejected when $r = 1$ against the alternative hypothesis of $r \geq 2$ and the null hypothesis is rejected when $r = 2$ against alternative hypothesis of $r \geq 3$. From the results, the authors concluded the presence of three co-integrating vectors in the sample. This finding suggests that there is a long-run equilibrium relationship among GDP, FDI and exports. 'r' denotes the number of co-integrating vectors. There are three independent linear combinations of the variables that are stationary. The critical values allow for a linear deterministic trend in the co-integrating vector unrestrictedly. The lag lengths used is one.

Starting with the Max Eigen test results, the null hypotheses $r = 1$ and $r = 2$ are rejected in favor of alternative hypotheses at $r = 2$ and $r = 3$. Further the null hypothesis of $r \leq 1$ cannot be rejected in favor of alternative hypothesis. These results indicate the presence of two co-integrating relationships.

In agreement with developments in the econometrics of stationary time series, the authors had started by estimating a long-run relationship between GDP and its determinants implied by equation using the Johansen co-integration test. In the Johanson's co-integration test, trace test and Maximum-Eigen test statistics had confirmed the presence of co-integration at first differences of 1 period lag.

VAR (Vector Auto-regression)

The vector autoregression (VAR) is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on the system of variables. The VAR approach sidesteps the need for structural modeling by treating every endogenous variable in the system as a function of the lagged values of all of the endogenous variables in the system.

Standard errors in ( ) & t-statistics in [ ]			
	FDI	EXPORTS	GDP
FDI(-1)	0.642018	0.020818	0.002132
	(0.12569)	(0.01707)	(0.01179)
	[5.10790]*	[1.21963]	[0.18085]
EXPORTS(-1)	1.364925	1.038232	0.154418
	(0.74558)	(0.10125)	(0.06994)
	[1.83070]	[10.2542]*	[2.20799]**
GDP(-1)	-1.119597	-0.119207	0.740668
	(1.05007)	(0.14260)	(0.09850)
	[-1.06621]	[-0.83595]	[7.51956]*
C	2.593245	1.105026	1.757614
	(6.44555)	(0.87531)	(0.60460)
	[0.40233]	[1.26244]	[2.90705]*
R-squared	0.920857	0.994585	0.993088
Adj. R-squared	0.914074	0.994121	0.992495
Sum sq. Resids	17.92915	0.330647	0.157754
S.E. equation	0.715724	0.097196	0.067136
F-statistic	135.7463	2142.744	1676.173
Log likelihood	-40.18449	37.68158	52.11181
Akaike AIC	2.265872	-1.727261	-2.467272
Schwarz SC	2.436493	-1.556639	-2.296651
Mean dependent	6.053846	10.13769	12.57128
S.D. dependent	2.441645	1.267597	0.774981

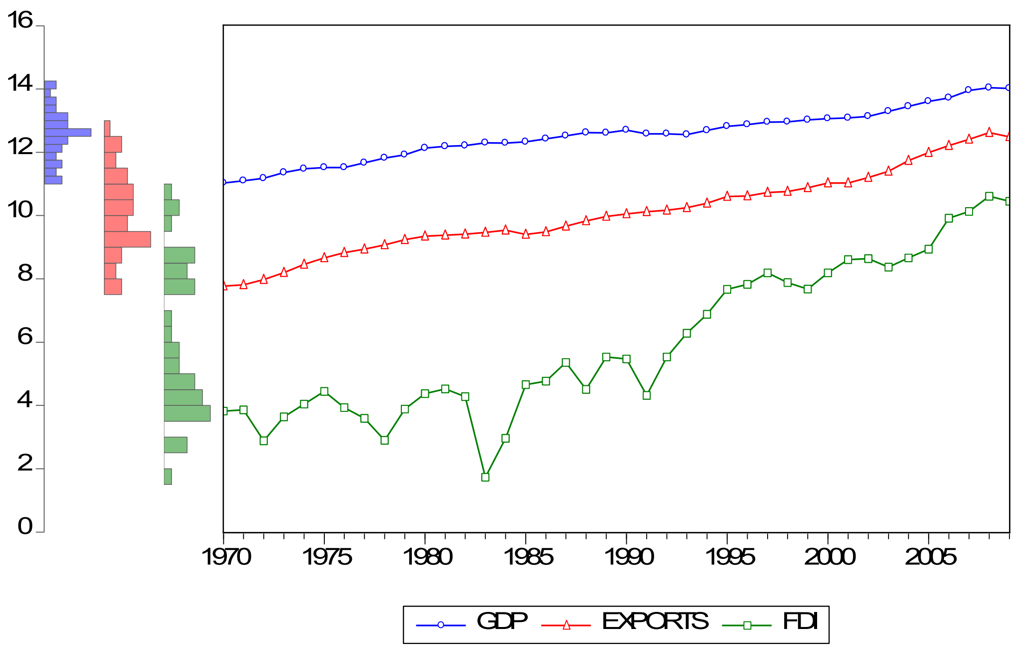
In lagged variables of economic activity and exports coefficients are statistically significant and FDI had the correct signs at 5% and 1% level respectively. Lagged exports and coefficients had correct signs and positively significant at 5 %. FDI did not have significant impact on GDP run. Coefficient of lagged GDP and exports had negative sign though they had not significant impact on FDI and exports respectively. In summary, VAR results point to an interesting conclusion that there was strong evidence indicating that the exports had positively influenced GDP of India in long run but not FDI. Ordinary Least Square is also worked out to test whether there is any contraction between OLS results and VAR results. In the result of OLS, it is again proved that FDI did not have any positive impact on GDP and GDP and Exports at first lag did have positive impact of GDP (Appendix B).

Findings and Conclusion

Findings

Foreign direct investment (FDI) in India has played an important role for development of the Indian economy. FDI in India has - in a lot of ways - enabled India to achieve a certain degree of financial stability, growth and development. This money has allowed India to focus on the areas that may have needed economic attention, and address the various problems that continue to challenge the country. India launched a series of progressive economic liberalization policies to overcome the structural defects that has caused the economic crisis in 1991. With these policy changes, foreign direct investment (FDI) into India has increased rapidly since 1992. Foreign direct investment to India increased from a mere $97 million in 1990-91 to $5,526 million in 2004-05 because of institutional restructuring (see Appendix - A).

Figure 1: The movements of residuals of India's GDP, Exports and FDI



The above figure shows the residual movements in which the co-movement and converging behavior between the two the movement of exports and GDP. FDI is not closely following the GDP in the initial period but after the year of 1992 it converges with movement in the FDI. The FDI inflows attained its peak in the mid of 2007 and the GDP also responded quickly to it and attained its all-time hike in study period.

As per the results drawn from this study, GDP had a positive significance on FDI because an increased domestic economic activity will attract foreign investors to invest at home due to the large number of consumers, increased domestic industrial production in different sectors and infrastructural facilities. It is clearly understood from this study that the GDP positively influenced by its own activity and exports. Due to the protectionism, FDI and GDP are low in 1970's and in the beginning of 1980's. Then it is acting towards same direction up to the end of the study period. As the FDI investment began to rise in the positive direction the market also is influenced by the positive feedback from the existing foreign investors in India and but do not continue to coincide with the reaction of economic activity.

Suggestions

Based on the study the following suggestions can be taken by the policy makers.

- Government can have stable and sensible economic policies toward FDI. FDI in retail would attract more foreign investors and may help to control prices domestically when the middle men are ignored. But, there is a possibility of negative impact on overall prices. If the middle men offer higher price than price offered by retailers to the direct producers, the inflation may increase due to the increase in the consumer price when goods are reaching the end users.
- There is a need for a well-educated and well-trained labor force and availability of necessary inputs to an operation, including access to technology. Women in workforce should be encouraged. Therefore, labour reform measures would attract FDI and exports of India.
- Improving the infrastructure in India will have a positive impact on both FDI and exports such as airports, ports, rail and road travel.
- The non-discriminatory regulatory environment and incentive based policies would attract FDI inflow. Indian can claim a transparent and open legal and regulatory regime and good regulatory supervision in WTO toward FDI.

- Controlling imported inflation especially high oil price is one of the important measure to be taken by giving subsidy for such a critical capital imports. This would result a positive trade balance. And maintaining a moderate level of inflation would also help to improve exports and FDI.
- Fiscal policy measures will also help the country to have a positive FDI inflow through favorable taxation and tax incentives. But the current scenario of India's fiscal balance is negative. Hence, it is believed that allowing FDI in retail may have a 'J' curve effect on fiscal deficit if FDI in retail makes a positive multiplier effect.

Conclusion

Over the past few decades India's exports have grown much faster than GDP. Several factors appear to have contributed to this phenomenon including FDI. However, as of yet there have not been many attempts to investigate the role of FDI and exports in India's economic performance. Results of the study suggest that there is a relation between FDI and GDP growth in India but did not have an impact. The larger growth effects can be found only when goods produced by more domestic firms and foreign MNEs may become substitutes rather than complements. Therefore, policymakers should be cautious when implementing policies aimed at inviting FDI especially recent reform measure that should be complementary to local production. Finally, FDI in India should fill the savings, investment, technological, employment, managerial and foreign exchange gaps.

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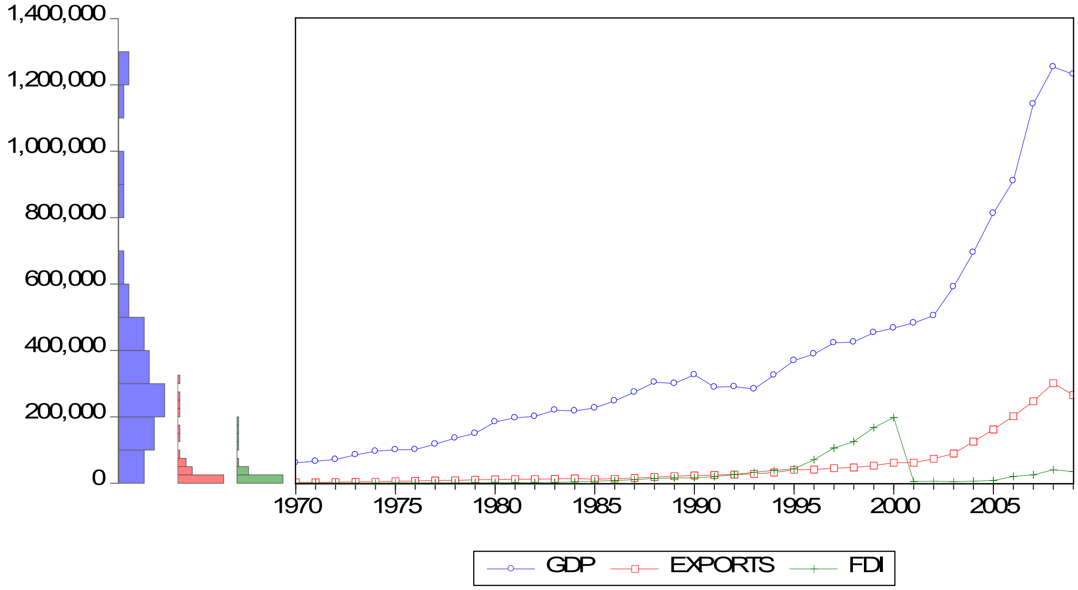
Appendix A: GDP, Exports of Goods and Services and FDI inflow of India

(US Dollars at current prices and current exchange rates in millions)



Appendix B: Ordinary Least Square Results

Dependent Variable: GDP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.757614	0.604604	2.907050	0.0063
GDP(-1)	0.740668	0.098499	7.519562	0.0000
FDI(-1)	0.002132	0.011790	0.180854	0.8575
EXPORTS(-1)	0.154418	0.069936	2.207985	0.0339
R-squared	0.993088	Mean dependent var		12.57128
Adjusted R-squared	0.992495	S.D. dependent var		0.774981
S.E. of regression	0.067136	Akaike info criterion		-2.467272
Sum squared resid	0.157754	Schwarz criterion		-2.296651
Log likelihood	52.11181	Hannan-Quinn criter.		-2.406055
F-statistic	1676.173	Durbin-Watson stat		1.497112
Prob(F-statistic)	0.000000			

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Corporate Reporting: Advantages and Disadvantages of Disclosure

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Abstract: The company is the key element in a business environment which interacts with other external elements. In order to ensure optimal cooperation with the other elements of the system, the company provides information about its activities in its annual report. Legislation sets out the policy concerning what is the minimum of information to be included in the report; however, in order to provide a more comprehensive view, the company may provide a broader range of information. The author of this article seeks to answer to question: What is it that would make a company want to provide its customers additional information about itself?

The objective of the article is to investigate the corporate advantages and disadvantages if the information provided about corporate activities is more comprehensive than is required by legislative regulations.

The author summarizes the opinion of researchers concerning the impact of legislation on the disclosure of company accounting information. The author analyzes the role of wider disclosure of information for business decision making both by internal and external users of information.

In the end, the author concludes that the quality of information in corporate reporting does not depend on the amount of legislative regulations. The corporate management is the only internal user that cannot have any losses as a result of any additional disclosure of information. At the same time, regarding external users, the author detects several risks in providing additional information because in each case where information is provided the external users of information may make both a positive and negative decision on further cooperation with the company.

Key words: Accounting, Business environment, Corporate reporting.

1. Introduction

The company is the key element in a business environment which interacts with other external elements, such as governmental institutions, competitors, suppliers, financiers and society. In order to ensure an optimal cooperation with the other elements of the system, a company provides information about its activities in its annual reports. The mandatory information to be covered in the report is laid down in the legislation of each country as well as by International Accounting Standards; however, to create a fuller picture of the company, it may present more information about itself than required by the aforementioned documents.

According to the Business Dictionary, information is data that:

(1) Have been verified to be accurate and timely,

(2) Are specific and organized for a purpose,

(3) Are presented within a context that gives it meaning and relevance,

(4) Can lead to an increase in understanding or decrease in uncertainty in respect of a given matter.

The value of information lies solely in its ability to affect human behavior, decision making, or the outcome of events. A piece of information is considered valueless if, after receiving it, things remain unchanged. (Business Dictionary, 26 July 2012)

In accordance with the definitions of the Terminology Commission of the Latvian Academy of Science (hereinafter referred to as "LAS"), information is data about processes in a company and their performance results, as well as the economical situation in the country. Information that has been collected for a specific purpose, task, person or period is defined as the needed information. To characterize corporate information, it could be said that it is economic information which the LAS Terminological Commission defines as data on corporate, national or global operational processes and their various aspects: production, consumption, change, resources (tangible, labor, financial etc.); economic information may be of different kinds: planning, accounting, statistical, open or secret. Economic information operates in accordance with an established system which covers the collection, processing, analysis, assessment, saving and use of information in the management of economic activities.(LAS Terminological Commission, 2000).

The author considers that the corporate ability to provide the users of information with selected high-quality information, even of the smallest amount, may secure long-term growth in the enterprise.

2. Methodology

In order to achieve the objective set out in the article, the author analyzes literature and summarizes the views of scientists concerning the quality conditions for accounting information, the impact of legislation on accounting outcomes and its typical uncertainty. Summarizing the information, the author concludes that there is no unanimity among scientists regarding the optimal variant for reporting accounting information. For example, there is a wide difference in understanding the scope of the mandatory nature of legislative regulations on information disclosure.

On the basis of sources investigated, the author divides the documents that regulate accounting into three groups. One separate group is for legislative documents whereby the basic principles of accounting are laid down, another separate group is for tax legislation and in the third group there are the documents that lay down the amount of information the enterprises are to disclose. In a figure, the author presents the schematic composition of regulatory legislation on accounting and its scope of impact in business environment.

In order to demonstrate the impact of accounting legislation on enterprises according to the levels of business environment, the author users the schematic picture of business environment quoted from author's publication in 2012; see: *Conference proceedings of Cambridge Business and Economics Conference*. The author's newly acquired understanding is displayed in the new figure where the legislation relevant to accounting is presented in its interaction with tiers of business environment with an emphasis put upon the scope of the impact that the such legislation has on business environment.

3. Documents Regulating Accounting Outcomes Analyses

Accounting by its nature is based on rules. It depends on the philosophy of company manager how these rules are translated and integrated in entrepreneurship. Rules are usually designed by government or regulators. However, it is not just regulators, managers who design rules. Users are important indirect designers, because managers who need to raise capital are pressured to report or disclose in forms that are appealing to them (Hirshleifer, D & Teoh, S. H, 2009). Behavior accounting has also devoted considerable effort to normative proposals for improving accounting rules and regulation (Kachelmeier & King, 2002; Hoddr & Koonce & McAnally, 2001). Due to increased information demands of managers and employers, accounting has considerably evolved lately and provides useful information to ensure more performance for public policies (Baluta, 2012).

Of course, in an ideal situation entrepreneurs are satisfied with rules and implement them, but implementation sometimes involves problems.

Researchers Hirshleifer and Teoh suggest that psychology shapes accounting rules and policy in two very different ways:

1. Good rules for bad users: Rules and policies that provide information in a form that is helpful for users who are subjects to bias and cognitive processing constraints;
2. Bad rules: Superfluous or even pernicious rules and policies that result from psychological bias on the part of the “designers” (managers, users, auditors, authorities, or voters) (Hirshleifer, D & Teoh, S. H, 2009)

Researchers Norreklit H. & Norreklit L. & Mitchell argue that to construct a form of guidance of “conceptual framework” for practice it is typical to include the following key elements:

1. A statement of the objectives of financial accounting. This is normally expressed at a general level and taken to involve the supply of information to a range of users who make economic decisions.

2. Basic premises or concepts that have a fundamental influence on the accountant's work. For example, going concern, accruals and money measurement are important examples.
3. The desirable qualities that accounting information should possess. For example, in the UK, FRS 18 identified these as relevance, reliability and prudence, comparability and consistency and comprehension (Norreklit H. & Norreklit L. & Mitchell, 2010).

The author suggests the accounting regulations be divided into following three groups:

1. Regulations concerning the basic principles of accounting,
2. Tax legislation,
3. Acts regulating the scope of information disclosure. (See fig.1)

Legislative acts regarding the basic principles of accounting include information that sets out:

1. Which types of business should keep books for accounting,
2. What properties the accounting information shall possess,
3. Who shall be responsible for accounting,
4. Which information should be considered a business secret,
5. The role and meaning of supporting documents in accounting,
6. Rules of recordings in accounting,
7. Rules concerning cash transactions (as well as the use of till systems),
8. Ways of keeping registers in accounting,
9. Provisions of document storage,
10. Provisions of stocktaking,
11. Provisions on annual reporting,
12. Separation of competences for accounting among responsible authorities
13. Liability/Consequences in the event that the basic principles are diregarded.

The author believes that the main legislative acts that regulate the basic principles of accounting only influence the company's own activities. These regulations do not influence the corporate cooperation with the elements of business micro-environment such as, *e.g.,* suppliers or customers. Compared with the other groups of regulatory documents that refer to accounting, the documents that regulate the basic principles of accounting have the least impact on company as the key element of the business environment; however, they have a direct impact on the organization and planning of the company's own activities and the amount of expenses to ensure the functions of accounting.

Tax legislation covers the whole taxable basis:

1. Indirect taxes which are paid when a consumer buys a commodity or service; such taxes include value added tax, excise duties, environmental tax, electricity tax, customs duty, lottery and gambling tax,
2. Payroll taxes, including income tax, state insurance payments,
3. Asset growth taxes, including corporation income tax, asset tax, tax of micro-enterprise,
4. Property taxes, including tax on immovable property, vehicle taxes.

Firstly, the dynamism of tax legislation creates an impact on a company as a key element of business environment through laying down the amount of costs necessary for ensuring accountancy functions, namely, tax liability application, calculation and reporting. Secondly, tax legislation determines the price of company's product; this creates a wider impact on the business environment, including both the internal business environment, *i.e.,* the company and the external business environment, *i.e.,* suppliers, consumers, competitors, marketing intermediaries, financiers and society. Provided that all the aforementioned taxes are amassed in the price of the produced product, we may argue that tax legislation has an indirect impact on the further tiers of the business environment up to global factors which bring the end product of the company to international markets.

To the mind of this author, the documents that regulate the amount of reporting disclosure are as follows: International Financial Reporting Standards and International Accounting Standards, as well as regulations issued by each country where certain principles of disclosure are laid down as being mandatory. Applying the Standards incurs costs for securing the information disclosure, it means that the company experiences an impact, first of all. The disclosure of information influences each user of the information and, taking into account that the users of information at various degrees of detail are spread all over the business environment, the influence of the documents that regulate information disclosure is equally rapid and identical on each of the elements of business environment. With this statement, the author presumes that the accessibility of information cannot be seen as an impediment because the information is used by the subjects who need it, *i.e.,* if one and the same information is available at all the tiers of business environment, there is no mandatory obligation that each element of the environment use it. Positive selection is a characteristic feature of information use.

To satisfy the objectives of accounting information users of various countries of the world, a successful solution has been found in the past century – International Financial Reporting Standards.

In the past several years, most accounting academics have been paying close attention to the International Accounting Standards Board (IASB) and its production of International Financial Reporting Standards (IFRS) (Zeff, S. A., 2012). After World War II, each country had its own Generally Accepted Accounting Principles (GAAP), or proper accounting practice. Even among the GAAPs in countries with active equity capital markets on which the listed companies depended heavily for finance — the United States, Canada, the United Kingdom, Australia, and New Zealand — there were important differences. For example, in the U.K., Australia, and New Zealand, companies could revalue their property, plant, and equipment (PPE), including investment property. In the U.S. and Canada, mainly because of the conservative influence of the Securities and Exchange Commission (SEC), companies adhered to historical cost (Zeff, S.A, 2007).

Research in the accounting literature convincingly concludes that accounting standards alone do not determine financial reporting outcomes (Ball & Robin & Wu, 2003; Leuz & Nanda & Wysocki, 2003; Leuz & Wysocki, 2008). By Holthausen (2009), financial reporting outcomes are the quality of financial reporting, measured in a variety of ways. Many forces shape the quality reporting, and accounting standards should be viewed as but one of those forces (Holthausen, 2009).

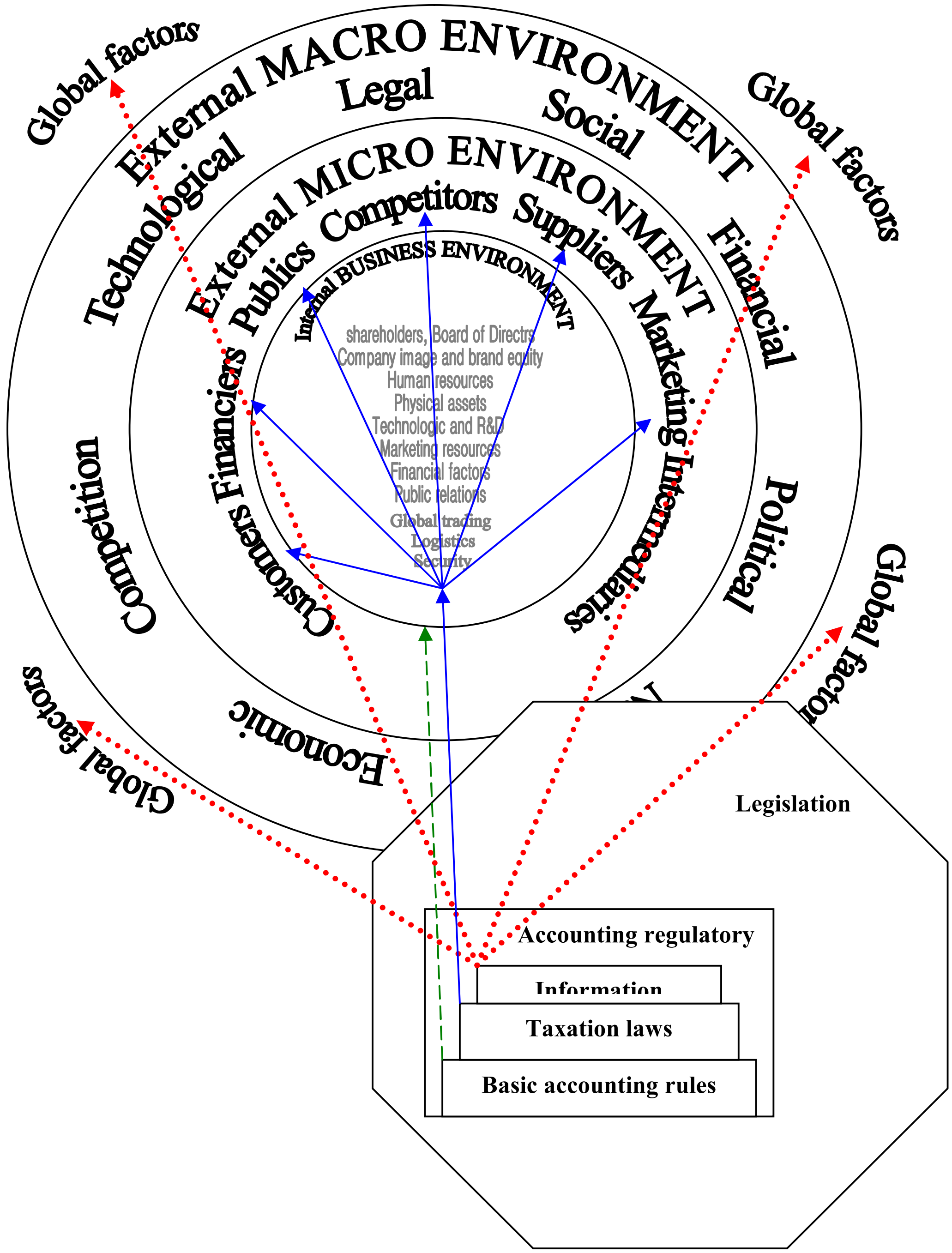

Fig. 1 Impact of accounting regulations on the business environment

The most common measurement of accounting information quality is auditing. But American equity holders awoke in 2002 to realize they no longer could trust corporate financial reports (Morgenson, G., 2002). Their doubts extended beyond Enron and Arthur Andersen firm to a large set of companies with reputation for aggressive accounting. The auditors had sold their independence in exchange for consulting rents. The problem, said the auditors, was a shortage of rules (Bratton, W. W., 2004).

Summarizing the opinions of scientists, the author concludes that accounting outcome does not depend on the quantity of rules, whether there are fewer or more of them, it does not show the completeness and accuracy of information. Last years development area to raise qualitative financial statements is corporate accountability reporting. Enterprises give more and more information to their users and therefore try to adjust information to each group of users.

Now we get a lot of financial information from enterprises, but a question arises whether we are able to understand it, to use it properly, because of its codified nature. Accounting represents the financial world. This world is differentiated; it consists of different realities (Llewellyn, 2007), having some physical, or perhaps better described as material, aspects (tangible assets like buildings, equipment and cash) but, predominately, consisting of socially embedded elements (intangible assets such as intellectual capital, concepts like value and activities such as exchange) (Llewellyn & Milne, 2007). Coding rules apply to the various accounting categories. For example, detailed codes dictate what can count as an asset. Asset codes reflect aspects of tangibility, property rights, future benefits and service potential (Williams, 2003).

After an analysis of the scientists' views, the author concludes that there is no unanimity among scientists with respect to the necessary degree of disclosure of accounting reporting for its users. The author shares the opinion that the language used in accounting is codified and its disclosure to users can turn out not to be fully comprehensible; however, at the same time, in order to make adequate business decisions, detailed information is necessary about the on-going processes in a company. A certain degree of confidence in corporate reporting among its users is obtained from auditor reports; however, the example mentioned above confirms the presence of some uncertainty in relation to the degree of trustworthiness of auditor reports. In fact, the choice as to what kind of information the company will provide to its external information users depends on the company itself because, as the research carried out by the author shows, the large quantity of regulative acts does not mean that the information provided in financial reporting really reflects with the actual corporate performance.

4. Advantages and Disadvantages of Corporate Reporting Disclosure

In each country, legislation lays down the amount of mandatory information to be disclosed in order to enable the users make objective decisions with respect to the company. For example, the tax administration uses corporate information in order to evaluate the compliance of tax calculations within the company with the rules established in the given country; financiers analyze the information in order to make a decision about financial allocations to the company, while society, represented by consumers, sometimes analyze the information provided by the company in order to obtain a clear notion of company's operative capacity in the long term in order to be assured of a company's capabilities of ensuring guarantees and commitments during the entire life span of the end product.

When disclosing information in annual reporting, the company should take into consideration the objective of all information users to obtain the maximum benefit from the information in the users' decision making process. The users of the information contained in annual reporting fall into two groups: internal and external. Internal users are company owners, management and employees; external users are suppliers, customers, financiers, tax administration, government and society (John Wiley&Sons, 2006).

To answer the question as to why a company might wish to provide more information to its users, the author makes an analysis of potential advantages and disadvantages from the additional disclosure of information.

Table 1. Advantages and Disadvantages from Corporate Reporting Disclosure to Internal Users

Information users (objectives of info use)	Additionally disclosed information provided by company	Advantages of additional disclosure	Disadvantages of additional disclosure
Company Management Uses information to make business decisions on further operation	- Assets of balance sheets in natural units, - Calculation of costs, - Company tasks grouped by deadlines and processes.	- A means to make a more objective decision, - A means of preventing unjustified losses in advance,	-
Company owners Use information in order to obtain info on the returns on capital	- Assets of balance sheets in natural units, - Calculation of costs, - A detailed checklist of tasks for the implementation of company's targets	- A means of making a more objective decision, - Better substantiated detailed calculations of the returns of capital, - A means to take part in the daily process of business decision making, thus ensuring better profits,	- Owners can see that more dividend payments are possible which may reduce the share of re-invested profit in the company and therefore slow down the process of development in the company.
Company employees Use the information to be sure of the sustainability of the company, stability of jobs and objective remuneration.	- Indicators of profitability - Turnover according to market segments, - Planned changes in the structure of the staff	- Employees have higher confidence in the management - Employees rely on professional solutions of the management.	- Additional demands of employees in case of high profitability indicators, - Reaction of employees when staff changes are planned.

It is in the interest of internal users of information that the company gains profits from business because the amount of profits tells upon each individual internal user of information and his personal benefit — owners will receive more in dividends while the management will receive gratitude from the owners and possibly a material remuneration in the form of bonus; the employees may also receive a better remuneration in the event of higher profits. The only negative aspect in the additional information disclosure is connected with possible mutual discord among internal information users during the consultations on the single conception of profit distribution.

Table 2. Advantages and Losses of Corporate Reporting Disclosure to External Users

Information users (objectives of info use)	Additionally disclosed information provided by company	Advantages of additional disclosure	Disadvantages of additional disclosure
Suppliers Use information to get assurance that company observes the deadlines of deferrals.	- Explication of deferred commitments by partners, - The size of unsold stock of goods by suppliers, - Number of deferral days by partners	- In case the company faces solvency problems, suppliers are informed about its commitments in relations with other partners displaying its loyalty to partners - Awareness of extended deferral deadlines in case the life-cycle of a stock of goods is longer than in other cases.	- In case solvency problems aggravate, by estimating commitments to other partners, the supplier may express dissatisfaction about his position on the list, - Discussions about the number of deferral days if it differs among the partners.
Buyers Use the information to make sure that the company is sustainable enough to ensure the implementation of guarantee commitments	- Customer responses to the products offered by the company, - Supplementary information on the usage of commodities offered.	- Increased turnover due to positive customer response, - Increased turnover due to such commodity properties earlier unfamiliar to customers.	- Decreased turnover due to negative response on the part of customers,
Financiers Use information to obtain certainty about the adequacy of resources and liquidity indicators.	- A detailed list of all financiers, - Disclosure of significant terms of contracts, *e.g.,* interest rate, - Indicators of profitability, - Indicators of liquidity.	- Conveying loyalty to financiers if year after year, the company presents a stable list of financiers in such a way demonstrating trustworthiness, - Promoting healthy competition.	- If a company often changes financiers and discloses this, financiers lose confidence as to the financial stability of the company, - Poor liquidity indicators can draw additional attention on the part of financiers.
Tax administration Use information to check compliance with legislation in tax calculations, as well as in the calculations of taxable basis.	- Detailed reflection of transactions, including in natural units.	- Certainty that transactions are reflected in accordance with their economic substance in compliance with the requirements of legislation.	- After the receipt of detailed information, tax administration may more often ask additional explanations concerning transactions because there is a possibility to have a regular follow-up in respect of each transaction.
Government Uses information to analyze at an overall level state economic growth by different cross-sections.	- Turnover according to different market segments, - Indicators of profitability,	- It is a possibility for the company to obtain essential information on the sector about the more active market segments, or the profitability at competitor companies.	- With increasingly detailed accounting, corporate costs increase on labor force which is engaged for additional tasks.
Society Guided by future or past events uses information to analyze the market.	- Intensity of operations by market segments, - Information on partners of cooperation, - Indicators of profitability,	- Supplementary information in public space may excite additional interest about company's production.	- In the case of negative experience, society may create a flow of negative information about the company.

The interest of external information users about corporate annual reporting is not as unambiguous as the interest of internal users. Each group of external users has a specific connection with the company — for example, suppliers want the company to buy from them raw material, at the same time, they are interested in a stable solvency of the company while the buyers are less concerned about the solvency status of the company; the quality of commodities is essential for them, as well as whether the company has the capacity to fulfill the guaranteed commitments. At the same time, tax administrations are interested in finding out if taxes are properly calculated by the enterprise and paid in good time.

5. Conclusions

In compliance with legislative regulations of accounting, tax administration expects from companies a definite amount of information. Audit experience testifies that irrespective of the quantity of regulative documents concerning accounting, there is a risk of mismatched information. Therefore, the author concludes that if a company does not want to provide some information about itself, it is possible to present the company in a more favorable light, even together with auditor's report. If, however, companies want to give more information to its users, they may disclose more. In author's opinion, additional publicity is appreciated as a sign of loyalty towards customers; this in its turn crates an opportunity to extend the market. Assessing the possibilities of providing supplementary information, the author draws the conclusion that each piece of information that is additionally provided has both positive and negative aspects; moreover, these aspects differ depending on the group of information users. The most significant thing, however, is that by providing information, the company changes its intangible value.

Taking into consideration that the negative aspects can be actualized in individual cases, in the author's opinion providing additional information in general can be regarded as positive. If there is any negative aspect in the company, through the disclosure of additional information the negative tidings reach the public relatively fast, and this exactly what characterizes the problem situation that has arisen. In case the information is not disclosed, the negative information reaches the public irrespectively, although now it is through media which may cause additional worries to the company.

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Dual Sides of China Entrepreneurial Activities: the Productive and the Unproductive

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Abstract

Although the influence of the institutional environment on the entrepreneur activities has been investigated by numerous researchers, little attention has been paid to its effect on the choice of entrepreneurial activities with different natures: productive activities, for example, innovation, and unproductive activities such as organized crime or rent seeking. We verify the causality relationship between the institutional environment and the entrepreneur's choice between productive entrepreneurial activities and those unproductive. The release of the Forbes' List of millionaires in mainland China is treated as an event affecting the stock market. By examining the origin of its influence on relevant stocks, our results show that a significantly positive relationship exists between the institutional environment and productive entrepreneurial activities.

Key Words: entrepreneurship, financial risk, institutional environment, government

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1. Introduction

Although the influence of the institutional environment on entrepreneur activities has been investigated by numerous researchers, (see Shane, 2003), little attention has been paid to its effect on the choice of entrepreneurial activities with different natures.[8] According to Baumol (1990), entrepreneurial activities can be divided into two types: productive activities, for example, innovation, and unproductive activities such as organized crime or rent seeking. The institutional environment influences the distribution of two types of entrepreneurial activities effectively through the relative economic and moral cost of unproductive activities. In a society with better institutional environment, entrepreneurs will choose productive activities over those unproductive. Since institutional environment could affect entrepreneurs' decisions, while entrepreneurs could also influence some aspects of institutional environment, it is difficult to identify the causal relationship between the institutional environment and the choice between two types of entrepreneurial activities.[9] The problem of data availability about unproductive activities, and the difficulty in simultaneously observing the performance of the same entity under various institutional environments also complicate the problem.

In this chapter, we illustrate the causal relationship between the institutional environment and productive activities via the Forbes List of Millionaires in mainland China (the List). After the accomplishment of Socialist Transformation in 1956, private capital activities were almost extinct for more than twenty years in mainland China. However, after reform and openness in 1978, economic activities of private capital has revived and achieved great success. Some entrepreneurs in mainland China have become millionaires (in USD) within twenty years. In 1999, Forbes released the first List of

[8] Institutional environment mainly consists of three dimensions: economic, political and social-cultural (North 1991). Different environments exert distinct impacts on entrepreneurial activities. The economic environment influences entrepreneurial opportunities, the available resources that are necessary to exploit opportunities and the opportunity cost of entrepreneurial activities. The political environment provides a framework of regulation where entrepreneurs conduct their business. The social-cultural environment determines the society belief and attitude towards entrepreneurial activities concerning the desirability, legitimacy and social acceptability of those activities.

[9] Some researchers only agree with Baumol that the institutional environment influences the entrepreneurial opportunity exploitation (Venkataraman, 1997; Shane and Venkataraman, 2000).

Millionaires in mainland China. The List is also known as "the List of fat pigs that will be killed", since some entrepreneurs in the list were found guilty or got into various troubles after the release of the List.[10] Baumol (1990) sheds light on the phenomenon by indicating the existence of unproductive activities in the business operation. By examining the volatility of the stock return of companies controlled by millionaires in the List, one can verify the relationship between the institutional environment and productive activities.

The event that the company's controller is in the List is likely to influence the performance of its stock. It may indicate that the person is more capable comparing to other entrepreneurs, but it also leads to potential institutional risk if unproductive activities are involved. In addition, the better institutional environment in the province where the company controlled by millionaires locates its headquarter, the higher incentive these millionaires will have to choose productive activities. Thus, the institutional environment of province will positively influence the stock price of the company. The relationship is illustrated in Figure 1.

Our sample consists of publicly listed companies in mainland China which are controlled by millionaires in the List from 1999 to 2002.[11] The event study methodology is employed. In the first step, we use the seemingly unrelated regression to identify the event effect and predict the performance of related stocks. In the second step, we investigate the factors that influence the event effect. Our results have shown the existence of the event effect. By applying pool cross-sectional analysis on the Cumulative Abnormal Return (CAR), it is found that factors of the institutional environment have significant impact on the abnormal performance. In addition to the influence of the institutional environment, the education attainment of company's controller, company's

[10] The removal of sector competition restriction is the main factor applied to explain the accumulation of wealth in the private sector in UK, USA, Australia and New Zealand (Siegfried and Roberts, 1991; Blitz and Siegfried, 1992; Siegfried and Round, 1994; Hazledine and Siegfried, 1997). Neumyar (2004) supports the same opinion in the global background. They cannot explain the phenomenon in China.

[11] The millionaire either owns the company, or can significantly influence the operation of the company. For example, Lou Zhongfu and Liu Yonghao just hold 17.87% and 7.98% in 600052 and 600016 respectively from 2001 to 2002. However, they are the largest shareholders and belong to the board of directors. As a result, they can significantly influence the operation of the company.

history and corporate governance also have significant influence on the abnormal performance.

Our work makes contribution to the understanding of the relationship between the institutional environment and the distribution of two types of entrepreneurial activities in the following aspects:

First, we conduct an empirical analysis for the causal relationship between the institutional environment and productive activities. For publicly listed companies controlled by millionaires in the List, the announcement of the List is an exogenous shock to the stock market. [12] The movement of stock price reveals the existence of unproductive activities. Moreover, we are able to overcome the problem of data availability by studying the publicly listed companies controlled by the millionaires in the List. As millionaires' background information in the public media is not complete, we cannot rely on such information to conduct our analysis. We use the information found in publicly listed companies as it is reliable and available to the public. Furthermore, the event study methodology allows us to analyze the event effect by examining characteristics of related companies and their institutional environment. Finally, to avoid the endogeneity problem, we examine the relationship by investigating the institutional environment in the long run before the year when the millionaire is in the List. Although entrepreneurs may select to be excluded from the List, they cannot influence the institutional environment in the long run.

The remaining of this chapter is organized as follows: Section 2 is the literature review. Section 3 introduces the background of the thesis. Sections 4 and 5 describe the empirical method and data respectively. The estimation result is reported in Section 6. Section 7 is the conclusion.

2 Literature Review

Institutional environment and entrepreneurial activities

[12] There is not self-selection process existing for these companies since the length and/or the standard of the List varied in the four-year period. In addition, although entrepreneurs preferring productive activities may choose institutional environment when he chose the headquarter for the company, they could not expect the transition of the institutional environment in the long-run.

The institutional environment mainly describes the "rules of the game" that generate incentives for certain kind of activities, and the social settings that determines legitimate and acceptable behaviors in a society. It consists of three dimensions: the economic environment, the political environment and the socio-cultural environment.

Baumol (1990) argues that policies and norms can influence the allocation of entrepreneurship between productive and unproductive activities. Comparing with extensive studies on the influence of the institutional environment on people's willingness to engage in entrepreneurial activities, only a few researchers have examined its effect on the distribution between productive and unproductive activities.[13] Aldrich and Fiol (1994) provide evidence that entrepreneurial activities take a socially productive form if productive entrepreneurial activity is legitimate. In addition, entrepreneurs opt to undertake productive activities because of the financial and moral cost of illegal activities (Fadahunsi and Rosa, 2002). Lu (1994) shows that productive and unproductive activities are substitutes. If entrepreneurs are able to influence their tax rates, e.g., through bribery, they are more likely to take part in unproductive activities. Finally, the choice between two types of activities depends on the incentive and cost under social rules and norms. For example, in Nigeria, when bribery in successful entrepreneurial activities is vital, this belief could lead the majority of people to regard illegal actions as legitimate aspects of business activities (Fadahunsi and Rosa, 2002).

The belief of investors

[13] In the dimension of economic environment, economic growth, low rates of inflation, social wealth, economic stability and capital availability have positive relationship with the level of opportunity exploitation (Campbell, 1992; Audretsch and Acs, 1994; Shane, 1996; Harper, 1998; Black and Strahan, 2002; Mezias and Mezias, 2000; McMillan and Woodruff, 2002). The increment in taxes of capital gains, income and property reduces the level of opportunity exploitation. As for the political environment, the opportunity exploitation is facilitated by more freedom in economic activities for individuals, stronger rules of law, the decentralization of power, and better protection of property rights (Hayek, 1945; Libecap, 1993; Casson, 1995; Harper, 1998; Shane, 2000). In the socio-cultural environment context, the social desirability of entrepreneurship, specific culture beliefs and the presence of entrepreneurial role models encourage activities in the exploitation of the entrepreneurial opportunity in the society (Cobas, 1986; Borjas and Bronaers, 1989; Aldrich, 1990; Bultler and Herring, 1991; Swanson and Webster, 1992; Aldrich and Fiol, 1994; Gnyawali and Fogel, 1994; Bates, 1995; Begley *et al.*, 1997; Walstad and Kourilsky, 1998).

One main source that investors form their beliefs is public information.[14] Public information affects investors differently in different time horizons. Stock returns exhibit a continuation or a momentum in the short-to-medium term. Signaling events, scheduled news releases, changes of the capital structure and managers' personal investments are studied by researchers. Ikenberry and Ramnath (2002) find that stock splits will induce active momentum, and a delayed response to changes in analyst recommendations suggests the existence of a drift in Michaely and Womack (1999). Womack (1996) finds that when dealing with a set of large or liquid stocks, there is an asymmetric lagged price response after changes in analyst recommendations. Tender offers, seasoned equity offerings, and venture capital distributions will also lead to a drift (Ikenberry *et al.*, 1995; Loughran and Ritter, 1995; Gompers and Lerner, 1998). Seyhun (1997) suggests that one can make a profit by mimicking the large trades of insiders, while Lakonishok and Lee (2001) suggest that opportunity mostly exists when purchasing smaller stocks.

In the long run, there will generally be a tendency of reversal, or fundamental reversions, implying that stock returns are negatively correlated across time. A pioneering study in this area is De Bondt *et al.* (1985), who suggest that when there is positive feedback, the stock price overshoots its fundamental value. As a result, it will experience sustained adjustment in the long run. Later studies supporting this argument apply different measures for the fundamental value of the company. For example, Fama and French (1992) apply book-to-market as the indicator of fundamental value, while Porta *et al.* (1997) use cash-flow-to-price ratios as the fundamental value indicator.

[14] Another is their psychological bias. Human behaviors are not consistent when decisions are influenced by different psychological aspects. One of them is mood which attracts the attention of researchers. A good mood results in a more optimistic evaluation of many things, such as life satisfaction, people, and products (Wright and Bower, 1992; Bagozzi *et al.*, 1999). One exogenous element that affects people's mood is sunlight. Researchers found evidence that sunlight influences markets. Saunder (1993) discovers that cloudy weather in New York City results in a negative New York Stock Exchange index. There is a strong correlation between cloudiness and stock returns in various choices of stock index and regression specification. If people are rational maximizers, then there are not many reasons for weather in a particular location to be correlated with stock market returns. In Kamstra *et al.* (2000), the stock return from Friday to Monday was significantly lower during daylight-saving-time weekends than during other weekends. Kamstra *et al.*, (2003) show that seasonal shifts in length of day also affect the return in five stock markets, which validates the January effect. Finally, Hirshleifer and Shumway (2003) examine the relationship of stock returns with the weather of a country's leading stock exchange across 26 countries from 1982 to 1997. They found that sunshine directly correlates with stock returns.

3 Background

In the previous section, we have introduced the background about the List. In this section, the variations in standards and methods to formulate the List are shown by year in the four-year period. Table 1 reports the summary statistics of millionaires in the List.[15] We also describe issues related to the stock market and the relevant institutional environments of China in the following subsections.

The Forbes' List of Millionaires in mainland China

Forbes creates a wide variety of lists under various categories. The List of Millionaires is the most popular one. The least wealthy in the 1999 List of mainland China was estimated to possess more than USD 6 million, while the per capita income of one year is USD700.[16] Adjusting for the cost of living, USD 6 million in China is equivalent to USD 200 million in the US. In order to succeed in the market, it is common for millionaires to build up connections with party cadres and senior bureaucrats. However, 41 of the 50 people in the List did not have such connections. The List focused on active businessmen who ran real businesses. It excluded the so-called prince-lings, who are relatives of China's political and military leaders. The age of the millionaires in the List ranged from 32 to 84 with the mean age of 48.68. One third of the millionaires in the List had junior middle school level, while another one third had university level education. 64.71 percent of the millionaires engaged in only one industry in 1999 and 77.55 percent companies owned by them were not going public.

A team of Chinese researchers in Shanghai and Hong Kong led by Rupert Hoogewerf carried out the Forbes study in 2000. The rate of exchange used was RMB 8.3 to one USA dollar and the stock prices for the holdings of the China Top 50 were as of mid-September. Compared with their counterparts in USA, Europe and more capitalist-

[15] Variables include age, education, number of main industry, listing status of their companies and wealth of millionaires in the Lists by year from 1999 to 2002. Since the wealth was an approximate number in 1999, we only report the minimum and the maximum wealth amounts in that year.

[16] Rupert Hoogewerf, a British chartered accountant conceived the list of the millionaires in mainland China with help from three Chinese researchers and sold the list to Forbes in 1999. To find the wealthy businesspeople, Hoogewerf scoured various sources including Chinese newspapers and magazines, corporate financial reports, China's Who's Who, securities firms, the Internet, donors to charities, awardees of national prizes, and delegates to the National People's Congress. Hoogewerf compared different published estimates of individuals' wealth and offered a conservative estimate for each person. The List was released on 15th November, 1999.

oriented countries in Asia, China's business leaders tried to keep a low profile and avoid publicity. The survey methodology had been refined but remains basically unchanged. One big difference was that the List ranked the estimated net holdings of individual entrepreneurs in 2000. The results were quite different from the List in 1999. The combined estimated wealth of the top 50 was USD10 billion in total, with an average of USD 203.8 million. The lowest rung of the List rose significantly to USD 42 million. Based on per capita income differentials, USD 42 million in China would be the equivalent of roughly USD500 million in USA. Twelve millionaires were delegates to China's parliament, the National People's Congress, indicating the pragmatism of the Communist Party in building up connections to private market.

In 2001，the List (seven women in it) contained 100 names, which doubled the number in the two previous rankings.[17] In the survey, the definition of a “Chinese” expanded to include anyone who was born and grew up in Greater China and conducted business in mainland China. There were no changes in survey method or definition in 2002. While it was estimated that 25% of the millionaires in the List belonged to the China Communist Party, most of the new wave of Chinese capitalists made their money outside the realm of state owned enterprises (SOEs). A mere 9 names from the 1999 List, contained only 50 names in that year, made the cut in 2002.

Strictly speaking, the List is a list of the most famous millionaires in mainland China. This survey method leads to inaccuracy of the List. In the top fifty private company taxes list of 2000, only six people appeared in the List of 1999.[18] We report the detailed information about the millionaires who were in the four-year period Lists and found guilty latter in Table 2.[19]

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[17] The most successful businesspeople in China were the Liu family in that year, owners of the Hope Group, and the second–largest supplier of animal feed in the country. Their net worth was estimated at USD 1 billion, unchanged from year 2000, when they were the second in that year. The richest family in 2000, Rong Yiren and his son Larry Yung, saw their wealth shrunk from USD 1.9 billion to USD 780 million, owing to a drop in the share price of CITIC Pacific, their Hong Kong–listed vehicle.

[18] Sun Feng was actually in prison and had lost control of his company when he was in the 1999 List. Number two in 2001, Yang Bin, was delisted due to tax fraud in 2002. He is neither the first nor the last entrepreneur that is found guilty after once being in the List.

[19] Millionaires’ troubles and crime commitment range from being suspected of corruption, bribery, to treason.

China stock market

China stock market was originally designed to support the development of SOEs when it was first set up.[20] Before 2001, CSRC set an annual quota of new shares to be issued in each year. The quota was given either as the number of companies going public or as the number of shares going public in each year. It was allocated among the provinces and state-industrial commissions according to the criteria of supporting regional or industrial development goals, with consideration of the balanced number among provinces and industries. The CSRC started to transform this quota system into the verification system in 2001. As a result, investment banks are able to recommend companies to the CSRC for going public. However, it is still the CSRC that makes the final decision on companies going public. Rights issues and seasoned equity offerings (SEOs) also need permission from the CSRC. Since most companies going public in China are state-owned enterprises, stocks are classified by ownership into six categories: three non-negotiable stocks (state-owned stocks, legal-person stocks and employee stocks) and three negotiable stocks (A shares, B shares and H shares).

In addition, an important feature of the Chinese stock market is that it is segregated into A-share and B-share markets. Domestic investors had been restricted to invest in the A-share market before 2001. Foreign investors could only invest in B shares since RMB cannot be exchanged freely. In addition, B-share stocks are traded in US dollars on the Shanghai Stock Exchange and in Hong Kong dollars on the Shenzhen Stock Exchange. In September 2006, the A-share market was opened up to the Qualified Foreign Institutional Investor (QFII).

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[20] There are two official stock exchanges in China. According to Official Reply Concerning the Establishment of the Shanghai Stock Exchange (SSE) from the Head office of the People's Bank of China on November 14, 1990, the first stock exchange in China opened up in Shanghai in December, 1990. Also, the Shenzhen Stock Exchange (SZE) got the official reply from the Head office of the People's Bank of China on April 16, 1991. Since its establishment, the China stock market has expanded rapidly and operated in a continually changing regulatory environment. In November 2000, the China Securities Regulatory Commission (CSRC) announced that the Shanghai and Shenzhen boards would be merged, in a move towards a unified stock market in China. This reorganization included making the Shanghai Stock Exchange the main board for blue chips and creating a single listing board for high-tech companies in Shenzhen, similar to the NASDAQ board. Since November 2000, all IPOs have only been listed on the Shanghai Stock Exchange. Although the Chinese NASDAQ board has not been established at July 2004, a Small and Medium Enterprises Board took off in Shenzhen in June 2004. From then on, big companies will be listed on the Shanghai Stock Exchange, while small and medium companies will be listed on the Shenzhen Stock Exchange.

Relevant institutional environment issues in China after 1978

We introduce relevant institutional environment issues, "rules of the game", in China after 1978. The institutional background determines entrepreneurial activities as mixtures of productive and unproductive activities in China.

Reform and openness in China are widened and deepen by the withdrawing of government intervention in microeconomic activities and the increasing effort in macro economy management and regulation (The World Bank, 1995). However, the paces of reform in the micro-level and the macro-level are not always consistent.[21] The lag between legislation and real micro economy activities renders great uncertainty in entrepreneurial activities. In addition, before the revision of the constitution in March 1999, the non-state sector has only been treated as the supplementary part in the whole economy. This status has led to the discrimination against the private entrepreneurial firms and individuals in obtaining factor inputs, accounting partly for their vulnerability to interventions by local governments (Tsang, 1994; Chow & Fung, 1996). The aforementioned two aspects result in that the relationship and the interests' consistency with local government become the vital element in successful business activities in China (Xin & Pearce, 1996; Peng & Luo, 2000; Park & Luo, 2001; Luo, 2003; Wu & Leung, 2005). In this institutional environment, rent seeking behaviors are thus unavoidable in acquiring critical resources, assessing entrepreneurial opportunities, or substituting for institutional voids in the transition economy framework. Hence, the combination of productive and unproductive activities is an issue in the wealth accumulation process of the millionaires in China. Substantial social resources are offered to those involved in the Schumpeterian innovation, while moral standard becomes less of the concern.

[21] For example, although the government has permitted the hiring in the small business of the self-employment since the beginning of reform and openness, the legal number of employees was not clear until the year of 1987. From then on, people who start their own business are classified into two types by the National Bureau of Statistics of China: those who hire less than eight employees are self-employed, and those who hire eight or more than eight employees are in the form of the private enterprise.

4 Econometrics Method

In this section, we first describe the econometric issues in the event study methodology.[22] Then three hypotheses are discussed in the event effect examination process, while one hypothesis is offered in the pool cross-sectional CAR analysis.

We apply the market model in our analysis to describe the stock performance. In addition, according to event study methodology, we define estimation window, event date and event window.[23] Figure 2 illustrates it.

In the estimation of the relationship between the company stock and the market index, cross-sectional dependence is the unavoidable issue when we design the event study strategy. The reason is that the List is the common event for publicly listed companies controlled by millionaires in the List in the same year. Different stocks are influenced by the same event in a same period. The residuals of each stock estimated by OLS are likely to be cross-sectionally dependent, if some reactions of stock price are sampled from common time periods. We will have the misstatement of significance level from the estimation. In this regards, we thus apply the seemingly unrelated regressions model to address the cross-sectional dependence in residuals (Christie, 1990). The model is a generalization of a linear regression model and consists of regressions for each stock in our sample. The regression equation system is as following:

$$R_{1t} = \alpha_{1t} + \beta_{1t} r_{mt} + \gamma_{1t} + \varepsilon_{1t}$$
$$R_{2t} = \alpha_{2t} + \beta_{2t} r_{mt} + \gamma_{2t} + \varepsilon_{2t}$$
$$\ldots\ldots$$
$$R_{it} = \alpha_{it} + \beta_{it} r_{mt} + \gamma_{it} + \varepsilon_{it} \tag{1}$$

[22] A review of event study methodology is presented in the appendix.

[23] The estimation window is the period that the relationship between the daily return of company and the benchmark market index is estimated. The event date is the day that event takes place and is publicized to the market. The event window is the period that the methodology assumes the event could influence the stock performance of the company. We predict the performance of the stock in the event window according to the relationship we find in the estimation window. The event period consists of estimation window and event window.

where R_{it} is the daily stock return of a stock *i* in event period, r_{mt} is the market index return in event period, μ_{it} is a dummy variable which equals one if the trading day is in the event window and zero in the estimation window, ε_{it} is the residual, α_{it}, β_{it}, and γ_{it} are parameters, and t refers to trading days in event period.

We apply the parametric hypothesis test to examine whether the event effect exists for related stocks. Due to the application of seemingly unrelated regression, we expect that γ_{it}s are equal to zero if null hypothesis holds. Then our tests are conducted in three aspects: The first aspect (H1-1) directly examines the existence of the event effect for the whole sample: the estimated parameters of the event dummy variable are equal to zero in all equations in the four-year period. Then whether the estimated parameters of the event dummy variable are equal to zero in all equations for companies where controllers are in the List for the first time (H1-2) is examined. Finally, we investigate whether estimated parameters of the event dummy variable are equal to zero in all equations for companies where controllers are in the List in previous year but are off the List in the study year (H1-3).

For companies in our sample, the controllers of the companies are in the List is the only difference between periods in the estimation window and in the event window. Basing on their renewed information set, investors adjust their beliefs such that abnormal stock return can be observed if the event effect exists.

H1-2 and H1-3 identify the influence direction of the event and whether the factor of the socio-cultural environment is the only source of the event effect.[24] H1-2 is the sub-

[24] In the socio-cultural context, being rich and famous is not a wise behavior. Although modern Chinese people believe in the traditional saying "lineage may not define a hero", the opinion of miso-affluence mentality also widely exists in the Chinese society. The latter attitude, on one hand, has its historical origin. The social class of businessmen had been vulnerable and humble in the past, Confucian culture holds the opinion that businessmen and business activities are the menace for a stable feudal society system (Lv, 2003). Consider the dominant official status of Confucian in China traditional culture, this attitude contributes to the existence of miso-affluence mentality in the socio-cultural environment of the modern China. On the other hand, the original sin in the wealth accumulation process is an unavoidable issue for the rich in mainland China. Except for managers in the SOEs and the old men with the experience of entrepreneurial activities before 1956, few people have the knowledge about business operation in the inception of reform and openness. Although people have different preferences and risk attitudes, great uncertainty in entrepreneurial activities and the public attitude towards the desirability of entrepreneurial activities were obstacles that prevented people from the exploitation of entrepreneurial opportunities. People who were most likely to exploit entrepreneurial opportunities were those either possess enough rent seeking resources to overcome uncertainties, or could not make a decent living in the central planned economy system.

hypothesis of H1-1. When H1-2 is not rejected, H01 should also be true. Besides, the impact direction should be the same for relevant companies' performance in the stock market in above two tests. To examine these issues, we assume that the factor of the social-cultural environment is the determinant in the stock market, and investors in the stock market of China share the same social-cultural environment in H1-2 and H1-3.

H1-3 provides us with the information about the influence direction since being off the list might be treated as good news in the stock market. As several millionaires got into trouble or were found guilty after 1999, the public awareness of the unproductive activities may co-exist with the millionaires' productive activities, as well as the latent risk of stricter scrutiny.

To estimate the event effect, we first calculate the abnormal return (AR) in the event window. The abnormal return observations will then be aggregated in order to draw overall inferences for the event of interest. The Cumulative Abnormal Return for firm i (CAR_i) is defined as

$$CAR_i = \sum_{0}^{t_1} AR_{it} = \sum_{0}^{t_1} \left(R_{it} - \widehat{R_{it}}\right) \tag{2}$$

where R_{it} is the daily stock return of a stock i in event window; $\widehat{R_{it}}$ is the predicted daily stock return in event window; t_1 is the total trading days in event window.

We perform the pool cross-sectional OLS analysis to examine the association between the magnitude of CAR and characteristics specific to the event observation. The regression equation is

$$CAR_i = \alpha_0 + \beta X_i + \eta Ins_i + \varepsilon_i \tag{3}$$

where CAR_i is the CAR of stock i; X_i is the variable vector measuring the company characteristics of stock i; Ins_i is the variable vector representing institutional environments; α_0 is the constant, while β and η are the vectors of coefficients for company characteristics and the measurements of the institutional environment; and ε_i is the error term.

Then we have the second hypothesis: the government competitiveness index has positive relationship with CAR. We make such an argument for two reasons. One is that Investors will adjust their belief according to the information received. Then the variation of the stock price reflects the average belief (Keynes, 1936), based on the information received by investors, on the future performance of the company. The other reason is that the stock of the company that operates in the better institutional environment will perform better in such belief adjustment. The province with better institutional environment offers entrepreneurs incentive to choose productive activities such that less institutional risk exists. In addition, although unproductive activities also contribute to the profit of a company, *ceteris paribus*, the potential institutional risk will lead to great uncertainty for investors in the stock market.

5 Data Description

Our sample consists of publicly listed companies controlled by millionaires who are in the List from 1999 to 2002.[25] We obtain financial and accounting data from China Stock Market and Accounting Research Database (CSMAR). The Lists provide us the simple data of personal characteristics. In addition, we generate the variable of the institutional environment from China Regional Competitiveness Development Report (2005). We introduce measurements by the sequence of the process in the event study in the following part.

In the event effect hypothesis tests, we obtain the daily return data of the single company and the indexes from CSMAR stock files in the period from 1998 to 2003. Data from the Shanghai A-share market, Shanghai B-share market, Shenzhen A-share market and Shenzhen B-share market are used in our study. We report the data summary by year from Table 3-1 to Table 3-4 for the stocks of the companies controlled by millionaires in the List of each year. Besides, in Table 4 we summarize the daily return for stocks controlled by millionaires who are once in the List in the previous year but off it in the year 2000 and 2002. Then in every four years, we have at most 201 observations for every stock and relevant market indexes except that a stock is newly listed or in the trade suspension in the estimation window period.[26] Additionally, price limit has been executed

[25] One reason for the choice of the four-year period is that Forbes is the only institution that publishes the list of millionaires in mainland China in this period. Otherwise, the event effect would become difficult to identify as various similar lists were released by different institutions after 2002. The other reason is that investors all come from mainland China and roughly share a similar socio-cultural environment in that period.

[26] We define from 200 trading days before the event date to 31 before it as estimation window, while 30 trading days before the event date and 30 trading days after it as event window.

since December 16th, 1996 in the Shanghai and Shenzhen stock exchanges, only the first trading day of publicly listed and the resume has no limit. Therefore, the absolute value of return ratio could be above 10 percent for some stocks in our sample.

In the cross-sectional analysis, we generate a series of variables to represent firm characteristics, industry circumstance and institutional environments. The dependent variable, CAR, varies from -50.02 percent to 51.08 percent with the mean of -0.74 percent. In Table 5-1 we present the summary of variables in our CAR analysis.

From the China's Listed Firm's Corporate Governance Research Database and China Stock Market Financial Database - Annual Report of CSMAR, we generate return on total asset ratio (ROA) to represent the earning ability of the company.[27] Table 5-1 shows that the mean of ROA in the sample is 5.49 percent with 21.04 percent as the maximum and -13.35 percent as the minimum. We also obtain the length of the company's history before its IPO (by the number of years), the dummy variable about whether SOE holds stock shares in it, and the stock share held by millionaires in the whole company. Table 5-1 presents that the length of the company's history before its IPO ranges from zero to eight years, while the average length is 2.06 years; twenty-three companies in the sample have stock shares hold by SOEs; and the mean of the stock share held by millionaires is 39.78 percent with 7.98 percent as the minimum and 71.25 percent as the maximum.

According to the Guidance on the Industry Classification of Listed Companies of China, we define the firm's industry share in our sample as the percentage of the firm's market value to the total market value of the whole industry in the news announcement date. Then the mean industry share of the previous three years is the average industry share of the calendar day that is 365, 710 and 1095 days before the event date respectively.[28] The minimum of this variable is thus zero if the company is publicly listed in the year when the List is released. It is also shown in Table 5-1 that the mean of this

[27] Since different companies have their own capital structures, we apply ROA as a consistent measurement of profitability across all companies.

[28] If these days are not the trading day, we apply the total market value of the previously closest trading day. For example, the news was released on November 15th in 1999. Then for a company in our sample the firm sizes of past three years are the total market value on November 15th in 1998, 1997 and 1996 respectively. And as the day of November 15th in 1998 is not a trading day, the total market value of November 13th is set to be the firm size of 1998.

variable is 4.65 percent.[29] We also control the education level of millionaires in our regression. Education attainment is ranked from one to six, with one for primary school and six for the above undergraduate.[30] In total, 76.74 percent observations in our sample have education level above college with 30.23 percent above the undergraduate level. Comparing with the whole education level of millionaires in the List of the four-year period, millionaires who control publicly listed companies have higher education level with the mean level being close to the undergraduate level.

Then we generate three institutional environment measurements. First, we use the average GDP growth rate from 1989 to the year before the List of each year made public to control the economic performance of the provinces where the companies' headquarters locate. It represents the long-run trend of the economic context measurement. The time lag helps us avoid the endogenous relationship between the company profit and the environment of the macro economy. The average GDP growth ratio is 12.16 percent, while the minimum and the maximum are 7.85 percent and 16.58 percent respectively. We then regard the year 1999 as the base group and generate year dummy to represent the different, socio-cultural circumstance towards the millionaires in the List in different years.

From China Regional Competitiveness Development Report (2005), we find the competitiveness index of government administration for each province.[31] The variable is calculated as the mean competitiveness index of government administration for the province where firm' head office locates from 1985 to the year each List publicized to present the long run trend in the political context confronting each company before the Lists are released. The mean is 60.06 and the standard deviation is 17.40. The index evaluates government administration in four aspects: government expenditure, fiscal policy, government efficiency, and social equality and safety. Given the increasing local government autonomy in the central-provincial framework after reform and openness in

[29] Besides, we find that as stock 600256 is the only publicly listed company in the non-metal mineral product industry, its industry share is 100 percent in our sample.

[30] It is separated into primary school, junior middle school, senior middle school, junior college, undergraduate, and above undergraduate. Each level includes the people who didn't finish the level in the year when he/she was in the List.

[31] Since the annual China statistics is released in the September of next year, the annual competitiveness index is based on the previous two years' statistical data.

1978, the index could represent various institutional environments of different provinces.[32]

Finally, we capture the change of the socio-cultural environment with the year dummy variables representing four years from 1999 to 2002. Take year 1999 as the base group, the effect resulting from the change in the belief of investors could be represented by estimated coefficients of the dummy variables. The number of stocks in our sample is 9, 11, 31 and 30 for 1999, 2000, 2001 and 2002 respectively.

6 Results

The event effect of being in the List

In this subsection, we report the primary result of the seemingly unrelated regression for three hypotheses from Table 6-1 to Table 6-3. The result of hypothesis tests is summarized in Table 7. Although we have set estimation window and event window to be 201 trading days, we have only 126 observations for each firm in the regression system of H1-1 since several stocks took initial public offering in the estimation window and some stocks were in the trade suspension in a few trading days. For the same reason, we have 134 and 200 observations for each firm in regression systems for H1-2 and H1-3.

Tables 6-1, 6-2 and 6-3 indicate that the overall average parameter γ estimates across the stocks in the four-year period is negative for H1-1 and positive for the other two. With uniform treatment of three hypotheses, the event that companies' controllers are in the List has the negative parameter γ estimate, -1.31 percent at mean level. In addition, the average parameter γ estimate is 0.99 percent for being in the List for the first time, while the number is 0.02 percent for dropping out of the List. However, the

[32] The competitiveness index of government administration is a proper measurement for the political environment. The reason is that entrepreneurial activities keep a certain degree of consistency across different provinces within the same company. The province where the general headquarters locate is the place where the entrepreneurs begin to adapt to "rules of the game" when they start to develop their businesses. Thus, the entrepreneur's personal control on the corporate operation, employees' learning by doing and the knowledge transfer within the whole company make the provincial index a proper measurement for the political environment. According to Table 5-2, the location of general headquarters varies across seventeen provinces.

average parameter γ estimates are not positive or negative unanimously across different years, while the time of change is same in all three hypotheses. In 1999 and 2000, we observe positive average parameter γ estimates, while they turn to be negative in the following two years. For example, in the regression system for H1-1, we have positive average parameter γ estimates, 30.53 and 4.83, in the year 1999 and 2000 respectively, while the negative, -7.9 and -5.63, is found in the next two years.

We also find coincident result in the percentage of negative parameter γ estimates in the regression system of H1-1. The negative percentage in the four years is 11.11, 25.00, 57.58 and 54.55 respectively, with average 47.13 in the whole period. Thus, being in the List becomes an undesirable activity, in the socio-cultural environment dimension, for investors after 2000.

We can conclude from the above discussion that the event effect is not unanimous for all stocks in all three regression systems. It supports our choice of seemingly unrelated regression since we cannot rule out the possibility that the event effect could be cancelled out in the calculation of average abnormal return across all stocks. Moreover, we cannot simply interpret the event effect detected in H1-1 as the result of the optimistic public belief. Otherwise H1-2 should be rejected by the same positive expectation as well.

Table 7 summarizes test results for all three aspects. We show the existence of the effect of the event that companies' controllers being in the List with the p-value of 0.0005 in both the F test and the Chi-square test conducted after we perform the regression system of H1-1. Before Forbes released the List, millionaires only knew their own wealth but not others'. Thus, the List not only reveals who are the richest but also sets a benchmark by which the public could expect who are the most successful entrepreneurs in China. Finally, the events that companies' controllers are in the List for the first time and off the List do not have influence on the companies' stock performance.

The tests result of hypotheses is encouraging for our study on the relationship between entrepreneurial activities and the institutional environment. We then conduct the cross-sectional analysis to further interpret the institutional environmental influence on the CAR, the event effect, of the relevant companies' stocks in the next subsection.

Cross-sectional analysis result

We present detailed results for three institutional environment variables, as well as control variables in our regressions, in Table 9.

For each company, we control for the average provincial GDP growth rate for provinces where companies' general headquarters locate. It is not significant either when we put it separately, or together with other two institutional environment variables in the regression. Its estimated parameter has positive sign as expected. There are two possible explanations for this. One is that provincial economic growth rate can only represent the economic environment that the head office confronts, while the companies' business may distribute among the whole country. The other is that the macro economy environment is extensively analyzed such that there is no information that is unexpected enough for investors in the stock market. Then we could not observe significant relationship between the individual stock and the macro economy environment.

We use the provincial government competitiveness index to measure the political environment. It is found to have a strong positive relationship with the event effect. In Table 9, the parameter estimated is significant at the 10 percent level after the economic environment and the socio-cultural environment are controlled. The result is consistent with our expectation that relatively good political environment facilitates the productive activities. The local government that is responsible could provide the public with sufficient public goods that facilitate the business operation. Efficient government operation contributes to the relative shrink in the number of unproductively entrepreneurial opportunity, for example, rent seeking or smuggling. Better society equality and safety helps to erase the systematical uncertainty and risk in all entrepreneurial activities. Generally speaking, the stock market participants' risk adversity helps us find relatively more productive companies, although we cannot even identify companies' productive and unproductive activities. Our empirical result shows that entrepreneurs would choose more productive activities due to better political environment, given the exogeneity of political environment in China.

Finally, we apply year dummies to find the public belief direction resulting from the socio-cultural environment. Taking the year 1999 as the reference group, we find significant negative influence from being in the List. Comparing with the year 1999, the event that companies' controllers are in the List causes -13.07 percent, -24.25 percent and

-24.26 percent in CAR in the end of the event window in three respective years. Using the daily cumulative average abnormal return (CAAR) of each year, we further illustrate how the direction of public belief changed in the four-year period.[33] The results are shown in Table 8 and Figure 3. We find strictly positive daily CAAR which is up to 18.87 percent in the end of the event window in 1999. In 2000, some of the daily CAAR become negative and CAAR is only 3.22 percent in the end of the event window. Although the List extents from top fifty to top one hundred in 2001, which means unexpected information are brought to the stock market in that year, the sign of the daily CAAR in all trading days in the event window is negative. It implies that the public belief is totally different from what it once was in the year 1999. Concerning that the R-square of the regression almost doubles after we control the year dummy in the CAR analysis, we can conclude that the influence of the socio-cultural environment significantly contributes to the effect of that event that companies' controllers are in the List.

In each regression we also control the following company specific characteristics: the earning ability, survival ability, corporate governance, relative competitiveness in the relevant industry and the education level of the millionaire.

The estimated coefficient of ROA is positive, but does not play a significant role in the CAR of each company after the year dummy is included. Similar result can be found in the parameter estimation of the average industry share in previous three years.

We find that the company history has positive and significant influence on CAR. Companies with a relatively longer history could provide the market with more information about its survival skills, operation and management. After we put all variables of the institutional environment into the regression, the significance level rises to 1 percent. Besides, the parameter estimated keeps positive sign across all the regressions.

For millionaire's education level, it has a significant and positive relationship with CAR after the institutional environment is controlled for. Better education achievement represents better ability in both the recognition and exploitation of opportunities and the

[33] $CAAR_{i,t_2} = \sum_0^{t_1} AAR_{it,t_2} = \sum_0^{t_1} \frac{1}{N_s} AR_{it,t_2}$, where t_2 is year 1999, 2000, 2001 and 2002; N_s is the number of stocks in each year.

management. However, personal ability is not important unless we can control the influence of the institutional environment.

We measure the corporate governance by two variables, the dummy whether SOEs hold stock shares in the company and the percentage of the stock share held by millionaires owning it. The dummy variable has negative coefficient which is significant at the 5 percent level in all regressions. If a company has SOE shareholder, it will cause a CAR change of -17.26 percent when we have all variables of the institutional environment in the regression in Table 9. Even the companies with some of the best and most successful entrepreneurs in China cannot avoid the drawback influence of SOE operation. The SOE stock shares in the company should be considered for the reason that the state shareholding is a key feature of Chinese publicly listed firms (Tian, 2000). Besides, there is a U-shaped relationship between the size of the government equity holding and the corporate value. As the government shareholding increase from zero, the corporate performance gets poorer and begins to improve after the state controls the company. Moreover, the firms controlled by government still underperform the firms without state shareholding.

The other corporate governance variable, the percentage of the stock share held by millionaires, depicts both the governance ability of the millionaire and the relative risk that could be suffered by being in the List. Our finding shows that after controlling for the institutional environment influence, the parameter estimate is negative and significant at the one percent level. The more share that the company owned by the millionaire, the more risk that investor will have if the millionaire get into trouble. In addition, the variable depicts the governance ability of the millionaire. *Ceteris paribus*, the millionaire with better governance ability could hold less share percentage while keep the same control level of the company unchanged.

7 Conclusion

In this chapter we have investigated the causal relationship between the institutional environment and the choice between the two types of entrepreneurial activities, by examining the effect of the event that publicly listed companies' controllers are in the

Forbes List. The event is an external shock for the stock market, while the long-run institutional environment before the announcement of the List is not subject to the influence of millionaires. The results of the event study show that entrepreneurs are more likely to choose productive activities due to better institutional environment. Besides the supply of entrepreneurial activities, the institutional environment also directly influences the nature of entrepreneurial activities.

The research of the institutional environment is interesting for the reason that it can be adjusted and controlled by the government. C*eteris paribus*, entrepreneurs with low business ethics are subject to less social restrictions and have more opportunities of making profits. It is therefore the institutional environment that affects entrepreneurs' tradeoff between productive and unproductive activities.

This chapter could be extended by examining the role of performance consistency. It is possible that entrepreneurs in a better institutional environment could outperform their competitors. The performance persistency in entrepreneurship (Gompers *et al.*, 2010) indicates that successful entrepreneurs will be more likely to succeed in future exploitations of entrepreneurial activities. If entrepreneurs in better institutional environment are more likely to survive, they are more likely to achieve better performance in the future. In addition, as the improvement in government policy can be considered to be an innovation, the timing of the improvement in the institutional environment is also important to breed entrepreneurship.

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Appendix

Event study methodology

Fama *et al.* (1969) develop the event study methodology, which is widely used in finance and accounting research. Stock market data with information of publicly listed companies in treatment group over time will contain information about other stocks in control group. As long as the reactions of the stocks towards an event are driven by some common factors, information about other stocks that are not subject to the event can help construct the counterfactuals of those that are subject to the event (Gregory and Head, 1999).

As a literature review paper, Mackinlay (1997) summarizes the three main types of models in statistics and two models in economics for measuring normal performance. The constant mean return model, the market model and the factor model belong to the statistic models. They follow statistical assumptions concerning the behavior of asset returns, and do not depend on any economic arguments. Models in the other category (economic model) rely on not only statistical assumptions, but also those concerning the investors' behavior. They are the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT) putted forward. Thus, the potential advantage of economic models is the opportunity to calculate more precise measures for the normal return using economic restrictions. However, statistic models dominate for event studies because such models also eliminate these biases at little cost.

There are two issues concerning the methods that one can apply in the prediction of the normal performance. One is the distribution of the security returns. For this issue, Ordinary least square (OLS) has traditionally been employed in the estimation. Also, the OLS estimator provides minimum variance among all unbiased estimators if security returns are normally distributed. Under non-normality, however, OLS is only the best linear unbiased estimator. Other non-linear estimators such as a robust estimator, may be preferred. Theil (1950) suggests a nonparametric estimator. This estimator has high efficiency and simplicity in computation and implementation. Hussain and Sprent (1983) find Theil estimators to be slightly inefficient to OLS under normality but markedly superior under alternative distributions with heavy tails. Talwar (1993) finds that Theil estimators perform better than OLS with various non-normal return distributions suggested in finance literature. Another issue in the normal performance prediction is the cross-sectional dependence in the residuals. The issue arises when the sample consists of stock returns in common time periods. Zellner (1962) proposes seemingly unrelated regressions model, which is a two-step method. In the first step, residuals are estimated by OLS. Then the parameter estimation is conducted with generalized least square (GLS) and the residual from the first step.

In the next step, the calculation of abnormal return mainly consists of two parts: the expected return, i.e. the benchmark for security, and the actual return. In the short run, we could simply apply the reference portfolios, such as an equally weighted market index or the decile portfolio according to the firm size, as the benchmark. Then the abnormal return observations will be aggregated in order to draw overall inferences for the event of interest. In the long run, however, Barber and Lyon (1997) argue that, instead of applying CAR, researchers should calculate abnormal returns as the simple buy-and-hold return on a sample firm less the simple buy-and-hold return on a reference portfolio or control firms. Matching sample firms to control firms with similar size and book-to-market ratios yields well-specified test statistics in virtually all sampling situations that researchers consider.

There are two main type tests for the null hypothesis, H_0, wherein the event has no effect on the security. Parametric standardized statistics are applied when specific assumptions have been made about the distribution of abnormal returns. Meanwhile, the nonparametric statistics, testing sign and rank of abnormal return are free of specific assumptions concerning the distribution of returns. Dombrow *et al.* (2000) examine the power of test statistic for different combination between OLS, Theil's incomplete method and the three statistic tests stated above. The results show that employing a complete nonparametric approach does not overly reject a valid null hypothesis of no abnormal performance. When no abnormal performance is induced (when the null hypothesis of zero should be true), the combination of employing the Theil estimation technique with nonparametric test statistics does not produce unacceptable Type I errors. Finally, the Cross-Sectional Models can provide theoretical insights from examining the association between the magnitude of the CAR and characteristics specific to the event observation.

Figure 1

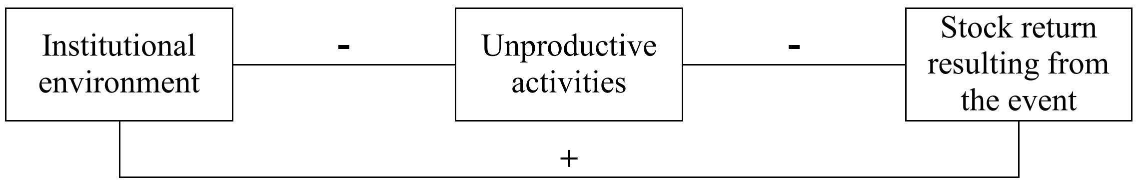

Figure 2

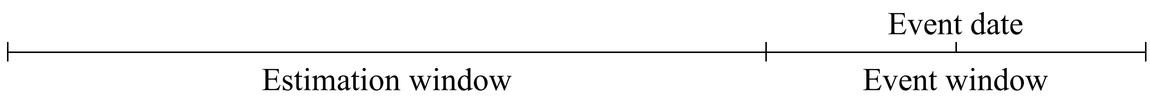

Figure 3

Cumulative average abnormal return from 1999 to 2002

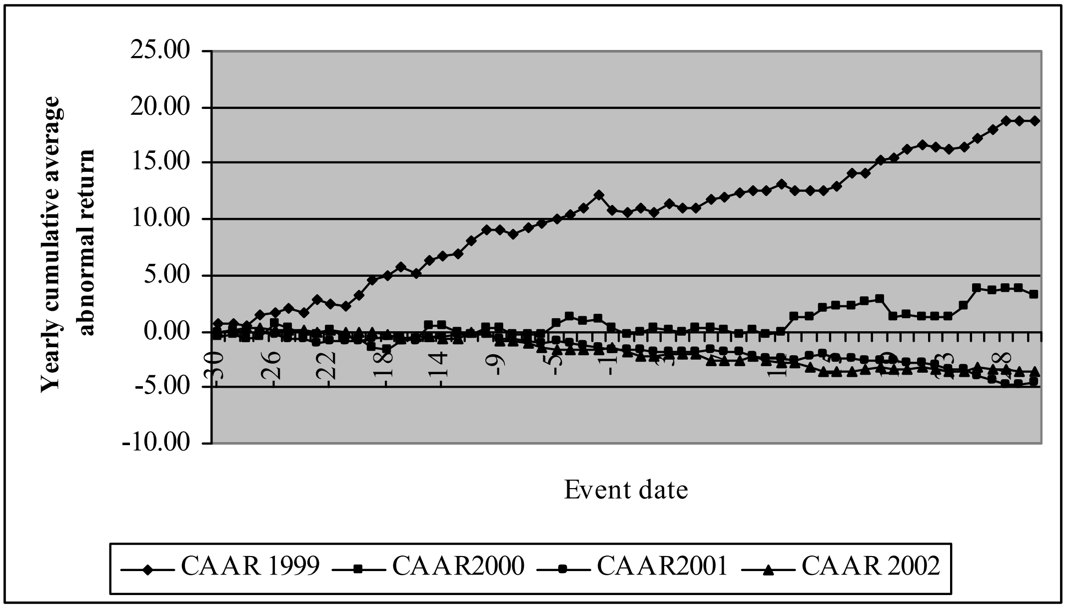

Table 1 Summary for the Forbes' list of Millionaire in mainland China

Age

Year	Mean	Std. Dev.	Min	Max
1999	48.68	10.39	32	83
2000	44.77	10.32	29	84
2001	46.07	8.62	30	71
2002	45.01	7.31	31	64

Education

Year	Prime	Middle	Senior	College	University	Above
1999	14.00%	30.00%	14.00%	2.00%	32.00%	8.00%
2000	3.85%	17.31%	7.69%	1.92%	44.23%	25.00%
2001	0.00%	7.92%	10.89%	14.85%	43.56%	22.77%
2002	0.00%	7.14%	15.31%	11.22%	44.90%	21.43%

Number of Main Industries

Year	1	2	3	4
1999	64.71%	23.53%	9.80%	1.96%
2000	62.39%	15.38%	15.38%	0.00%
2001	71.29%	21.78%	6.93%	0.00%
2002	56.57%	26.26%	16.16%	1.01%

Going Public

Year	Shenzhen	Shanghai	Hong Kong	New York	Singapore	Not going public
1999	10.20%	8.16%	4.08%	0.00%	0.00%	77.55%
2000	9.80%	13.73%	9.80%	9.80%	0.00%	56.86%
2001	6.45%	21.51%	11.83%	1.08%	3.23%	55.91%
2002	9.78%	17.39%	14.13%	1.09%	3.26%	54.35%

Wealth (million USD)

Year	Mean	Std. Dev.	Min	Max
1999			6.00	1000.00
2000	203.08	296.30	42.00	1900.00
2001	180.46	185.70	60.00	1000.00
2002	190.07	145.67	84.00	850.00

Table 2 Millionaires in the List from 1999 to 2002 and being in trouble or found guilty

Name	In list year	Trouble & Crime Sentence
Huang Hongsheng	1999-2002	Limited imprisonment of 6 years
Li Jianwei	1999	Being suspected of corruption and bribery
Liu Xiaoqing	1999	Being suspected of crime against tax collection
Lu Junxiong	1999	Limited imprisonment of 18 years
Lv Youzhen	1999	Limited imprisonment of 7 years
Mou Qizhong	1999	Lifetime imprisonment
Rubia Kadeer	1999	Limited imprisonment of 8 years
Sun Feng	1999	Limited imprisonment of 6 and a half years
Wu Zhijian	1999-2000	Limited imprisonment of 17 years
Gu Chujun	2001	Forbidden to enter stock market for lifetime
Shi Minzhi	2001	Be suspected of raping two underage girls
Tang Wanxin	2001-2002	Limited imprisonment of 8years
Yang Bin	2001	Limited imprisonment of 18years
Yang Rong	2001	Exile abroad for being suspected of stealing state own assets
Zhou Zhengyi	2001-2002	Limited imprisonment of 3years

Table 3-1 Summary of daily stock return for companies controlled by millionaires in the List in 1999

Stock code	Year	Obs. Num.	Mean	Std.	Min.	Max
000055	1999	201	-0.01	2.99	-10.00	10.00
000078	1999	201	0.29	3.28	-9.99	10.00
000527	1999	201	0.23	2.87	-9.32	10.00
000876	1999	201	0.10	2.62	-10.00	8.63
Shenzhen A	1999	201	0.09	1.95	-7.99	6.99
600052	1999	201	0.36	3.07	-9.20	10.00
600080	1999	201	-0.03	2.94	-9.97	10.00
600811	1999	201	0.13	2.82	-10.00	10.00
600867	1999	201	-0.06	2.51	-9.82	9.98
Shanghai A	1999	201	0.11	1.87	-7.61	6.60
200055	1999	201	0.24	4.71	-10.00	10.00
Shenzhen B	1999	201	0.42	3.44	-9.50	9.87

Table 3-2 Summary of daily stock return for companies controlled by millionaires in the List in 2000

Stock code	Year	Obs. Num.	Mean	Std.	Min.	Max
000046	2000	201	0.09	1.79	-5.02	8.37
000078	2000	201	0.17	2.11	-5.56	10.00
000559	2000	201	0.24	2.15	-6.77	7.71
000583	2000	196	0.09	2.26	-6.63	9.50
000876	2000	201	0.06	1.95	-7.29	7.26
Shenzhen A	2000	201	0.11	1.09	-4.75	3.41
600052	2000	201	0.05	2.02	-4.08	10.00
600080	2000	201	0.13	1.85	-4.26	10.00
600093	2000	201	0.22	2.05	-4.76	8.18
600185	2000	201	0.05	1.88	-5.16	7.68
600196	2000	200	0.09	1.76	-4.52	9.46
600256	2000	155	0.54	2.72	-7.03	7.96
600811	2000	201	0.23	2.63	-5.65	10.00
Shanghai A	2000	201	0.11	1.03	-4.41	3.16

Table 3-3 Summary of daily stock return for companies controlled by millionaires in the List in 2001

Stock code	Year	Obs. Num.	Mean	Std.	Min.	Max
000046	2001	201	-0.11	2.38	-9.61	10.02
000078	2001	201	-0.14	1.92	-6.14	9.99
000549	2001	201	0.06	0.80	-3.35	6.46
000559	2001	201	-0.09	1.78	-7.42	10.02
000583	2001	200	-0.14	2.15	-8.46	9.99
000633	2001	201	0.03	0.69	-3.90	7.06
000876	2001	201	-0.05	1.73	-5.79	9.99
001696	2001	201	0.04	2.51	-5.04	5.03
Shenzhen A	2001	201	-0.12	1.43	-5.61	9.68
600016	2001	201	0.06	1.77	-5.42	9.98
600052	2001	201	-0.08	1.95	-7.37	10.00
600080	2001	201	-0.17	1.97	-6.48	10.00
600093	2001	201	0.05	2.49	-9.68	10.00
600107	2001	201	-0.18	1.93	-9.80	10.00
600172	2001	201	0.00	1.64	-6.12	10.00
600185	2001	201	-0.17	2.11	-8.50	10.00
600196	2001	200	-0.16	1.96	-7.42	10.00
600210	2001	201	0.04	1.54	-4.71	9.99
600233	2001	201	-0.07	2.03	-6.19	9.97
600256	2001	201	0.02	1.96	-6.19	10.00
600380	2001	135	-0.37	2.30	-10.00	67.16
600555	2001	184	0.06	3.18	-9.00	30.00
600588	2001	151	-0.39	2.47	-9.75	148.65
600589	2001	134	-0.39	2.78	-10.00	9.99
600653	2001	201	-0.07	1.76	-4.64	10.00
600660	2001	201	-0.01	1.21	-5.48	7.86
600737	2001	201	0.03	1.14	-3.61	8.36
600752	2001	201	-0.17	1.84	-9.53	9.97
600770	2001	201	-0.12	2.53	-7.40	10.00
600788	2001	201	-0.13	1.89	-6.75	9.97
600811	2001	201	-0.05	1.88	-6.60	9.98
600823	2001	201	0.06	2.37	-7.30	10.00
600867	2001	201	-0.17	1.84	-7.44	10.00
Shanghai A	2001	201	-0.10	1.39	-5.31	9.86
900955	2001	201	0.35	2.98	-9.08	10.00
Shanghai B	2001	201	0.30	3.13	-9.78	9.92

Table 3-4 Summary of daily stock return for companies controlled by millionaires in the List in 2002

Stock code	Year	Obs. Num.	Mean	Std.	Min.	Max
000046	2002	201	-0.11	2.38	-9.61	10.02
000078	2002	201	-0.14	1.92	-6.14	9.99
000536	2002	201	0.06	0.80	-18.53	38.13
000549	2002	201	-0.09	1.78	-7.42	10.02
000559	2002	200	-0.14	2.15	-8.46	9.99
000583	2002	201	0.03	0.69	-3.90	7.06
000622	2002	201	-0.05	1.73	-5.79	9.99
000633	2002	201	0.04	2.51	-5.04	5.03
000700	2002	201	-0.12	1.43	-5.61	9.68
000876	2002	201	0.06	1.77	-5.42	9.98
Shenzhen A	2002	201	-0.08	1.95	-7.37	10.00
600016	2002	201	-0.17	1.97	-6.48	10.00
600052	2002	201	0.05	2.49	-9.68	10.00
600067	2002	201	-0.18	1.93	-9.80	10.00
600080	2002	201	-0.12	1.85	-6.36	10.00
600093	2002	201	0.00	1.64	-6.12	10.00
600159	2002	201	-0.17	2.11	-8.50	10.00
600172	2002	201	-0.07	2.03	-6.19	9.97
600185	2002	201	0.02	1.96	-6.19	10.00
600196	2002	198	0.03	1.92	-7.57	10.00
600210	2002	135	-0.37	2.30	-10.00	10.00
600256	2002	151	-0.39	2.47	-9.75	10.00
600380	2002	134	-0.39	2.78	-10.00	9.99
600398	2002	201	-0.07	1.76	-4.64	10.00
600555	2002	200	-0.12	1.82	-7.14	10.00
600588	2002	201	-0.01	1.21	-5.48	7.86
600660	2002	201	0.03	1.14	-3.61	8.36
600737	2002	201	-0.17	1.84	-9.53	9.97
600770	2002	201	-0.12	2.53	-7.40	10.00
600811	2002	201	-0.13	1.89	-6.75	9.97
600818	2002	201	-0.05	1.88	-11.49	27.37
600823	2002	201	0.06	2.37	-7.30	10.00
600885	2002	201	-0.17	1.84	-7.44	10.00
Shanghai A	2002	201	-0.10	1.39	-5.31	9.86
900955	2002	201	0.35	2.98	-9.08	10.00
Shanghai B	2002	201	-0.06	1.79	-7.96	9.84

Table 4
Summary of daily stock return for companies controlled by millionaires who are off the List

Stock code	Year	Obs. Num.	Mean	Std.	Min.	Max
000055	2000	201	0.17	1.96	-7.09	10.00
000527	2000	201	0.01	1.95	-6.83	8.92
Shenzhen A	2000	201	0.14	1.03	-3.35	3.41
600052	2000	201	0.05	2.02	-4.08	10.00
600811	2000	201	0.23	2.63	-5.65	10.00
600867	2000	201	0.08	2.22	-5.46	10.00
Shanghai A	2000	201	0.15	0.97	-3.08	3.16
200055	2000	201	0.29	3.00	-9.56	10.00
Shenzhen B	2000	201	0.30	2.33	-7.01	9.72
600107	2002	201	-0.01	2.46	-7.90	10.00
600233	2002	201	0.00	1.86	-3.80	9.17
600589	2002	201	-0.04	1.78	-4.97	10.00
600653	2002	201	0.12	2.56	-6.72	10.00
600752	2002	201	0.02	2.12	-4.67	10.00
600788	2002	201	-0.03	2.02	-4.88	9.97
600867	2002	201	0.17	2.38	-4.66	9.99
Shanghai A	2002	201	-0.10	1.39	-5.31	9.86

Table 5-1
Summary of pool cross-sectional analysis variables

Variable	Obs. Num.	Mean	Std.	Min.	Max
Cumulative abnormal return (%)	81	-0.7411	17.3005	-50.02	51.08
The length of the company's history before its IPO	81	2.0617	2.3095	0.00	8.00
SOE holds stock share in company	81	0.2222	0.4183	0.00	1.00
Return on total asset ratio (%)	81	5.4924	4.6188	-13.35	21.04
Millionaires' stock share (%)	81	39.7844	14.0815	7.98	71.25
Education level	81	4.8395	1.2294	2.00	6.00
Mean previous industry share (%)	81	4.7626	11.7011	0.00	100.00
Average provincial GDP growth ratio (%)	81	12.1709	2.2244	7.85	16.58
Gov. competitiveness index	81	62.2376	18.1682	37.72	91.26

Table 5-2
Provinces where general headquarters locate

General Headquarter	Freq.	Percent	Cum.
Beijing	2	2.47	2.47
Chongqing	1	1.23	3.7
Fujian	3	3.7	7.41
Guangdong	10	12.35	19.75
Heilongjiang	4	4.94	24.69
Henan	2	2.47	27.16
Hubei	1	1.23	28.4
Hunan	1	1.23	29.63
Jiangsu	4	4.94	34.57
Jilin	2	2.47	37.04
Liaoling	1	1.23	38.27
Shandong	4	4.94	43.21
Shanghai	19	23.46	66.67
Shan’xi	8	9.88	76.54
Sichuan	9	11.11	87.65
Xinjiang	3	3.7	91.36
Zhejiang	7	8.64	100

Table 6-1 Seemingly unrelated regression system results for hypothesis 1-1

Stock	Year	α	β	γ	Obs. num.	R-square
000055	1999	-0.3010	1.1508***	0.4886	126	0.5806
		1.31	21.95	1.45		
000078	1999	0.1302	1.2661***	0.0128	126	0.6762
		0.57	31.85	0.04		
000527	1999	0.1414	1.2391***	0.1264	126	0.6417
		0.62	25.14	0.38		
000876	1999	-0.3066	0.8531***	0.8149**	126	0.4716
		1.37	19.18	2.48		
200055	1999	-0.4851	1.0281***	0.5824	126	0.6999
		1.55	25.08	1.27		
600052	1999	0.1961	1.1526***	0.5865	126	0.4493
		0.61	15.78	1.25		
600080	1999	-0.2393	1.2290***	0.2314	126	0.7173
		1.25	27.33	0.82		
600811	1999	0.2512	1.0717***	-0.2748	126	0.3579
		0.93	17.78	0.69		
600867	1999	-0.1910	1.0445***	0.1793	126	0.2363
		1.25	33.31	0.8		
Average	1999			0.3053		
% negative	1999			11.11		
000046	2000	0.0265	1.2331***	0.1173	126	0.1257
		0.11	9.8	0.35		
000078	2000	0.0976	0.7497***	-0.0383	126	0.2173
		0.49	9.09	0.13		
000559	2000	-0.0010	0.8356***	-0.0317	126	0.1609
		0.01	7.48	0.11		
000583	2000	0.0489	0.8545***	0.0233	126	0.2705
		0.26	9.9	0.09		
000876	2000	-0.3562	0.7939***	0.3321	126	0.3297
		2.14	8.91	1.36		
600052	2000	-0.0894	1.1955***	0.1696	126	0.2792
		0.52	14.08	0.68		
600080	2000	0.0891	1.1320***	0.0262	126	0.3624
		0.47	10.32	0.09		
600093	2000	-0.0894	1.1955***	0.1696	126	0.3669
		0.52	14.08	0.68		
600185	2000	-0.1740	1.2088***	0.3403	126	0.3861
		1.01	14.59	1.35		
600196	2000	0.0783	1.0888***	0.0413	126	0.0514
		0.53	14.96	0.19		
600256	2000	0.8519	0.6799***	-0.8564*	126	0.538
		2.64	3.55	1.82		
600811	2000	-0.2343	1.5554***	0.2858	126	0.7394
		1.23	16.99	1.02		
Average	2000			0.0483		
% negative	2000			25.00		

Stock	Year	α	β	γ	Obs. num.	R-square
000046	2001	0.2638	1.2475***	-0.3485	126	0.2729
		1.11	17.83	1.01		
000078	2001	0.0934	1.0666***	-0.1962	126	0.7373
		0.71	32.23	1.02		
000549	2001	0.2352**	0.2430***	-0.2501*	126	0.7092
		2.42	10.08	1.77		
000559	2001	0.2205*	0.9976***	-0.2815	126	0.2046
		1.71	28.1	1.5		
000583	2001	0.0877	1.1150***	-0.2345	126	0.7453
		0.59	27.37	1.08		
000633	2001	0.1474*	0.1920***	-0.1063	126	0.4132
		1.67	9.86	0.83		
000876	2001	0.1296	0.9460***	-0.2215	126	0.6222
		1.09	33.29	1.28		
001696	2001	0.0027	0.9750***	-0.1446	126	0.6773
		0.01	15.62	0.42		
600016	2001	0.0631	0.9502***	0.0931	126	0.8158
		0.43	27.21	0.44		
600052	2001	-0.0291	1.0600***	0.1865	126	0.3012
		-0.2	25.03	0.87		
600080	2001	0.0136	1.2076***	-0.0265	126	0.6335
		0.11	31.66	0.15		
600093	2001	0.4282	0.7825***	-0.7884	126	0.8064
		1.49	9.37	1.87		
600107	2001	-0.2741	1.0668***	0.3283	126	0.7523
		-1.62	21.9	1.33		
600172	2001	0.1991	0.9777***	-0.1493	126	0.3634
		1.73	31.84	0.89		
600185	2001	0.0478	1.2875***	-0.0295	126	0.6783
		0.34	32.51	0.14		
600196	2001	0.0387	1.2066***	-0.0318	126	0.7819
		0.32	31.12	0.18		
600210	2001	0.0549	0.5390***	0.0187	126	0.3987
		0.34	12.36	0.08		
600233	2001	0.1825	1.2572***	-0.2322	126	0.6406
		1.09	27.56	0.96		
600256	2001	-0.0234	0.7344***	0.0118	126	0.6963
		0.12	13.03	0.04		
600380	2001	-0.1004	1.1105***	0.0668	126	0.6279
		0.59	26.39	0.27		
600555	2001	0.0123	1.2303***	0.0084	126	0.6704
		0.07	24.39	0.03		
600588	2001	-0.0342	1.1500***	0.0733	126	0.6634
		0.18	22.81	0.27		
600589	2001	0.0343	1.4338***	-0.1594	126	0.2668
		0.17	29.28	0.55		
600653	2001	-0.1214	0.8999***	0.2409	126	0.2883
		0.87	21.17	1.19		

Stock	Year	α	β	γ	Obs. num.	R-square
600660	2001	0.0629	0.3066***	-0.0490	126	0.6533
		0.54	11.47	0.29		
600737	2001	0.1217	0.2976***	-0.1582	126	0.5921
		1.12	10.17	1.00		
600752	2001	-0.0946	1.0486***	0.0948	126	0.7938
		0.62	22.31	0.43		
600770	2001	0.2100	1.3527***	-0.1842	126	0.6112
		0.96	21.34	0.58		
600788	2001	-0.0031	1.1936***	0.0539	126	0.6798
		0.02	32.19	0.30		
600811	2001	0.0971	0.9376***	0.0097	126	0.7652
		0.61	19.52	0.04		
600823	2001	0.1820	1.2271***	-0.1302	126	0.8609
		0.99	21.22	0.49		
600867	2001	-0.0749	1.1637***	0.1479	126	0.8472
		0.58	27.9	0.79		
900955	2001	0.2069*	0.7925***	-0.2182	126	0.6323
		1.83	47.24	1.32		
Average	2001			-0.0790		
% negative	2001			57.58		
000046	2002	-0.0028	1.4508***	0.0198	126	0.0419
		0.03	56.34	0.13		
000078	2002	-0.0023	1.3351***	0.0558	126	0.368
		0.01	21.18	0.22		
000536	2002	0.4581	0.6856***	-0.7824	126	0.6566
		0.75	3.6	0.88		
000549	2002	0.1809**	0.2773***	-0.1039	126	0.4724
		2.77	14.27	1.08		
000559	2002	0.0506	0.8519***	-0.1971	126	0.8474
		0.47	22.27	1.25		
000583	2002	-0.4637*	1.2192***	0.6826*	126	0.4631
		1.95	17.54	1.95		
000622	2002	-0.0914	1.2458***	0.1004	126	0.4556
		0.99	37.55	0.74		
000633	2002	0.0501	0.2741***	0.0803	126	0.3493
		1.15	19.13	1.25		
000700	2002	-0.1613	0.8396***	-0.0585	126	0.6103
		0.97	19.54	0.24		
000876	2002	0.1472	0.7196***	-0.3661	126	0.6803
		0.8	11.71	1.36		
600016	2002	0.1537	1.0761***	-0.2798	126	0.4996
		1.1	22.83	1.37		
600052	2002	-0.0132	1.1030***	-0.1119	126	0.7311
		0.1	25.15	0.6		
600067	2002	0.0450	0.8074***	0.0421	126	0.5042
		0.33	16.86	0.21		
600080	2002	-0.1374	1.0733***	0.0372	126	0.407
		1.28	34.09	0.24		

Stock	Year	α	β	γ	Obs. num.	R-square
600093	2002	0.0737	0.8872***	-0.3027	126	0.6694
		0.5	18.94	1.41		
600159	2002	0.0045	1.0091***	0.1747	126	0.6679
		0.03	17.24	0.66		
600172	2002	-0.1442	1.0850***	-0.0187	126	0.3148
		1.24	27.72	0.11		
600185	2002	-0.0217	1.1725***	-0.1025	126	0.3838
		0.17	30.63	0.55		
600196	2002	0.0913	1.1241***	-0.1945	126	0.6969
		0.7	28.14	1.02		
600210	2002	0.0552	0.6892***	-0.2905	126	0.5755
		0.32	11.73	1.16		
600256	2002	-0.0295	0.8066***	0.0895	126	0.3556
		0.17	14.26	0.36		
600380	2002	0.1506	0.8306***	-0.0764	126	0.5591
		1.26	20.56	0.43		
600398	2002	-0.0919	0.8117***	0.0621	126	0.3781
		0.53	12.5	0.24		
600555	2002	-0.0508	1.0487***	-0.1680	126	0.4399
		0.35	20.74	0.78		
600588	2002	-0.0652	0.9498***	0.3617	126	0.4701
		0.35	13.98	1.31		
600660	2002	0.2798	1.0696***	-0.0422	126	0.5551
		1.48	18.19	0.15		
600737	2002	0.1133**	0.2919***	0.0207	126	0.7563
		2.16	22.95	0.27		
600770	2002	-0.1760	1.4326***	0.4300	126	0.0645
		0.87	19.77	1.45		
600811	2002	0.1282	1.0672***	-0.2391	126	0.5424
		1.27	32.93	1.62		
600818	2002	0.5424	0.7063***	-0.8157	126	0.7735
		1.39	5.66	1.43		
600823	2002	-0.0580	1.2554***	0.1041	126	0.4696
		0.34	18.73	0.41		
600885	2002	-0.2088*	1.3246***	0.1821	126	0.7735
		1.76	36.04	1.05		
900955	2002	-0.1178	0.7543***	-0.1515	126	0.4696
		0.74	17.72	0.65		
Average	2002			-0.0563		
% negative	2002			54.55		
Average	1999--2002			-0.0131		
% negative	1999--2002			47.13		

Absolute value of t-statistics under estimated coefficients;* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6-2 Seemingly unrelated regression system results for hypothesis 1-2

Equation	Year	α	β	γ	Obs. num.	R-square
000055	1999	-0.3254	1.0330***	0.5155	134	0.5823
		1.49	15.46	1.59		
000078	1999	0.0662	1.2834***	0.0823	134	0.6803
		0.31	22.43	0.26		
000527	1999	0.2340	1.2537***	0.0461	134	0.6515
		1.08	18.98	0.14		
000876	1999	-0.1662	0.8969***	0.6701**	134	0.4543
		0.73	13.76	1.98		
200055	1999	-0.4061	1.0273***	0.4528	134	0.6466
		1.37	18.63	1.03		
600052	1999	0.3238	1.1391***	0.3687	134	0.3717
		1.04	11.49	0.80		
600080	1999	-0.2467	1.1881***	0.2247	134	0.7025
		1.37	20.06	0.84		
600811	1999	0.1899	1.0866***	-0.1994	134	0.4520
		0.74	13.97	0.52		
600867	1999	-0.2210	1.0789***	0.1918	134	0.7360
		1.48	23.68	0.86		
Average	1999			0.2614		
% negative	1999			11.11		
000046	2000	-0.0499	1.1915***	0.1554	134	0.3635
		0.34	11.89	0.72		
000559	2000	0.0879	0.9114***	-0.0389	134	0.1211
		0.47	7.45	0.14		
000583	2000	-0.0639	0.9679***	-0.0238	134	0.1963
		0.33	6.69	0.08		
600093	2000	0.0423	1.1327***	0.1380	134	0.3121
		0.23	8.30	0.51		
600196	2000	-0.0383	1.1629***	0.1212	134	0.3639
		0.27	10.95	0.57		
600185	2000	-0.1860	1.1865***	0.3732	134	0.3727
		1.15	10.21	1.55		
600256	2000	0.8798	0.4325***	-0.7833	134	0.0474
		2.81	1.89	1.68		
600811	2000	-0.1380	1.5547***	0.1677	134	0.3754
		0.76	11.70	0.62		
Average	2000			0.0137		
% negative	2000			37.50		
000549	2001	0.2198**	0.2346***	-0.2445*	134	0.2686
		2.38	7.19	1.80		
000633	2001	0.1343	0.1692***	-0.0851	134	0.2008
		1.62	6.75	0.70		
000696	2001	-0.0636	0.9934***	-0.0064	134	0.4042
		0.28	13.13	0.02		
600016	2001	0.1031	0.9220***	0.0269	134	0.6050
		0.71	17.93	0.13		
600107	2001	-0.1867	1.0654***	0.2823	134	0.6220
		1.15	16.95	1.18		

Equation	Year	α	β	γ	Obs. num.	R-square
600172	2001	0.2131	0.9994***	-0.1353	134	0.7462
		1.96	25.15	0.84		
600210	2001	0.0422	0.5247***	-0.0034	134	0.3485
		0.27	9.15	0.01		
600233	2001	0.1819	1.2268***	-0.2505	134	0.6785
		1.16	20.25	1.08		
600380	2001	-0.0854	1.1183***	0.0359	134	0.6391
		0.53	19.51	0.15		
600555	2001	0.0157	1.2836***	0.0790	134	0.6865
		0.10	19.68	0.32		
600588	2001	-0.0506	1.2449***	0.0664	134	0.6174
		0.29	19.03	0.26		
600589	2001	-0.0279	1.5140***	-0.0281	134	0.6575
		0.15	22.20	0.10		
600653	2001	-0.1548	0.9010***	0.3277*	134	0.6547
		1.16	17.21	1.67		
600660	2001	0.0753	0.2380***	-0.0692	134	0.2369
		0.68	6.45	0.42		
600737	2001	0.1131	0.2850***	-0.1446	134	0.2793
		1.08	7.72	0.94		
600752	2001	-0.1229	1.0304***	0.1129	134	0.6526
		0.86	19.15	0.54		
600770	2001	0.1954	1.3516***	-0.1756	134	0.5840
		0.94	16.91	0.57		
600788	2001	0.0305	1.2212***	0.0363	134	0.7894
		0.26	26.80	0.21		
600823	2001	0.2764	1.2719***	-0.1876	134	0.6693
		1.57	18.48	0.72		
600867	2001	-0.0702	1.1493***	0.1245	134	0.7616
		0.58	23.05	0.69		
900955	2001	0.1728	0.7841***	-0.1797	134	0.8527
		1.59	33.38	1.12		
Average	2001			-0.0199		
% negative	2001			57.14		
000536	2002	0.5063	0.5023*	-0.9242	134	0.0386
		0.88	1.79	1.09		
000622	2002	-0.0543	1.2550***	0.0705	134	0.8495
		0.62	31.90	0.54		
000700	2002	-0.1594	0.8032***	-0.0312	134	0.4466
		1.02	12.55	0.13		
600067	2002	0.0502	0.7852***	0.0359	134	0.4903
		0.39	13.57	0.19		
600159	2002	0.0893	0.8760***	0.0576	134	0.4040
		0.52	11.00	0.23		
600398	2002	-0.1166	0.8437***	0.0973	134	0.3516
		0.71	10.20	0.40		

Equation	Year	α	β	γ	Obs. num.	R-square
600818	2002	0.6440*	0.5867***	-1.0238*	134	0.0757
		1.73	2.72	1.86		
600885	2002	-0.1700	1.3258***	0.1289	134	0.7788
		1.52	25.94	0.77		
Average	2002			-0.1986		
% negative	2002			37.50		
Average	1999-2002			0.0099		
% negative	1999-2002			41.30		

Absolute value of t-statistics under estimated coefficients;* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6-3
Seemingly unrelated regression system results for hypothesis 1-3

Equation	Year	α	β	γ	Obs. num.	R-square
000055	2000	-0.0003	1.0044***	0.0018	200	0.2801
		0.21	9.17	0.69		
000527	2000	-0.0018	1.1246***	0.0014	200	0.3423
		1.37	10.73	0.58		
200055	2000	-0.0007	1.0755***	0.0019	200	0.7295
		0.56	24.46	0.81		
600052	2000	-0.0007	1.0088***	0.0004	200	0.2497
		0.45	8.74	0.15		
600811	2000	0.0001	1.5616***	-0.0002	200	0.3274
		0.08	10.24	0.06		
600867	2000	-0.0013	1.1843***	0.0016	200	0.2863
		0.79	8.85	0.56		
Average	2000			0.0012		
% negative	2000			16.67		
600107	2002	0.0001	1.3229***	-0.0007	200	0.6630
		0.08	19.97	0.33		
600233	2002	0.0000	1.0543***	-0.0013	200	0.6825
		0.01	21.73	0.81		
600589	2002	-0.0008	1.0745***	-0.0001	200	0.7522
		1.04	24.87	0.06		
600653	2002	0.0011	1.1440***	-0.0008	200	0.5186
		0.74	14.55	0.29		
600752	2002	-0.0004	1.2158***	0.0005	200	0.6970
		0.41	21.82	0.30		
600788	2002	-0.0009	1.2429***	0.0006	200	0.7617
		1.05	26.35	0.37		
600867	2002	0.0019	1.1385***	-0.0025	200	0.4753
		1.31	13.45	0.93		
Average	2002			-0.0006		
% negative	2002			71.43		
Average	2000-2002			0.0002		
% negative	2000-2002			46.16		

Absolute value of t-statistics under estimated coefficients;* significant at 10%; ** significant at 5%;*** significant at 1%

Table 7 Hypothesis test results

	Being In the list	Newly in the list	Being out of the list
F test	F(87, 10701) = 1.58	F(46, 6026) = 1.08	F(13, 2561) = 0.29
Prob. >F	0.0005	0.3370	0.9930
χ^2 test	chi2(87) = 137.36	chi2(46) = 49.48	chi2(13) = 3.81
Prob. >Chi2	0.0005	0.3362	0.9930

Table 8

Cumulative average abnormal return in each event day

Event day	CAAR1999	CAAR 2000	CAAR2001	CAAR2002	CAAR1999-2002
-30	0.73	-0.40	-0.04	-0.10	0.05
-29	0.67	-0.33	0.10	0.03	0.12
-28	0.51	-0.68	-0.17	0.26	-0.02
-27	1.38	-0.51	-0.16	0.22	0.23
-26	1.65	0.66	-0.34	0.04	0.50
-25	2.14	0.29	-0.58	0.03	0.47
-24	1.71	-0.32	-0.65	0.11	0.21
-23	2.86	-0.32	-1.00	-0.05	0.37
-22	2.47	0.03	-0.95	0.10	0.41
-21	2.28	-0.52	-0.96	-0.05	0.19
-20	3.25	-0.69	-0.92	-0.04	0.40
-19	4.56	-1.45	-0.65	-0.06	0.60
-18	4.89	-1.55	-0.38	-0.22	0.68
-17	5.79	-0.89	-0.44	-0.61	0.96
-16	5.20	-0.61	-0.78	-0.57	0.81
-15	6.35	0.43	-0.57	-0.55	1.41
-14	6.64	0.41	-0.45	-0.72	1.47
-13	6.92	-0.15	-0.23	-0.64	1.47
-12	8.13	-0.32	-0.36	-0.18	1.82
-10	9.08	0.39	-0.35	-0.18	2.24
-9	9.13	0.25	-0.57	-0.82	2.00
-8	8.58	-0.32	-0.66	-0.95	1.66
-7	9.20	-0.36	-0.79	-1.15	1.73
-6	9.62	-0.30	-1.03	-1.38	1.73
-5	10.04	0.77	-0.89	-1.70	2.05
-4	10.38	1.18	-1.13	-1.67	2.19
-3	10.91	0.96	-1.29	-1.71	2.22
-2	12.09	1.06	-1.45	-1.58	2.53
-1	10.85	0.22	-1.65	-1.52	1.97
0	10.67	-0.27	-1.71	-1.79	1.73
1	11.08	-0.13	-1.61	-2.14	1.80
2	10.70	0.22	-1.76	-2.14	1.75
3	11.31	0.07	-1.85	-2.07	1.86
4	11.04	-0.16	-1.82	-2.08	1.74
5	10.98	0.29	-1.91	-1.98	1.85
6	11.85	0.23	-1.60	-2.70	1.94
7	11.97	0.06	-1.88	-2.68	1.87
8	12.37	-0.24	-1.91	-2.63	1.90
9	12.59	0.04	-2.30	-2.28	2.01
10	12.50	-0.31	-2.49	-2.65	1.76
11	13.08	0.00	-2.34	-2.81	1.98
12	12.48	1.20	-2.57	-2.71	2.10
13	12.55	1.37	-2.23	-3.16	2.13
14	12.46	2.00	-2.12	-3.59	2.19
15	12.93	2.18	-2.38	-3.66	2.27

Event day	CAAR1999	CAAR 2000	CAAR2001	CAAR2002	CAAR1999-2002
16	14.14	2.30	-2.32	-3.66	2.61
17	14.16	2.67	-2.52	-3.40	2.73
18	15.19	2.74	-2.59	-3.20	3.04
19	15.47	1.37	-2.68	-3.33	2.71
20	16.30	1.53	-2.76	-3.35	2.93
21	16.64	1.36	-2.71	-3.12	3.04
22	16.43	1.19	-2.93	-3.40	2.82
23	16.24	1.36	-3.46	-3.59	2.64
24	16.51	2.26	-3.47	-3.57	2.94
25	17.21	3.76	-3.97	-3.13	3.47
27	17.93	3.55	-4.35	-3.48	3.41
28	18.73	3.87	-4.80	-3.39	3.60
29	18.80	3.78	-4.79	-3.50	3.57
30	18.87	3.22	-4.53	-3.59	3.49

Table 9
Pool cross-sectional OLS estimations of cumulative abnormal return

	(1)	(2)	(3)	(4) Cumulative Abnormal R
Company history length before IPO	1.5592*	1.8388**	1.9026**	2.1971***
	1.87	2.18	2.51	2.85
SOE holds stock share in company	-15.0048***	-17.2515***	-11.8807***	-14.3642***
	3.27	3.61	2.77	3.17
Return on total asset ratio	0.7471*	0.8574*	0.2386	0.3377
	1.69	1.94	0.55	0.78
Millionaires' stock share	-0.2547*	-0.2790*	-0.2467*	-0.2949**
	1.70	1.88	1.82	2.17
Education level	1.3592	1.4863	2.0401	2.5202*
	0.84	0.94	1.40	1.72
Mean previous industry share	0.1587	0.1868	0.1603	0.2126
	1.00	1.18	1.10	1.46
Average provincial GDP growth ratio	0.344			0.4661
	0.41			0.55
Gov. competitiveness index		0.1558		0.1835*
		1.43		1.78
Year dummy for 2000			-14.1354**	-11.9284*
			2.08	1.75
Year dummy for 2001			-24.6763***	-25.1762***
			4.14	4.28
Year dummy for 2002			-22.1553***	-22.8231***
			3.56	3.64
Constant	-6.111	-12.0887	15.412	-2.7969
	0.40	0.99	1.56	0.19
Observations	81	81	81	81
R-squared	0.1903	0.2107	0.3541	0.3907

Absolute value of t-statistics under estimated coefficients; * significant at 10%; ** significant at 5%;
*** significant at 1%.

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Charitable Organizations in Malaysia; Issues on Regulating and Monitoring of Charitable Organizations.

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Abstract: Charities plays important roles in the legal field and theirs affairs are of public concerns. It is commonly known that any charitable trust be it in the form of society or company or even organization must be for the benefit of public. Under the English law, the concept and purposes of charity has its origin from the Preamble to Charitable Uses Act 1601. Generally, the charitable purposes can be classified to four; namely the relief of poverty, the advancement of education, the advancement of religion and other purposes beneficial to the community. In England and Wales the prevailing Act that covers matters relating to charity is The Charities Act 2011, which has list down 12 prevailing heading that come under charity and above all, the courts and the Charity Commissioners will help to enforce charitable purposes and prevent abuse through trust law. The issue that needs to be highlighted is the fact that all types of charity is not subject to proper monitoring. In Malaysia, there is no proper body that focused solely on monitoring any charitable organization, as to whether money or property donated by public has been used solely for charity or not. Currently charitable organization in Malaysia can be in the form of societies, foundation and company and there are different regulators in these different organization. Abuse in charity organization may occur directly or indirectly. Objectives of this paper are to proposed uniformity of laws and procedures relating to charitable organization and to propose a single and competent body to deal with matters exclusively within the scope of charity with the purview of local legislation, society and customs prevailing in Malaysia.

Keywords: Charities, organizations. Trust, charitable trust, charitable organizations, company

Introduction

Charity in its widest sense denotes "all the good affections that men ought to bear towards each other; in its most restricted and common sense it denotes relief of the poor.[per Sir William Grant M.R in *Mourice* v *Bishop of Durham* 1805) 9 Ves at 405]. The word charity is a direct descendant of the Latin word 'caritas' meaning 'love. 'Despite a few attempt to have statutory definition of charity, the word charity is a wide and elastic word, which has a much wider meaning in law than it has in popular speech. Under the English Charities Act 2011, charity means any institution which is established for charitable purposes and falls under the control of the High Court in the exercise of its jurisdiction relating to charity. There are 13 charitable purposes laid down by this Act, which can be considered as a huge extension compared to the four principal purposes of charity introduced by Lord MacNagthen in *Income Tax Special Purposes Commissioners v Pemsel*, [1989] AC 531; namely trusts for the relief of poverty; trusts for the advancement of education, trust for the advancement of religion, trust for other purposes beneficial to the community, (not falling under any of the preceding heads).

In most of countries around the world donation or direct giving is one of the simpliest form of charity. Donor can choose whichever organization that he has interest it, donote some money and has no say as to the usage of such money. For doing this donor will be getting tax deduction. This bring us to a few advantages and benefits accorded to charitable trust and this can be seen from two aspects namely, validity and fiscal advantages. Charitable trust has always been trust for purposes and it's existence is in perpetuity. In achieving the charitable status, there is no need to identify what are the object for its existence or who are the beneficiary. More importantly, any trust or organization which is charitable in nature will be given exemption from tax. What need to be proven is the element of public benefit in each charitable purposes. Requirement for public benefit is very important as it need to be charitable purposes must confer a benefit on the public or sufficient section of the public.(M. Robert, 2008)

As for Malaysia, there is no single statute governing matters relating to charity. There is no statutory interpretation on the word charity and as it is now, the laws governing charity follows the English laws. Despite this, there are certain aspects that need a vital attention namely the monitoring of the movement of charitable organization. This article will discuss on the need to have a proper body or mechanism to monitor and regulate charitable organization in Malaysia and this will be done by looking at the current situation in Malaysia and at the same time discuss on the situation prevailing in England, Wales and Australia, countries upon which the existence of Charity Commission has been the fundamental backbone in any matters relating to charitable organizations.

Charity in Malaysia

As far as charity is concerned, there is no single statute governing this subject matter and above all there is no statutory interpretation on charity in Malaysia. The court in Malaysia has been referring English principles of charitable trust as the basis in overcoming conflict or matters relating to charity. There are a lot of charitable organizations in Malaysia and these usually come under the purview of Registrar of Societies of Malaysia or the Company Commission, in case where the charitable organization is a company in nature. There is no single regulatory body that is assigned to monitor the movement or administration of charitable organization in Malaysia. This has led to lack of through information on the exact number of registered charitable organization in Malaysia as it comes under different purview altogether.

Despite not having a single statute on charity, the fiscal advantages relating to charity can be seen in some provisions under the Income Tax Act 1967. Section 34 of the Income Tax 1066 that deals with adjusted income from business that can be deducted from tax laid down several circumstances that that can come within purview of charity although not specifically mentioned. The followings are circumstances where deductions are allowed to be made from adjusted income from business where expenditures are incurred for the following reasons;

a) Assisting any disabled person employed by such relevant person. This can be seen under section 34(6)(e) of the Income Tax Act 1966 where the expenditure is used to purchase any equipment or alteration or renovation of premises to assist any disabled person employed by the relevant persons

b) Translating or publishing any books relating to cultural, literary, professional, scientific or technical in the national language, approved by the Dewan Bahasa and Pustaka.
(Section 34(6) (f) of the Income Tax Act 1966)

c) Providing library facilities which is accessible to public and also includes contribution to public libraries and also libraries in school and institutions of higher education. Deduction not exceeding one hundred thousand ringgit can be given to any person who has incurred such expenses. [Section 34(6)(g) of the Income Tax Act 1966]

d) Provisions of services, public amenities and contributions to a charity or community in project pertaining to education, health, housing, conservation or preservation of environment, enhancement of income of poor, infrastructure and information and communication technology approved by the Minister. [Section 34(6)(h) of the Income Tax Act 1966]

e) Provision of infrastructure managed by the company in relation to its business available for public use. [Section 34(6)(ha) of the Income Tax Act 1966]

f) Provision and maintenance of a child care centre for the benefit of persons employed by him in the business. Section 34(6)(i) of the Income Tax Act 1966

g) Managing a musical or cultural group approved by the Minister.[Section 34(6)(j) of the Income Tax Act 1966]

h) Sponsoring any arts, cultural or heritage activity approved by the Minister of Information, Communication and Culture: This is stated under section 34(6)(k) of the Income Tax Act 1966 where the amount deducted for sponsoring those activities shall not exceed five hundred thousand ringgit and as for sponsoring foreign arts, cultural or heritage activity shall not exceed two hundred thousand ringgit.

i) Providing scholarship to a student for any course leading to an award of a diploma or degree (includes a Masters or Doctorate level) at a higher educational institution established or registered in Malaysia or under the Universities and

> University Colleges Act 1971. Section 34(6)(i) of the Income Tax Act 1966 further stated that there are certain limitation imposed together with the grant of scholarship and among others, the student has no means of his own and the total monthly income of the parents do not exceed five thousand ringgit

Under a mandatory provision of section 9(1) of the Government Proceedings Ordinance 1966, it is stated that in case of any alleged breach of any express constructive trust for public, religious, social or charitable purposes or where the direction of the court is deemed necessary for the administration of any trust, the Attorney General or two or more persons having interest in the trust and having obtained consent in writing of the Attorney General may institute a suit or be joined as a party in any existing suit on behalf of the Government or the public for the purpose of obtaining relief specified in the subsection. The significance of knowing the exact number is to ensure public confidence in the administration of charitable organization and also the fiscal advantages particularly, which is important in boasting charitable organization and voluntary activity by citizen, is being observed. There is at least a need to have a workable charitable framework that will ensure the matter on integrity and good governance in charitable organization can be fully enforced.

Monitoring Commission in Malaysia

As to whether Malaysia need a monitoring commission in Malaysia can be subject to variety of opinions. There is a need to have a proper monitoring mechanism in order to obtain public confidence and at the same time to detect fraud and abuse. There are two main bodies that are involved in the establishing and monitoring any organization, not necessarily charitable, namely The Registrar of Societies and the Company Commission. Each possess different mechanism as the focus and purpose of this two existing regulators are also different.

i) Registrar of Societies

The history behind the creation of the Registrar of Societies started when the British during its colonization took initiatives to curb dangerous criminal activities posed by the underground movement of the Chinese immigrants. The first move was to set up the Secretary for Chinese Affairs (SCA). Later Societies Enactment 1899 was introduced in 1913 at the Federated Malays States and under this Enactment the post of Registrar of Society was introduced in order to monitor movements revolving around any societies being set up back then. The main function of the Registrar of Society was to impose total controls on all societies' activities established at that time. This Enactment has been used until Malaya achieved independence in 1957. Societies Enactment has been amended from time to time on 1927, 1947 and 1949.

This Enactment was amended in 1949 and being in force on 1st Sept 1949, where it was made compulsory for any societies to be registered. Until 31st December 1949, there was about 1,590 enactment being registered. 1899 Enactment was repealed again by the Parliament in 1965/66 and was in force on 1st February 1966 and this was known as Societies Act 1966 (Act 13 year 1966). The 1966 Act is the combination of three different Ordinances namely Ordinance 1949 for the Federated Malay States, Sarawak Societies Ordinance 1957 and Sabah Societies Ordinance 1961. As the result of this 1966 Act the office of Registry of Societies was established in 1966 in order to give full force for the implementation of the Act after the office was separated from the Registry of Trade Unions. [Retrieved from http://www.ros.gov.my/index.php?ida=AUS-20080105203256 on 22nd November 2012]

The establishment of any society or organization of any nature is under the purview of the Registrar of Societies. S3(1) and (1a) of the Societies Act 1966 stated that the appointment of the Registrar of Societies and the Deputy Registrars are made by the Yang Di Pertuan Agung (the King) whilst appointment of Assistant of Registrars are by the Minister. Matters on societies and organizations are governed by two Acts namely the Societies Act 1966 and Societies Regulations 1964. The office of Registrar of Societies in Malaysia is a department under the Home Minister handling non-governmental organizations and political parties. The objective of this department is to ensure the growth and development of a healthy and orderly society which is not in conflict with the requirements of peace, welfare, security, public order or morals.

Under this 1966 Act refers to any club, company, partnership or association of seven or more persons whatever its nature or object, whether temporary or permanent. Section 2 of Societies Act 1966 laid down a few exception to this definition and they are a) any company registered under any written law relating to companies; b) any company or association constituted under any written law; c) any trade union registered or required to be registered under the provision of any written law relating to trade unions for the time being in force in Malaysia; d) any

> company, association or partnership formed for the sole purpose of carrying on any lawful business that has for its object the acquisition of gain by the company, association or partnership or by the individual members thereof; e) any co-operative society, registered as such under any written law; f) any organization or association in respect of which there is for the time being in force a certificate (which may be granted, refused or cancelled at his discretion) by a person or authority appointed under the provisions of the written law for the time being in force relating to the registration of schools that such organization or association forms parts of the curriculum of a school; or g) any school, management committee of a school, parents' association or parent-teachers' association registered or exempted from registration under any law for the time being in force regulating schools

There are a few divisions of societies that come under the purview of this office. This includes religious societies, trade related societies including financial institutions, developers or manufacturers and chambers of commerce or entrepreneurs. Besides that political organization and societies that focused on the environment, consumerism and international friendship are also within this confine. Though in some categorization, the element of charity can be found, it is not the task of the Registrar of Societies to ensure or declare as to whether this societies are charitable in nature. The division that in incharge of enforcement will have to ensure that all socities are registered with the office followed the rules and regulations under the Societies Act 1966. Intelligience works will be carried out at in order to discover any existence of illegal societies and also beside investigating and coordinating complaints from publics and also other *agencies such Public* Complaints Bureau, police and others. Currently any decision made by the office of the Registrar of Societies that relate with establishment, enforcement and dissolution are subject to judicial review by courts in Malaysia.[*Kerajaan Negeri Selangor & Ors* v *Pendaftar Pertubuhan Malaysia and another suit* [2012] 3 MLJ 795]

ii) Companies Commission of Malaysia

Prior to the establishment of the Companies Commission of Malaysia (CCM), the Registrar of Businesses and Registrar of Companies were the two government's divisions, which are responsible to manage the system of registration of business and companies, respectively. Although these two divisions are independent from each other, both have the same objectives, that is, to ensure that the registration of companies and business are done effectively and efficiently. Taking into consideration the rapid growth of business in Malaysia, the Ministry of Domestic Trade and Consumer Affairs, proposed for the establishment of the Companies Commission of Malaysia, which merged both the

ROC and ROB. The Commission has the power to regulate companies and business in Malaysia and to administer any law, which confers functions and powers on the Commission. The intention is to equip the Commission to efficiently and effectively carry out its functions in a corporate sector that is growing bigger in number, sophistication and dynamism.

The Bill of Companies Commission of Malaysia was presented and read for the first time in the Dewan Rakyat on the 24th April 2001. There are number of reasons submitted by the Ministry to justify the establishment of the Companies Commission of Malaysia. Among others, the need for one government central agency to administer the business sector. By merging the ROC and ROB, the resources can be pool to produce greater synergies and optimum usage of resources.
The Bill of Companies Commission was later accepted by the Parliament, obtained its royal assent on the 6th September 2001, gazetted on the 27th September and came into operation on the 16th April 2002.

Under the new set up, the functions of the Registrar of Companies and the Registrar of Businesses in Malaysia are transferred to the Commission. The main powers of the Companies Commission include the power to process, approve and register companies and businesses, and the power to do all things in connection with its enforcement of the respective laws, such as rights to call for information and to conduct inspections and investigations of companies and businesses. It also has the power to undertake proceedings for any offence against the respective laws, and power to enforce and collect fees as an agent of the government under the laws.

CCM reports to and advises the Minister of Domestic Trade and Consumer Affairs on all matters concerning companies, corporations and businesses which are related to the respective laws. The functions of CCM are:[http://www.ssm.com.my]

1. To ensure that the provisions of the Companies Commission of Malaysia Act and laws are administered, enforced, given effect to, carried out and complied with;

2. To act as agent of the Government and provide services in administering, collecting and enforcing payment of prescribed fees or any other charges under the laws administered;
3. To regulate matters relating to corporations, companies and businesses in relation to laws administrated;
4. To encourage and promote proper conduct amongst directors, secretaries, managers and other officers of a corporation, self-regulated corporations, companies, businesses, industry groups and professional bodies in the corporate sector in order to ensure that all corporate and business activities are conducted in accordance with established norms of good corporate governance;
5. To enhance and promote the supply of corporate information under any of the laws administrated, and create and develop a facility whereby any corporate information received by the Companies Commission may be analyzed and supplied to the public;
6. To carry out research and commission studies on any matter relating to corporate and business activities;
7. To advise the Minister generally on matters relating to corporate and business activities in relation to the laws administered; and
8. To carry out all such activities and do all such things as are necessary or advantageous and proper for the administration of the Companies Commission or for such other purpose as may be directed by the Minister.

As regards to charitable organisations, CCM plays an important role as it is the agency to register foundations even though such foundations are established for charitable purposes. A foundation is a corporate body with a separate legal entity, usually established by the founder to hold assets with the objective of managing these assets for the benefit of a class of persons on a contractual basis. It is deemed a separate legal entity from its managers (i.e. its officers and its council) and is typically used for private wealth management and charitable purposes. The foundations shall be registered as a company limited by guarantee and the authorized share capital required is RM 1 million. The main difference between a foundation and a corporation is that a foundation does not have any shareholders. Assets that are held in the name of the foundation are to be used for purposes clearly defined in its constitutive documents. The administration and operation of the foundation is set out in contracts, not fiduciary principles.

There are three main different types of Foundation set up:

1. Independent Foundation

This type of Foundation Set Up is where the funds are derived from an individual or a family and is the most common type of private foundation. This type of Foundation Set Up may be administered by the donor or members of the donor's family, or by an independent board, making it one of the easiest Foundation Set Ups because of the minimal number of people involved in its operation.

2. Corporate Foundation

This type of Foundation Set Up is formed and funded by corporations, but is a separate legal Entity which has a Board of Directors usually made up of officials from the corporation. A Corporation may embark on Foundation Set Up with endowments or from periodic contributions or both.

3. Operating Foundation

This type of private Foundation Set Up has its prime objectives of research, welfare, or other programs stated in its governing body. Most of the funds go towards these primary activities, though grants can be made to pursuits outside the primary activities.

Charity Commission in Other Jurisdictions

1) England and Wales

Charities under English Law are governed by Charities Act 2011. It was originated from the Preamble to the English Statute of Charitable Uses Act 1601 which laid down the basic foundation or useful guidance as to what can be considered as charitable. Although the Preamble of Charitable Uses Act 1601 was repealed by the Mortmain and Charitable Act 1888 section 13(2) of such Act set out that references to such charities shall be construed as references within the meaning, purview and interpretation of the said preamble.

One very significant steps taken by English Parliament in order to monitor any negligent and mismanagement of charitable funds was is the establishment of the Charity Commission under the Charitable Trust Acts 1853, 1855 and 1860. For the past fifty years, in the followings enactments of Charities Act 1960, 1993, 2005 and the latest 2011, the power of monitoring given to the Commission have been further expanded and strengthened. Charity Commission is an independent regulator, non ministerial government department which is accountable to the Home Secretary. [D.Hayton and, 2005]. It's functions are to promote the effective use of charitable resources by encouraging better methods of administration, by giving charity trustees advice and by investigating and checking abuse

The Charity Commission has a few objectives set out under section 14 of the Charities Act 2012, namely the public confident, the public benefit, compliance, charitable resources and the accountability objectives. All these indicate the importance of having proper monitoring bodies to regulate matters relating to charities. The public confidence objective for instance is to increase public trust and confidence; whilst public benefit objective is to promote awareness and understanding of the operation of public benefit requirement and under Part 2 of the Charities Act 2011. Section 15 of this Act laid down the Commission's general duties which includes among other matters, determining whether institutions are or not charities and encouraging and facilitating better administration of charities. The latter can be done by giving advice and guidance to charities, any class of charities or particular charities as the Commission considers appropriate.

More importantly, the Commission has duty to identify and investigate apparent or mismanagement in the administration of charity. In order to ensure proper monitoring, any registered charities which a gross annual income exceeding £100,000 must submit annual accounts to the Commission. What is so unique about this Charity Commission is that the power given in the Statute is corresponding with those possessed by the Attorney General, whereby in case of enforcing any obligation against default charitable organization or its trustee, they are allowed to take the case straight to court. The Commission is also given a restricted concurrent jurisdiction with the High Court to try matter pertaining to charities. This basically covers three matters; first to establish scheme for the administration of charity; second to appoint, discharge or remove a charity trustee or trustee for charities or to remove an officer or employee and lastly to vest, transfer property to person entitling to it.

Although appointment of Commissioners are made by the Home Secretary, the latter has no power to direct Commissioners about the exercise of their statutory functions or no parliamentary questions can be addressed to him about their actions in particular cases as the Commission is only responsible to the courts in applying the law of Charity. [D.J. Hayton, 2003]. The need to have a regulatory body in England and Wales has been solved by the existence of the Charity Commission. Nonetheless it is still subject to reform as there is a big call for more transparency and accountability of charities.

ii) Australia

Charity law_in Australia follows the England definition of charity based on the Preamble to the Statute of Elizabeth (Charitable Uses Act 1601). The Australian courts and jurisdictions both federal and state have consistently relied on English case law. The recent judgment by the High Court of Australia in *Commissioner of Taxation v Bargwanna* [2012] HCA 11. had laid down some guideline relating to trustee of charitable trust to exercise powers for a charitable purpose.‘ Trustee should stick to and conform to carrying out duties according to the deed. The court has been very consistent with judgments in order to help those within the purview of charitable organization to work closely according to the intended subject matter.’

The laws relating to charities in Australia bears no differences with the ones under English laws. The advantages enjoyed by charitable organization or trust are similar and this includes exemption from tax, lifespan may continue indefinitely and non compliance with the requirement for uncertainty of object. Another similarity is there is statutory definition of charitable trust and the approach is basically the same with English law, i.e, by looking at the spirit and intendment of Preamble of the Statute of Elizabeth; Charitable Uses 1601 and definition given by courts. Unlike England and Wales, Australia does not have any administrative body such as Charity Commission that administers regulation or other quasi judicial functions.

Following the position in England, Australian charitable organizations have been exempted from income tax since the first comprehensive state income tax legislation in 1884 until the current Income Tax Assessment Act 1977. [Prof. Myles McGregor- Lowndes, 2002] Australian Taxation Office (ATO) had been criticised to be inconsistent and uncertain in regulating matters regarding law of charity. Industry Commission, *Charitable Organisation in Australia*, Report No 45, AGPS, Canberra, 1995]. Currently, the ATO acts as the default regulator for the Not-For-Profit (NFP) sector. Other bodies such as Australian Securities and Investments Commission responsible for the regulation of NFP incorporated as companies limited by guarantee, whilst the Office of the Registrar of Indigenous Corporations (ORIC) is an independent statutory office holder which regulates some NFP Indigenous corporations registered under the *Corporations (Aboriginal and Torres Strait Islander) Act 2006*.

Thus there is no a single regulator which administer the NFP sector. There is also no single reference point for the NFP sector to access information, education or guidance. The current lack of information available to the public acts as a barrier to people making knowledgeable decisions about donating and volunteering, thus undermining philanthropic engagement and potentially the generosity of donors. [*Exposure Draft: Australian Charities and Not-for-profits Commission Bill 2012*] In 2000, Charity Definition Inquiry (CDI) was established by the former Prime Minister John Howard. The Inquiry was to provide the government with options for enhancing the clarity and consistency of the definitions of charity. The Inquiry was expected to provide legislative and administrative frame works which are appropriate for Australia's social and economic environment in 21st century. [J. Howard, 2000] Amongst the recommendation suggested by the CDI was the introduction of a statutory definition of charity with an independent administrative body for federal law. The Inquiry decided that the definition of charity should be set down in legislation.

The federal government rejected the CDI's recommendations for an independent administrative body or establishment of a permanent advisory panel. Prof. Myles McGregor- Lowndes described the situation as: … a fatal flaw in the reform of the definition charity as the courts currently receive little opportunity to make new law on the definition because various factors such as the expense of litigation and reluctance of donation seeking bodies to be exposed to adverse publicity through the judicial process.However the government had enacted the extension of Charitable Purpose Act 2004 which enlarged the legal definition for federal purposes to include childcare, self-help groups and closed religious orders. All federal statutes were subsequently modified by this legislation. This extension, nonetheless has not been taken up by any state jurisdiction to reform their definition of charity. Later in 2008 and 2010 other reports had also recommended that a single independent national charities commission should be established to monitor, regulate and provide advice to all NFP organizations.

What can be seen the move for more transparent charitable organization is mounted in Australia as well. In 2011-12 budget, the Government announced the establishment of Australian Charities and Not-for-Profits Commission (ACNC). The House of Representative Economics Committee " Report on the Exposure Draft of the Australia Charities and Not-for- profits Commission Bills 2012 was issued in order to establish independant regulator. Among the recommendation are protection of private donor in terms of their privacy, develop s set of standards for governance. The ACNC will administer a regulatory framework to simplify the NFP sector's interactions with the Australian government. The ACNC will maintain a register of registered entities and will act as the central reference point for information on and for the NFP sector. The register and public information portal for registered charities and NFP entities will strengthen accountability and transparency for the sector. In July 2012 the ACNC Bills were referred to the House Representatives Standing Committee on Economics for inquiry. [The 2008 & 2010 Senate Economics Committee]

The ACNC has been set up to achieve the following objects: [http//:www.acnc.gov.au]

- Maintain, protect and enhance public trust and confidence in the sector through increased accountability and transparency
- Support and sustain a robust, vibrant, independent and innovative not-for-profit sector
- Promote the reduction of unnecessary regulatory obligations on the sector

To achieve the objects, the ACNC would register organizations as charities, help charities understand and meet their obligations through information, guidance, advice and other support, and maintains a free and searchable public register so that anyone can look up information about registered charities. The existence of Charities Act and the ACNC have enable the charitable organization to have a better guidance as to the establishment of charities.

Proposed Recommendation.

A few alternative suggestions in order to come up with proper monitoring mechanism in Malaysia. This can be done by observing a few matters and among others the establishment of the office of Charity Commission or to incorporate the task of monitoring in the existing agencies. The introduction of Charity Commission will be the biggest task as the first move before this is the need to have our own Charity law statute. Malaysia has never had a statute on charity and the move to have one need to be considered as huge and serious step towards reforming the law on charity. It will have to start with the introduction of Charity Act as this will expand further in recognizing the establishment of Charity Commission. It is important to remember that the establishment of a Charity Commission is paramount as it act as an 'independent regulator for charitable activities' which purposes is to promote public' trust and confident in charities. The body, which is registered as a charity's body will automatically receive numbers of financial benefits, particularly tax enhancement for donation, qualifies to apply for grants from foundations and other bodies, and gains greater respect from the public. Besides that this regulator hold responsibilities to ensure that the board of a charity which consists of trustee will enable to complete the task given by the donor. Probably the best practice to be imported will be the English Charity Commission with further modification to suit into the current situation in Malaysia.

As for incorporating the monitoring task to the existence agencies namely the Registrar of Societies and Company Commission, the jurisdictional ambit of these two big agencies need to be reviewed. Beside that the application to set up any organizational organization will need to be revisited in order to be in line with the ambit of fiscal advantages offered by the office of Inland Revenue. The biggest challenge will be the issue on overlapping regulating and monitoring power that may arise if these were to be incorporated.

Conclusion

The move to have a single regulator in monitoring charitable organization is very vital and at the moment the move to have this has not been widely campaigned by the current ruling authority in Malaysia. The act of giving for more is indeed part and parcel of Malaysian society and charitable organizations are allowed to exist although in so many different forms. Registrar of Societies' office is very much concerned with establishment of society to be in line with the requirements of peace, welfare, security, public order or morals. The decision in *Kerajaan Negeri Selangor & Ors v Pendaftar Pertubuhan Malaysia and another suit*[34] clearly showed that although the decision of the Registrar of Societies' decision is subject to judicial review, there is an indication on the importance of having a single regulator to monitor any activities revolving around any charitable organization. The court can go to the extend deciding whether there is any infringement of legal right and legal interest and question of integrity and transparency that has no relation with the latter will unlikely produce positive outcome. Prevention is better than cure would be better adopted in order to strengthen the integrity of a charitable organization especially the ones with noble cause to be able to survive without any negative impression of lack of proper monitoring.

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MANAGERS PERCEPTION OF THE SYARI'AH PRINCIPLES AND THE EFFECT OF A MANAGEMENT CONTROL PROCESS

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Abstract

The study investigates the phenomena of banks which apply the shari'ah-compliance. The purpose of this study is to analyze the managers perception of the sharia principles on the information management system, manager behavior, bank product type and the management control process of the syariah bank. The results of analyses revealed that: first, the effect of managers perception of syariah principle make a contribution to the preparation, development and application of management information system. Second, the effect of manager perception of syari'ah principles makes a contribution to manager behavior. Third, the effect of the managers perception of syariah principles make a substantial contribution to the planning, development and implementation of the various types of products.

Key words: shari'ah principles, management information system, manager behavior, and management control.

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1. Introduction

Islamic Banking has reached a successful and unprecedented expansion among Muslims all over the world during the last few years. Not only is the high growth rate astonishing, but also many conventional banks just converted or are about to convert (Akkizidis and Khandelwal, 2007). The two kinds of banks have the different concepts. The concept of Islamic banking is free-of interest while the conventional banking using interest as a time factor for borrowed money (Taib, Ramayah and Razak, 2008).

The idea to forbid interest in Islam is that it does not in lines with the very objective of shari'ah which promotes the welfare of the people in safeguarding the faith, life, intellect, posterity and property (Asy syatibi, p. 13; Taib). Islamic banking principles share risk and reward in wealth creation via equity rather than debt. It promotes entrepreneurship and creativity in economic cycle (Taib; Ramayah and Razak, 2008).

The Islamic banking endeavors to provide Sharia compliant products and services to the customers. It balances the moral and material needs of society in achieving the socio-economic justice with the overall objective of attaining social and economic justice (Farooq, Ahmad and Jamil, 2010 and Taib. Ramayah and Razak, 2008).

Even though, the Islamic banks have attracted a great deal of enthusiasm and support, they have also been subject to a number of other criticisms. One of these criticisms, as pointed out by Rodney Wilson (1999) is their inability to get away from the trappings of conventional banks (Tlemsani, and Matthews, 2009; Isam and Matthews, 2009; see also Kingstone, 2009).

The lending activities of Islamic banks are confined primarily to the secondary modes: financing short-term trade and lease operations of large and well-established firms and corporations who get credit facilities from both conventional and Islamic banks. They do not seem to have played any significant role in financing small and medium scale businesses, farmers, industrialists, or craftsmen, or providing venture capital (El-Gamel, 2000).

In addition, the main and fundamental problem of sharia bank management today is to improve the bank professionalism and performance by keeping hold on the sharia principle in the increasingly tight competition in the economic globalization stream. One main problem the sharia bank faces is its high dependency on result of debtor's business so when the debtor loses, the bank will also lose. This high dependency on debtor forces the bank to develop an information management system that can provide, choose, and determine the actually profitable debtors. Another problem the sharia bank encounters is to face the highly competitive era, particularly in the term of collecting fund from the public.

The presence of banking deregulation enables the foreign exchange banks to open their sharia banking system-based business subsidiaries. The sharia bank management is required to provide products not contradicted with the principles of sharia. The banking products with sharia principle need management control system to choose appropriate type of product, to arrange a realistic and dynamic budget, to improve effectiveness and efficiency of the implementation and supervision, as well as determine the product attractive to the customers.

Shariah bank is a business institution that needs the effectiveness measurement of management control process in its business progress. The progress of business is measured with the criteria determined by Indonesian Bank, the stockholders, and the budget. The assessment on the progress of bank business should be investigated the factors influencing it in order the quality of process occurring can be found clearly the factors with much effect and those with less effect.

2. Theoretical Foundation

2.1.Shari'ah Bank in Indonesia

Islamic banking (in Indonesia known as shari'ah bank) is a banking system whose principles underlying its operation and activities are founded on Islamic shari'ah principles. All operation of the Islamic banking that is transactions involving either deposits or financing must be based on shari'ah principles (Haron and Azmi, 2009; Thus, the primary goals of Islamic banking is to help Muslim conduct their business while upholding Islamic values related to trade finance and currency movement (Ahmed, 2007).

In Indonesia, Shari'ah bank and its types of business operation has been governed by Bank of Indonesia in Act Number 7 of 1992 about banking. Operationally, the products of Syariah bank are based on the sharia-compliant principles (Wilson, 2007; Haron and Azmi, 2009).

Shari'ah bank has three functions. First is as the agent that collects fund from the public. The Second is the organizer of the fund and property entrusted by stockholders. The Third is fund provider (entrusted goods and stockholder's property) (Perwaatmaja and Antonio, 1992)

In undertaking its commercial business, shari'ah bank, according to Muhammad Syafi'i Antonio (1992) has three basic principles: a) profit share, b) sell-buy (profit margin), and c) fee (service) systems. These sharia principles are the foundation of Shari'ah banking products. In its application, these principles are confronted with the different perception on how its system development, manager behavior are, and what kind of product it offers.

The banking products need a system to manage them. The system of banking has complex dimension and element. This research is focused on the management information system (MIS), an integrated manual/mechanic system to present information in supporting operation, management, and decision making in an organization (Davis, 1988). In its application, the system uses hardware and software as well, procedure guideline, management and decision model, and database.

Onny Widjanarko (1995) asserted that the bank management is required to be able to develop the product of bank. He proposed five strategies of developing bank products which are imitation, improvement, improving, innovating and invention. Imitation is a strategy trying to imitate the way of strong product form of the market pioneer. Improvement is modifying a product gradually to become a higher-quality and more attractive than its original form, c) Improving is the strategy to modify comprehensively the product by giving extra facilities in order it has a stronger bargaining power, d) Innovating is creating new ideas much different from the previous ones in order it gives more impressive for the users. While invention is the strategy inventing new skim products that never have thought about by the inventors before.

2.2. Principles Underlying Islamic Banking

It is the consensus among of Muslim scholars that Islamic banking has various principles. Generally speaking, it is classed into two categories. One of them is the principle advocates to contribute to Islamic objective which permit risk-return sharing between providers and users of fund (Haron and Azmi, 2009).

There are some premises underlying the formulation of research focus problem. First, Islamic banking system is built on such fundamental principles a) the life of human being depends on material sources as the media provided by God to meet their needs, b) Islam orders investment and prohibits monopoly or evoking wealth, c) investment conducted in such a way that could ensure the fulfillment of basic needs, d) the prohibition of riba, e) *Zakat* is an essential element of Islamic economy system, f) economic system depends on a firm and rooted moral standard in Islamic social system concerning what forbidden and fault (Haron and Azmi, 2009, Wilson, 2007 and Amrullah, 1985).

Second, commerce and trading conducted based on Islamic tenets of Islam and free from usury, *gharar* (fraud) and speculation. (Mashin, 1983). Thirdly, economy as a part of all aspects of life is encompassed in Islam for its basic values, originating from *tauhid* (unity of God) principle. Islam has adequately contained instrumental values and operational norms to be applied into the economic institution.

Third, individual acts based on his/her perception and not on reality. Making this perception close to the actual reality that individual wants, the manager is frequently encouraged to work only more effectively. The manager understands what motivating them, not only taking assumptions (Harsey and Blachard, 1993).

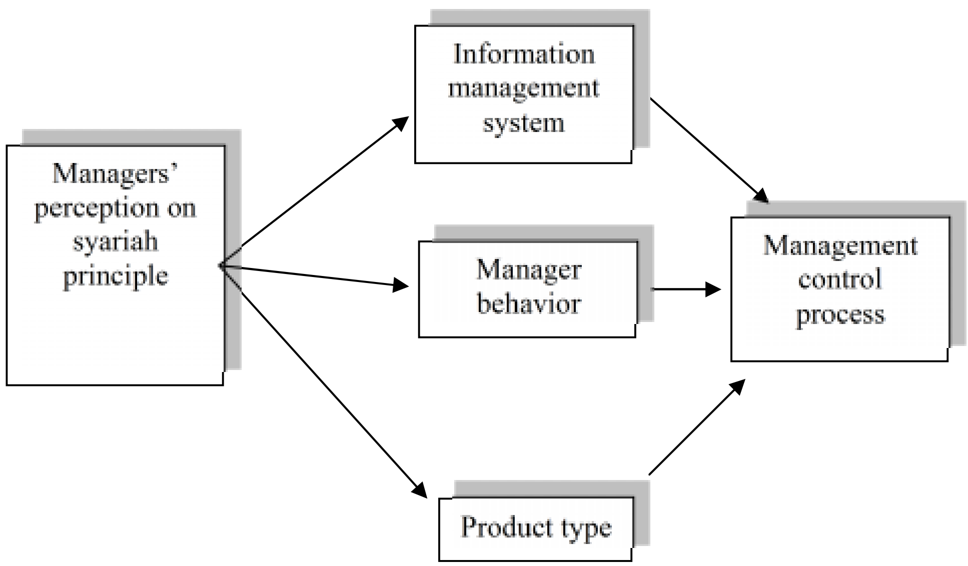
Fourth, there are four basic characteristics of individual affecting the organization's effectiveness namely are perception, attitude, personality, and learning. Each of them affects the manager and subordinate behavior pattern (Gibson, Ivanicevich, and Donely, 1990).

Third, management information system of a company is not only a technical communication system such as a system made for enabling the data to flow from a point (company) to another within the system. However, the system is intended to make the data conveyed functions as the input to the managers and workers in the process of making decision, and affects their behavior (Bimberg and Nath, 1967).

Fourth, according to behavioral theory and based on the fact that the characteristics-based leadership theory is not successful. The finding reveals that the leadership behavior is closely related to the leadership process (Schermerson, Hunt and Osborn, 1994).

Fifth, the management control system in business activity used by the manager to convict that the resource possessed has been used effectively and efficiently to achieve the predetermined objective (Anthony and Dearden, 1980).

Sixth, Mechant (1984) found that the contingent relationship between corporate context (size, product diversity and extend of decentralization) and the uses of budgeting information. Regarding the frame of thought above, the paradigm of research can be formulated and described as follows:



Research Conceptual Paradigm

2. METHOD

2.1 Object

Fifteen Sharia Crediting Bank for People (SCBP) were the objects of the research. All of the banks have the similarity characteristics such provide service to the people based on sharia-compliant principle, similarity in lower-middle scale business, and similar experience in managing the sharia banking. The respondents were the managers of Syariah bank including the president director, marketing director, and operational director. There were 40 respondents of managers from fifteen sharia banks. The sample was not taken. It is based on the fact that the target population consist only 40 persons including the directors, president director, marketing director, and operational director. The composition of respondents was: 15 general directors, 15 marketing directors, and 10 operational directors.

2.3.Method

The independent variable was measured by using close-ended questionnaire instruments meeting the Likert's type items. Each choice of responses was given score. This score was raised for its measurement level to the interval level through Method of Successive Intervals. The questionnaire were arranged based on the research matrix and the answer considered as appropriate according to the selected respondents by crossing the answer choice available.

2.4.Technique of Collecting Data

In obtaining the primary data, the researcher used questionnaire, a structured question list given to the management team of Syariah Bank. Second, interview was conducted to complete the data obtained through questionnaire. Third, observation was done to observe the manager behavior and circumstance of management control process.

2.5.Technique of Analyzing Data

Hypothesis Testing 1

The hypothesis is illustrated in the sub structure 1 (see the figure), revealing the effect of Managers' Perception on Syariah Principle variable ($X_{1.2}$) on the Information Management system (X_2). Other variables, immeasurable and unstudied, affecting the banking system, are stated as exogenous variable (ε_2).

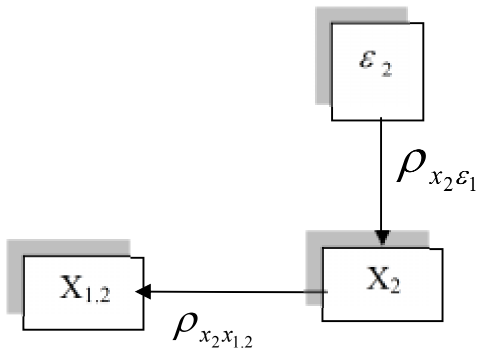


Figure. Sub Structure 1

The hypothesis one has the following operational hypothesis:

H_0 : $P_{x_2x_i} < 0$

H_1 : $P_{x_2x_i} > 0$ with i = 1.1

The size of variable's effect in the figure of sub structure one, will be exhibited by the size of structural parameter ($P_{x_1x_i}$) that can be estimated with the formula:

$$r_{xixj} = \frac{\sum_{i=1}^{n} XiXj - \frac{1}{n}\left(\sum_{i=1}^{n} Xi\right)\left(\sum_{i=1}^{n} Xj\right)}{\sqrt{\left[\sum_{i=1}^{n} Xi^2 - \frac{1}{n}\left(\sum Xi\right)^2\right]\left[\sum Xj^2 - \frac{1}{n}\left(\sum Xj\right)^2\right]}}$$

Information management system, manager behavior, type of bank product and management control process affect the bank's financial performance.

Hypothesis Testing 2

This hypothesis is illustrated in the sub structure 2 (see the figure) revealing the effect of Managers' Perception on Syariah Principle variable ($X_{1.3}$) on the Manager Behavior (X_3). Other variables, immeasurable and unstudied, affecting the banking system, are stated as exogenous variable (ε_3).

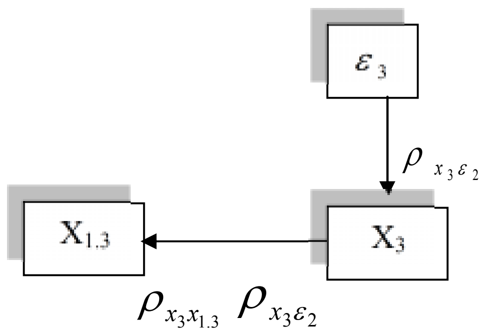


Figure 1. Sub Structure 2

The hypothesis two has the following operational hypothesis:

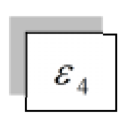
H_0 : $P_{x_3x_{1.3}} < 0$

H_1 : $P_{x_3x_{1.3}} > 0$ with i = 1.3

The size of variable's effect in the figure of sub structure two will be exhibited by the size of structural parameter ($P_{x3 \cdot xi}$).

Hypothesis Testing 3

This hypothesis is illustrated in the sub structure 3 (see the figure), revealing the effect of Managers' Perception on Syariah Principle variable ($X_{1.4}$) on the type of bank products (X_4). Other variables, immeasurable and unstudied, affecting the banking system, are stated as exogenous variable (ε_1).



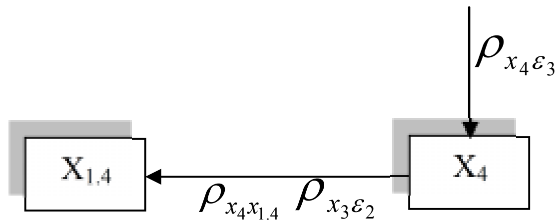


Figure 2. Sub Structure 3

The hypothesis two has the following operational hypothesis:

H_0 : $P_{x_4x_1} < 0$

H_1 : $P_{x_4x_1} > 0$ with i = 1.4

The size of variable's effect in the figure of sub structure three will be exhibited by the size of structural parameter (P_{x4xi}).

Hypothesis Testing 4

This hypothesis is illustrated in the sub structure 4 (see the figure), revealing the effect of banking system (X_2), Manager Behavior (X_3) and Type of Bank Product (X_4) variables on the Management Control System variable (X_5). Other variables, immeasurable and unstudied, affecting the banking system, are stated as exogenous variable (ε_4).

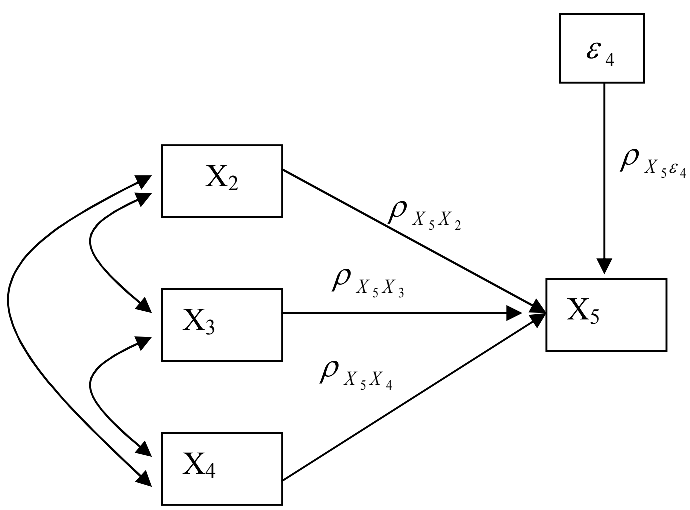


Figure 3. Sub Structure 4

The hypothesis three has the following operational hypothesis:

H_0 : $P_{X_5X_1} < 0$

H_1 : $P_{X_5X_1} > 0$ with i = 2, 3, and 4

The size of variable's effect in the figure of sub structure four will be exhibited by the size of structural parameter (P_{x5xi}).

3. Result and Discussion

3.1. Hypotheses Testing 1

The hypothesis tested according to the paradigm reflecting on the hypothesis, namely the effect of Managers Perception on Syariah Principle ($X_{1.2}$) on Information Management System (X_2). This hypothesis tested using Path Analysis. The paradigm of hypothesis 1 is illustrated in sub structure 1 depicting the effect of $X_{1.2}$ on X_2 with operational hypothesis as follows:

H_0 : $P_{x_2x_i} < 0$

H_1 : $P_{x_2x_i} > 0$ with i = 1.2

Using the calculation and inverse correlation matrix of independent variable, the path coefficient is obtained as shown in the table below:

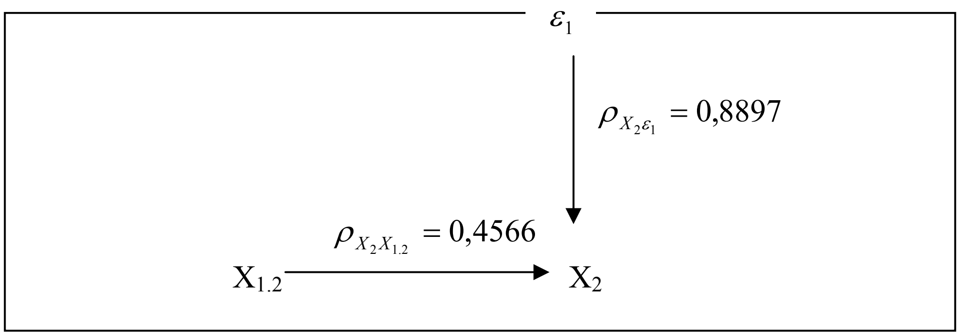
Table 1

The effect of $X_{1.2}$ on X_2

Path coefficient X_{12} on X_2	$\rho_{X_2X_{1.2}}$	0,4566
Coefficient of Multiple Determination	$R^2{}_{X_2X_{1.2}}$	0,2085
Path coefficient of other Variable on X_2	$\rho_{X_2\varepsilon_1}$	0,8897

From the path coefficient mentioned above, the sub structure 1 can be exhibited in the figure below:

Figure 4: Path Coefficient of Sub Structure 1



The figure above explains that the effect of $X_{1.2}$ on X_2 is $\rho_{X_2X_{1.2}} = 0,4566$. It indicates that the independent variable, managers perception on Syariah principle affects directly the information management system while the effect of other unstudied variables on information management system is $\rho_{X_2\varepsilon_1} = 0.8897$.

The size of independent variable managers perception on sharia principle effect on information management system is 20.85%, while the effect of other unstudied variables on information management system is 79.15%. Following Guilsford's rule, the effect size of 20.85% belongs to low/small category. Despite small effect, the presence of positive effect indicates that the managers' perception on sharia principle contributes to the information management system arrangement, development, and implementation.

The theories underlying hypothesis 1 are premises one, two, three, four, and six, presupposing the presence of the relationship between the managers' perception on sharia principle and the information management system. The result of hypothesis testing supports and confirms the preexisting theory.

3.2. Hypothesis Testing 2

The hypothesis 2 tested according to the paradigm reflecting on the hypothesis namely the effect of managers perception on sharia principle ($X_{1.3}$) on manager behavior (X_3). This hypothesis will be studied using path analysis. The paradigm of hypothesis 2 is illustrated in sub structure 2, depicting the effect of X_{13} on X_3 with operational hypothesis as follows:

H_0 : $P_{x_3x_{1.3}} < 0$

H_1 : $P_{x_3 x_{1.3}} > 0$ with i = 1.3

Using the calculation and inverse correlation matrix of independent variable, the path coefficient is obtained as shown in the table below:

Table 2: The effect of $X_{1.3}$ on X_3

Path coefficient X_{13} on X_3	$\rho_{X_3 X_{1.3}}$	0,5596
Coefficient of Multiple Determination	$R^2{}_{X_3 X_{1.3}}$	0,3131
Path coefficient of other variable on X_2	$\rho_{X_3 \varepsilon_2}$	0,8288

The path coefficient mentioned above, the sub structure 2 can be exhibited in the figure below:

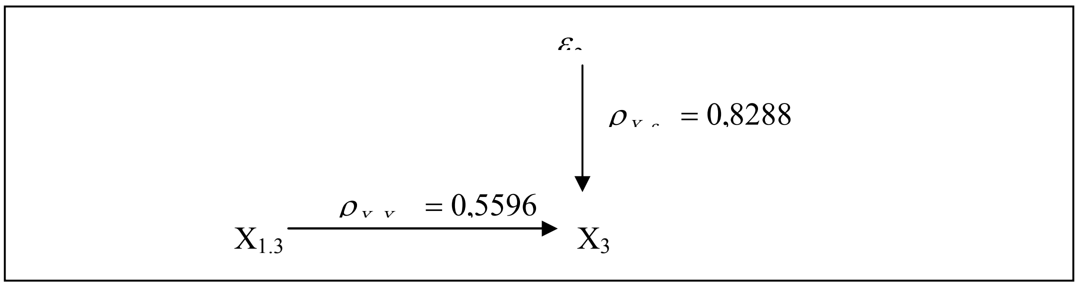


Figure 4. Path Coefficient of Sub Structure 2

The figure above explained that the effect of $X_{1.3}$ on X_3 was $\rho_{X_3 X_{1.3}} = 0{,}5596$. This figure indicates that the independent variable, Managers' Perception on sharia Principle, affects directly the manager behavior, while the effect of other unstudied variables on manager behavior is $\rho_{X_3 \varepsilon_2} = 0{,}8288$.

The size of independent variable (Managers' Perception on sharia Principle) effect on manager behavior is 31.31%, while the effect of other unstudied variables on manager behavior is 68.69%. Following Guilsford's rule, the effect size of 31.31% belongs to low/small category. Despite small effect, the presence of positive effect indicates that the managers' perception on sharia principle contributes to the manager behavior.

The theories underlying hypothesis 2 are premises one, two, three, four, five and seven, presupposing that there is a relationship between the managers' perception on sharia principle and the manager behavior. It means that the result of hypothesis testing supports and confirms the preexisting theory.

3.3. Hypothesis Testing 3

The hypothesis 3 tested according to the paradigm reflecting on the hypothesis namely the effect of managers' perception on sharia principle ($X_{1.4}$) on type of bank product (X_4). This hypothesis will be studied using path analysis. The paradigm of hypothesis 3 is illustrated in sub structure 3, depicting the effect of X_{14} on X_4 with operational hypothesis as follows:

H_0 : $P_{x_4 x_{i.}} < 0$

H_1 : $P_{x_4 x_i} > 0$ with i = 1.4

Using the calculation and inverse correlation matrix of independent variable, the path coefficient is obtained as shown in the following table:

Table 3: The effect of $X_{1.4}$ on X_4

Path coefficient X_{14} on X_4	$\rho_{X_4 X_{1.4}}$	0,6724
Coefficient of Multiple Determination	$R^2{}_{X_4 X_{1.4}}$	0,4521
Path coefficient of other variable on X_4	$\rho_{X_4 \varepsilon_3}$	0,7402

The path coefficient mentioned above, the sub structure 3 can be exhibited in the figure below:

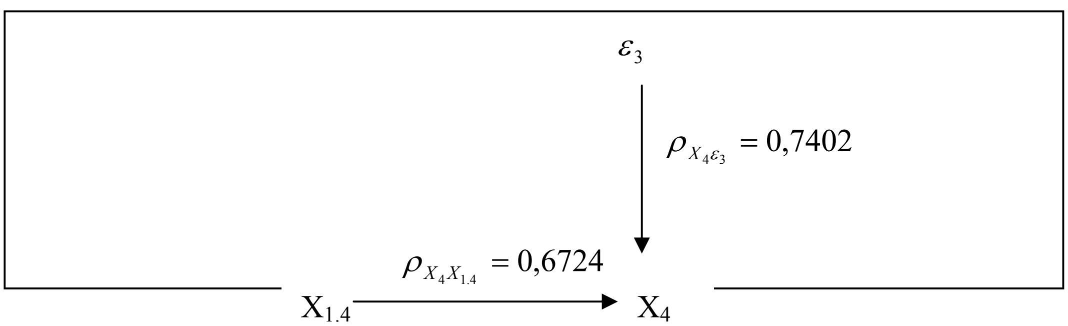


Figure 5. Path Coefficient of Sub Structure 3

The figure above explains that the effect of $X_{1.4}$ on X_4 is $\rho_{X_4X_{1.4}} = 0{,}6724$. It indicates that the independent variable, managers perception on sharia principle affects directly the type of bank product, while the effect of other unstudied variables on type of bank product is $\rho_{X_4\varepsilon_3} = 0{,}7402$.

The size of independent variable (managers perception on sharia principle) effect on type of bank product is 45.21% while the effect of other unstudied variables on type of bank product is 54.79%. Following Guilsford's rule, the effect size of 45.21% belongs to moderate category. Despite moderate effect, it indicates that the managers perception on sharia principle contributes substantially to the type of bank product planning and development.

The theories underlying hypothesis 3 are premises one, two, three, four, and eleven, presupposing that there is a relationship between the managers' perception on sharia principle and the type of bank product. It means that the result of hypothesis testing supports and confirms the preexisting theory.

3.4. Hypothesis Testing 4

The hypothesis 4 tested according to the paradigm reflecting on the hypothesis namely the effect of information management system (X_2), manager behavior (X_3), and type of bank product (X_4) on management control process (X_4). This hypothesis will be studied using path analysis based on the variables existing. The paradigm of hypothesis 4 is illustrated in sub structure 4 depicting the effect of X_2, X_3, and X_4 on X_5 with operational hypothesis as follows:

H_0 : $P_{X_5X_i} < 0$

H_1 : $P_{X_5X_i} > 0$ with i = 2, 3 and 4

Using the calculation of correlation matrix and inverse correlation matrix of independent variable, the path coefficient is obtained like shown in the table 5.31 below:

Table 4: The effect of X_2, X_3, and X_4 on X_5

Path coefficient of X_2 on X_5	$\rho_{X_5X_2}$	-0,0295
Path coefficient of X_3 on X_5	$\rho_{X_5X_3}$	0,3289
Path coefficient of X_4 on X_5	$\rho_{X_5X_4}$	0,5363
Coefficient of multiple determination	$R^2{}_{X_5X_2....X_4}$	05722
Path coefficient of other variable on X_5	$\rho_{X_5\varepsilon_4}$	06541

From the path coefficient mentioned above, the sub structure 4 can be exhibited in the figure below:

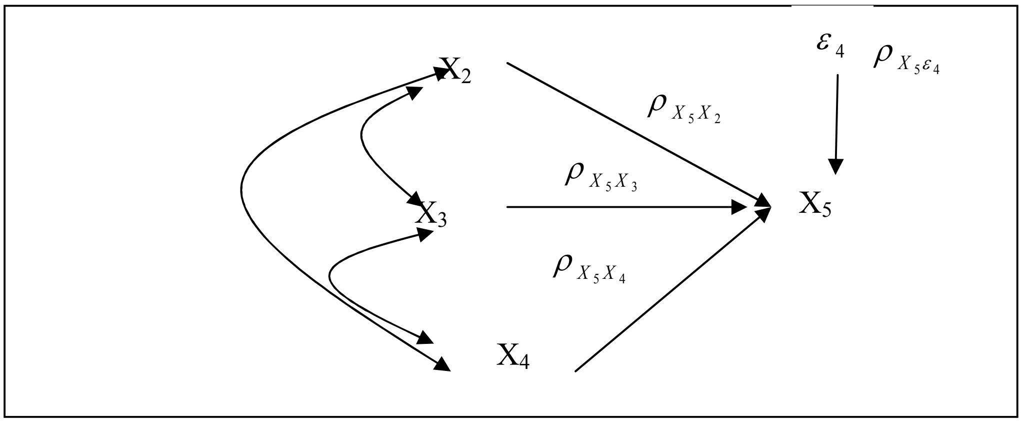


Figure 6. Path Coefficient of Sub Structure 4

The figure above can be explained further that First, the effect of information management system (X_2) on management control process (X_5) is $\rho_{X_5X_2}$ = -0,0295 which indicates that the independent variable, information management system has not affected the management control process in Syariah bank. The absence of information management system breaks the existing theory stating that information management system functions as the input to the decision making process (Bimberg and Nath, 1967) and programming or budgeting is the product of decision making process (Anthony, 1989). The violation against the existing theory can empirically be explained that the information management system had not been applied completely to Syariah bank. It is because the customers of Syariah bank are generally small-scale merchants (with the daily sale volume less than IDR 2,000,000.00) and even retail merchants in traditional with daily scale volume less than IDR 100,000.00. Such the customers have not utilized yet the information technology constituting an integral part of information management development and application. The theory information management system is built on the result of study on the companies that have utilized information technology.

Second, the effect of manager behavior (X_3) on the management control process (X_5) is $\rho_{X_5X_3}$ = 0.3289. This figure indicates that the independent variable of manager behavior affects directly the management control process. The percentage of direct effect is 10.82%, while the percentage of indirect one through type of bank product is 10.60% and through information management system is – 0.63%. The total effect of manager behavior on the management control process is totally 20.79%. The total percentage of 20.79%, according to Guilsford's criteria, belongs to small category. The presence of manager behavior effects on the management control process supports Caplan's (1971), Schermerborn, Hunt, and Osborn's (1994) theories.

Third, the effect of bank product type (X_4) on the management control process (X_5) is $\rho_{X_5X_4}$= 0.5363. It means that the independent variable of bank product type affects directly the management control process. The percentage of direct effect is 28.76% while the percentage of indirect one through manager behavior is 10.60% and through information management system is – 0.63%. The effect of bank product type on the management control process is totally 38.17%. The total percentage of 38.17%, according to Guilsford's criteria, belongs to low category closing to medium. The presence of bank product type effect on the management control process supports Anthony & Dearden's (1980) theories.

Fourth, the coefficient of multiple determination value is RZx-S.x2....x, = 57,22%. This figure indicates that the effect of independent variables (management control system [X_2], manager behavior [X_3] and type of bank product [X_4]) in a multiple way on the management control process is 57.22%, while the effect of other unstudied variables is 42.78%. The multiple value of 57.22%, according to Guilsford's criteria, belongs to medium/moderate category indicating that the management information system, manager behavior and type of bank product contribute substantially to the management control process. The result of hypothesis testing 4 supports and confirms the theories of Bimberg and Nath's (1967) and Schemerson, Hunt and Osborn (1994).

4. Conclusion

Based on the discussion of the research finding, several conclusions can be drawn generally. (1) The managers perception on sharia principle affect the information management system. (2) The managers perception on sharia principle affect the manager behavior. (3) The managers perception on sharia principle affects the type of bank product. (4) The information management system, manager behavior, and bank product type affects the management control process. Particularly, here several conclusions are suggested. In this particular conclusion, the result of hypothesis testing will be suggested with elaboration.

First, the effect of managers perception on sharia principle on information management system is 20.85%. This percentage indicates that the managers perception on sharia principle contributes to the information management system arrangement, development and application as well as evaluation. The Managers assessment on indicator interest will become a heavy burden to the borrower during recession is high. It is supported by information that in the presence of economic crisis, the number of customers in Syariah bank increases due to the high interest rate prevailing in conventional bank. The high assessment is also given to the service reward in costing and information management system according to sharia principle, as well as IMS evaluation according to sharia principle. This high assessment contributes to the IMS arrangement, application and development. The result of research also showed the low assessment on the interest and usury dimension, meaning that majority managers of Syariah bank perceive the interest as same as usury and want to apply the sharia principle directly in comprehensive way. Such the perception is less down-to-earth and the socialization process will be inadequate. Islamic tenet delivery and application in the prophet’s age passed through conviction instilling stage (Mekah period) and the application of sharia principle gradually (Madinah period), all of which needed twenty three years.

Second, the effect of the managers’ perception on sharia principle on the manager behavior is 31.31%. It means that the managers perception on sharia principle contributes to the manager behavior. The managers perception on sharia principle contributes to the manager behavior that can be seen from the managers high valuation on the customer dimension as business partner, honesty and justice, transaction recording, and business as devotion (*ibadah*) to Allah.

Third, the effect of managers' perception on sharia principle on the bank product type is 45.21%. The effect of 45.21% indicated that the managers perception on sharia principle contributes substantially to the bank product type planning and development. The substantial contribution that can be seen from the high/very high valuation is that the main factor underlying each product designing is sharia principle, the main factor taken into account in each new product decision is sharia principle, the bank product is approved by the sharia council, the evaluation of bank product is done by sharia council, and the implementation of bank product corresponds to sharia principle, as well as the bank product recording should be consistent with the sharia principle.

Fourth, the effect of information management system, manager behavior, and bank product type on management control process in a multiple way (simultaneously) is 57.22% indicating that information management system, manager behavior, and bank product type contributes substantially the management control process. The results of hypothesis testing support and confirm that IMS functions as input to the decision making process (Bimberg and Nath, 1967), manager behavior is closely related to the leadership process (Schermerson, Hunt and Osborn, 1994), the application of behavioral theory to improve the effectiveness of management accounting and a bank's existence requires the management to be able to develop banking product/service corresponding to the customers' need.

Fifth, the effect of information management system on the management control process is -0.0295, indicating that the independent variable (information management system) has not affected yet the management control process in sharia bank. The absence of information management system effect on the management control process is because IMS has not been applied and generally the manager should have database about its bank's share, viewed from its conviction on sharia principle, its business's background and prospect, its fund management, the expected bank service, and the customer participation expected by the bank.

Sixth, the direct effect of independent variable (manager behavior) on management control process is 10.82%, while the indirect effect through type of bank product is 10.60%, and through information management system is – 0.63%. The effect of manager behavior on the management control process is totally 20.79%. The result of current research confirms theory that the manager behavior is very close to the leadership process (Schemerson, Hunt and Osborn,1994). The result of research also shows the negative indirect effect of manager behavior through IMS on the management control process. It is in contradiction with the theory that IMS functions in the managers' decision making process (Bimberg and Nath, 1967,). This condition can be explained because IMS has not been completely applied and the database in IMS has not been developed in most Syariah bank.

Seventh, the direct effect of independent variable (type of bank product) on the management control process is 28.76%). The indirect effect through manager behavior is 10.60% and through information management system is 0.63%. The effect of bank product type on management control system totally is 38.17%. The result of hypothesis testing in addition to supports Caplan's (1971) theory also shows the negative indirect effect of bank product type through information management system on the control management process, in contradiction with the theory of Bimberg and Nath's (1967).

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GETTING THE MOST OUT OF YOUR HYBRID CLOUDS: ADOPTION MANAGEMENT STRATEGY

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ABSTRACT

Organizations have been relatively reserved when adopting cloud-based systems and technologies. Information technologies comprising cloud-computing model are not new. In fact, they have been available for decades. Former distributed computing model have been retouched and promoted as cloud computing. The cloud-based model envelops distributed information technologies and makes them available via communication networks. Networks may be part of an internal infrastructures–intranets, or external–internet and mobile communication networks. Depending on ownership and provision of information technology components of cloud systems, there are three main distinguishable classes: private—internal ownership and provision, public—external ownership and provision, and hybrid—combination of private and public. Each cloud model has its benefits and drawbacks. Private clouds are the most beneficial, but have higher initial costs. Public clouds are the most detrimental, but have low initial costs. Hybrid clouds have a potential to balance benefits and drawbacks of both models–if properly managed. We explore pertinent characteristics of hybrid cloud systems and present a viable management strategy for suitable adoption.

KEYWORDS: cloud systems, cloud computing, hybrid clouds, cloud management, cloud-based services, information technology management, actionable knowledge.

INTRODUCTION

Despite significant risks associated with public clouds, cloud systems are considered a promising trend. Not surprisingly, the major advocates of public cloud services are the public cloud providers themselves. However, public clouds are not the only option organizations have. There are three main cloud architectures: private, public and hybrid. In private clouds, information technology resources and services are owned by an organization and provided internally. In public clouds, external organizations own information technology resources and provide services to other organizations over internet or mobile networks. Hybrid clouds incorporate both private and public components. They can balance inherent risks and benefits of both architectures. Managing cloud adoption involves significant considerations and planning (Géczy et al., 2012).

Information technologies, resources and services are among core elements in knowledge-intensive organizations (Alvesson, 2004). Knowledge workers increasingly rely on information technologies for efficiently performing their tasks (Ringel-Bickelmaier and Ringel, 2010; Davenport, 2005). Organizations devote considerable resources to information technologies and allocate notable portions of financial and human capital to manage them. Considerable information technology investments attract external providers—including cloud providers. External providers supply their services to organizations and individuals for remuneration (Marston et al., 2011).

The cloud service model resembles an outsourcing model where services are outsourced to providers. Generally, non-core competencies are outsourced to external providers while the core competencies are kept in-house. Outsourcing should provide both economic and operational benefits for organizations. To achieve cost benefits, the outsourcing costs should be lower than the corresponding information technology expenditures. Cloud providers are able to achieve the cost benefits by employing the economy of scale. They provide same services to a large number of organizations, in order to lower their operating costs and achieve reasonable margins—while offering attractive prices to their customers (Kambil, 2009). The analogies to outsourcing are straightforward and appear rational. However, the cost issues are not the major ones. There are numerous other pressing issues requiring careful considerations.

This study addresses imperative issues for adoption of hybrid cloud architectures. We concisely highlight pertinent benefits and risks associated with hybrid clouds. Analysis of benefits and risks exposes viable management strategies. They translate to actionable knowledge vital for feasible adoption of hybrid cloud systems.

HYBRID CLOUD ARCHITECTURE

Common features of cloud architectures are distribution of resources and services, and their on-demand supply over networks (Rimal et al., 2011). Illustration of cloud architectures is shown in Figure 1. Resources and services are provided dynamically according to alternating needs (Goscinski and Brock, 2010). Dynamic demand for resources should be timely matched by supply. Cloud-based systems should be therefore suitably scalable.

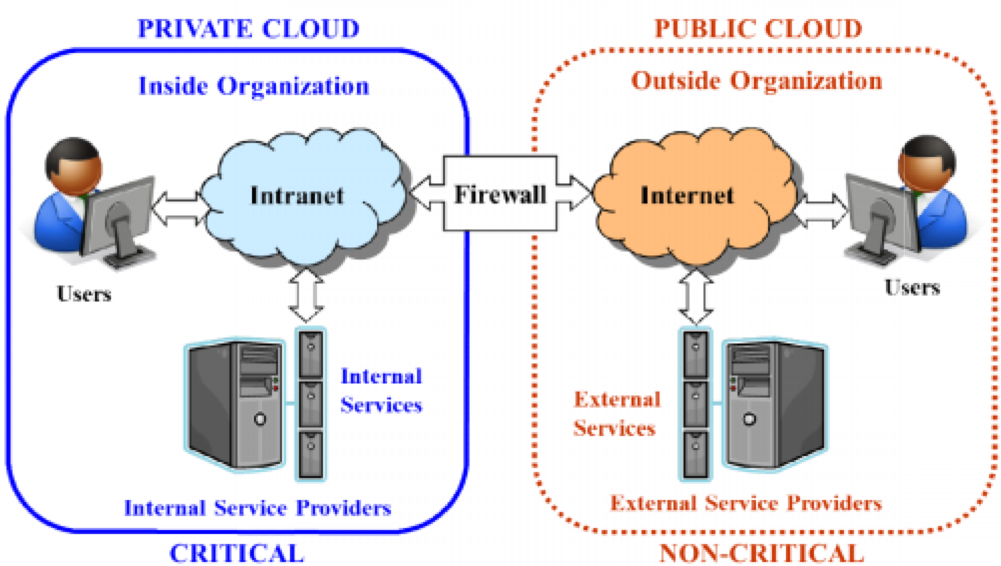

Figure 1. Depiction of essential characteristics of private and public cloud models.

Cloud-based services and resources are accessed via communication networks (Frischbier and Petrov, 2010; Haeberlen, 2010). Various operators own networks. The major global network is internet. Organizations have also their own networks—intranets. Standardized protocols facilitate access of services and resources over various networks.

Three main cloud systems are distinguished: private, public and hybrid. They differ in ownership, accessibility and location of cloud environments. Cloud architectures are presented in Figure 1. Private cloud architecture is shown on the left-hand side, while the right-hand side shows the public one. Combination of private and public clouds denotes the hybrid cloud architecture.

Private clouds provide the greatest benefits for organizations (Orakwue, 2010). Organizations own the cloud environments; hence, they can exercise full control over their data, services, resources and infrastructure. Services and resources are accessed over intranets. Local intranets are presently the most reliable, secure and available networks. Private clouds are also the most economical in a long term.

Public clouds are the most detrimental for organizations (Hofmann and Woods, 2010). Organizations lose control over their valuable data, services and infrastructure since these essentials are outsourced to external providers. Organizations must compromise on numerous key issues. Valuable organizational data and services are exposed to significant security risks because they are hosted by external providers and accessed over internet or mobile networks. Internet and mobile networks are significantly less reliable than intranets. Furthermore, they are monitored by various entities. Public clouds are the most expensive in a long term.

Hybrid clouds exemplify a compromise between private and public clouds (Sotomayor et al., 2009). Critical organizational infrastructure, data and services should be in-house and accessible over local intranets. Residual non-critical data and services may be outsourced to external providers.

CHARACTERISTICS OF HYBRID CLOUDS

Hybrid cloud systems inherit characteristics from both of their components: private and public clouds. This unique combination of both cloud architectures presents some specific issues. Some relate to links between both private and public clouds, while others arise from the resulting hybrid cloud system. They are concisely described in the following subsections.

BENEFITS:

Essential benefits of hybrid cloud architectures are associated with private clouds. Primary concern of organizations and users are security, control and accessibility of their valuable data and services (Anthes, 2010). While private cloud systems facilitate secure environments for organizational data and services, incorporation of public clouds exposes organizations to significant risks. Hence, what would be primary benefits in purely private cloud architectures, become potential risks in hybrid ones. The principal benefits of hybrid clouds are described in the following paragraphs.

- **Scalability**. Information technology resources can be dynamically allocated on-demand. When demand increases, more resources are provided, and vice versa. This permits effective utilization of resources.
- **Similarities**. There are notable similarities between both components of hybrid clouds and outsourcing. Managers with outsourcing experience and expertise are well positioned for assessing issues related to cloud adoption.
- **Speed**. Cloud systems can be deployed quickly. There are many ready-to-use systems and packages suiting various needs of organizations and users.
- **Ease**. Cloud systems are easily deployable. Contemporary technologies facilitate easy and fast deployment. Both hardware and software components are built for easy use and adaptation.
- **Load Decrease**. Hybrid clouds help to decrease various loads within organizations. Non-core and resource intensive services can be moved to public clouds. This decreases loads on private cloud systems.

RISKS:

The major risks of hybrid clouds are inherited from the public cloud segment (Subashini and Kavitha, 2011; Lanois, 2010). The most important risks are security and loss of control. Control and management of valuable data and services are of the primary concerns for organizations (Julisch and Hall, 2010; Hamlen et al., 2010). Private clouds allow full control of data and services by organizations, but public clouds do not. Major risks associated with hybrid clouds are outlined in the following paragraphs.

- **Overlaps**. Ideally, data and services utilized by private and public clouds should not overlap. Private cloud systems expose valuable organizational data and services to substantial risks. Overlaps increase the risks.
- **Security**. Public clouds have inherently high security risks. Exposing critical organizational data and services to public cloud providers exposes them to high risks. Furthermore, external communication networks are monitored by various governmental and corporate organizations.
- **Control**. Control over valuable organizational data and services is essential. In private clouds, organizations maintain the complete control. However, in public clouds, the control is lost.
- **Availability**. Availability refers to accessibility of services and resources. Services and resources should be accessible fast and reliably. If network connection is unreliable, services may become inaccessible. Organizational intranets are presently substantially more reliable and faster that global internet and mobile networks.
- **Lock-in**. Business strategies of public cloud providers regularly incorporate lock-ins. Public cloud providers erect artificial barriers for organizations when they want to transfer organizational data, services and resources out of their platforms.
- **Liability**. Public cloud providers legally distance themselves from liabilities. Valuable organizational data may be damaged, compromised and exposed to undesirable entities at public clouds. Unfortunately, organizations have only very limited or non-existent legal protection.
- **Legislations**. In cloud systems, services and resources are distributed. Intentionally, data centers of public cloud providers are physically situated in locations with inadequate or non-existent legislations covering data protection, privacy, and other important issues.

ACTIONABLE MANAGEMENT STRATEGIES FOR HYBRID CLOUD ADOPTION

Indispensable precursors to hybrid cloud adoption are significant considerations and planning. Hybrid cloud systems may fit some organizations, but they may be unfit for others (McKinney, 2010). Large and medium size organizations should aim at private clouds from the beginning. Managers should cautiously weigh whether the incorporation of a public cloud is worth the risks (Marston et al., 2011).

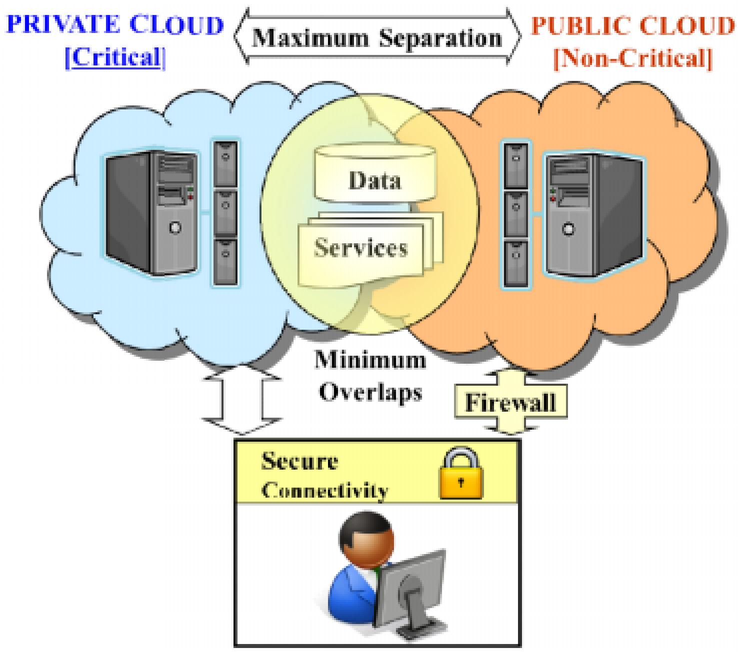

Figure 2. Illustration of strategic management principles in viable hybrid cloud adoption.

A viable hybrid cloud adoption strategy aims at maximizing benefits, minimizing risks, and efficiently maintaining suitable long-term balance. The primary focus should be on maximizing separation between private and public clouds in terms of data and services, minimizing overlaps among data and services, and enhancing end-to-end secure connectivity. They are detailed in the following paragraphs.

- **Maximum Separation**: It is essential to maintain the maximum possible separation of data and services between the public and private clouds. The core data and services should be in the private cloud in-house, while non-core and residual elements may be in public clouds. Exposure to public clouds should be kept at minimum. The separation should be at both physical and logical levels (Loganayagi and Sujatha, 2011).
- **Minimum Overlaps**: Complete separation of public and private cloud systems may be difficult. In such cases, it is advisable to minimize overlaps of data, services and infrastructures that are exposed to both public and private clouds. Overlaps elevate security and control risks. Bridging systems between private and public clouds should be appropriately monitored for any sensitive data leakage, damage and exposure.
- **End-to-End Secure Connectivity**: Security is one of the most important issues. Data exchanged between an organization and a public cloud is exposed to a wide range of

compromization. It is therefore pertinent to secure the complete communication path, end-to-end.

CONCLUSIONS

Viable adoption of hybrid cloud systems should aim at balancing benefits and risks according to the local conditions of organizations. Hybrid clouds have this potential; however, balancing benefits and risks requires a suitable strategy. An obvious strategy is to maximize benefits and minimize risks, while maintaining operational effectiveness of the hybrid clouds. Although relatively general, this strategic approach highlights pertinent strategic managerial domains. The strategic domain managers should focus on are maximum separation of private and public clouds, minimum data and service overlaps among cloud architectures, secure end-to-end connectivity. Maximum separation of data and services between private and public clouds lowers the risk of undesirable exposure and loss of control. Minimum data and service overlaps address fragmentation and security issues. Secure end-to-end connectivity between users and services for both public and private clouds deals with undesirable compromization and exposure of valuable organizational data and services. Organizations should aim at long terms cost effectiveness of hybrid cloud systems. This results in maximizing the efficiency of private clouds within two years and minimizing exposure to public clouds. We advocate prioritizing security, control and accessibility aspects of cloud systems, while aiming at long terms operating and cost efficiency.

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Impacts of Minimum Wage on Employment:
First Evidence in Turkish SMEs

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Humberto LOPEZ RIZZO**

Abstract

In Turkey, the minimum wage (MW) increase was significant in the mid-2000s, and, according to some observers, resulted, in a reduction of competitiveness and employment in SMEs. This paper, by using a multinomial logistic regression model, examines the effects of MW increases on employment adjustments (increase or decrease) of Turkish SMEs for 2005-2006. The results indicate that a MW increase is not a determining factor for the observed employment enlargement, but inversely, it increases the chances of employment reduction. However, the magnitude of these effects is relatively modest, as employment in SMEs is more closely related to other factors such as turnover than it is the by the level of the MW.

Keywords: Minimum wage; Small and medium-sized enterprises (SMEs); Multinomial logistic regression; Turkey.

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The Impact of Foreign Direct Investment on Dynamic Net Social Welfare in Saudi Arabia
- A quantifying macroeconomic approach- Time Series Analysis

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Abstract:

The paper adopts a theoretical framework that depends on the development of Weitzman (2001)'s theory in dynamic net social welfare and tries to quantify the concept of the net social welfare within a theoretical macroeconomic framework.

The paper tests the impact of the foreign direct investment inflows to Saudi Arabia on the social welfare of Saudi Arabia according to the definition adopted in this paper over time. To do so the paper utilized an intervention time series analysis that gave a clear evidence of the significant positive impact of the foreign direct inflows on the social welfare of Saudi Arabia over time on the macro-level.

The paper is important for policy decision makers in the country to adopt more openness policies to enhance social welfare over time.

Keywords: Saudi Arabia, National accounts, Sustainable development, Dynamic social welfare, Dynamic macroeconomic analysis, Quantitative macro-analysis, Foreign direct investment, Consumers' surplus.

I. Introduction:

The paper adopts a theoretical framework that depends on the development of Weitzman (2001)'s theory in dynamic net social welfare and tries to quantify the concept of the net social welfare within a theoretical macroeconomic framework. To do so; a national income approach has been adopted to represent the theoretical concept of the consumer's surplus and welfare measurement in microeconomics. The paper also tests empirically the impact of the foreign direct investment inflows to Saudi Arabia on its social welfare over time. To do so the paper adopted a linear intervention time series analysis in order to capture the dynamic effect of the foreign direct inflows to the country over time.

The analysis show a clear evidence of positive – non-harming – effect on the social welfare of the country which can add to the literature of foreign investment and openness a new supportive evidence of adopting more open policies in the economy. From the other hand; the paper presents a new quantifying approach to test the dynamic social welfare in general.

The paper does not aim to review previous literature in related topics. It rather presents an evidence to help policy takers regarding adopting open policies that attract more secure foreign investment to the economy.

The paper is structured after the introduction as follows: section II presents the theoretical discussion, section III presents the time series data used for the analysis and time span. Section IV presents the empirical analysis and its result. Section V presents the summary, the conclusion, and the implications.

II. Theoretical framework:

The proposed research adopts Li & Lofgren (2009) definition of net social welfare that depends on Weitzman (2001)'s development of dynamic welfare comparison theory.[i] According to Weitzman (2001), "the difference in intertemporal welfare between two points in time of the same economy can be exactly measured by the difference in real national income plus a consumer surplus term." Yet, the current proposed research utilizes a different methodology to address the impact of the foreign direct investment in Saudi Arabia on the dynamic net social welfare of the country.

The analysis will be managed within a dynamic open macro-economy framework.

Analytically speaking; it is well known that consumer's surplus can be measured by the difference between what the consumer is willing to pay and what he/she is actually paying. From a macro-economic perspective; we can take the CPI as a proxy of what the consumers are actually paying in the economy while the entire area under the aggregate demand is what the consumers are willing to pay. In different words; the consumer surplus is theoretically feasible within the area located under the demand and above the price. If we consider on the macro-level that the entire demand is the gross nominal private consumption, then; the consumer surplus on the macro-level can be determined mathematically as follows:

The consumer surplus = ln (nominal gross consumption) – ln (CPI); this equals the real gross consumption. Therefore; the real gross consumption in the economy can be considered a proxy of the consumer surplus.

[1] ***Martin L. Weitzman (March, 2001), A contribution to the theory of Welfare Accounting, the Scandinavian Journal of Economics, Volume 103, Issue 1, Pages 1-23.***

Recalling Weitzman's statement mentioned above; then;

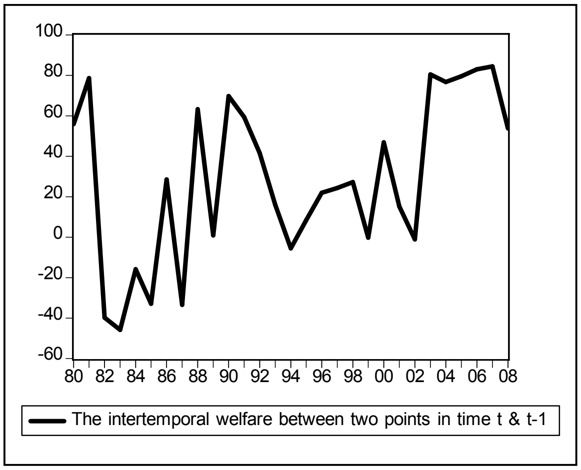
The intertemporal welfare between two points in time t & t-1 = (The real national income + the real gross consumption) $_t$ *– (the real national income + the real gross consumption)* $_{t-1}$

The paper tests then the inflows of foreign direct investment to Saudi Arabia on the social welfare over time according to the above definition.

The variability of the output of the above equation could be an enough measure of the risk itself on the macro level since it includes implicitly the change of the status of the economy over time.

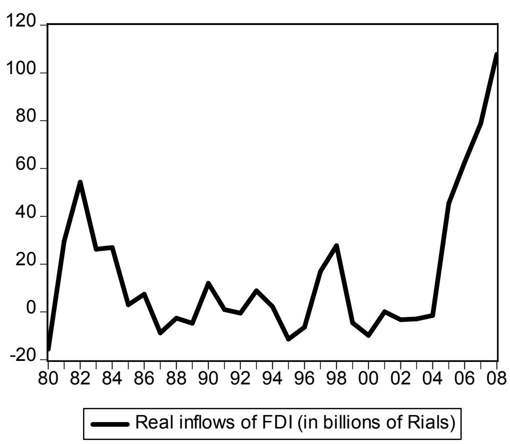
III. Data:

Time series data of the inflows of foreign direct investment to Saudi Arabia in millions of dollars, time series data of the foreign exchange rate of Saudi Rial, time series data of the nominal gross national income in billions of Rials, time series data of gross household consumption in billions of Rials, time series data of the CPI of Saudi Arabia and the GDP deflator of Saudi Arabia are collected from the IMF: International Financial Statistics Yearbook (2010). Raw data are modified in a consistent manner. Figures 1 and 2 consecutively show the time path of the intertemporal social welfare over time after modifying its components depending on the definition discussed in the above section and the the time path of the foreign investment inflows to Saudi Arabia in addition to their descriptive statistics.



	WELFARE
Mean	29.00140
Median	27.19759
Maximum	84.45678
Minimum	-45.78639
Std. Dev.	40.60139
Skewness	-0.239936
Kurtosis	1.907541
Jarque-Bera	1.720357
Probability	0.423087
Sum	841.0406
Sum Sq. Dev.	46157.23
Observations	29

Figure 1: The time path of the intertemporal welfare of Saudi Arabia (in real billions of Rials) and its descriptive statistics.



	REALFDI
Mean	15.14238
Median	2.246996
Maximum	107.8260
Minimum	-15.57164
Std. Dev.	29.53115
Skewness	1.577892
Kurtosis	4.953603
Jarque-Bera	16.64545
Probability	0.000243
Sum	439.1289
Sum Sq. Dev.	24418.49
Observations	29

Figure 2: The time path of the inflows of foreign direct investment to Saudi Arabia (in real billions of Rials) and its descriptive statistics.

IV. The Empirical Analysis:

To find the impact of the FDI inflows to Saudi Arabia on its dynamic social welfare according to the definition adopted in this paper; a linear intervention model is employed in this paper. The model is given by the following equation (equation 1):

$$\boldsymbol{WELFARE_t = a_0 + A(L)WELFARE_{t-1} + c_0\, REALFDI_t + B(L)\, \varepsilon_{t,,}} \qquad \textbf{(1)}$$

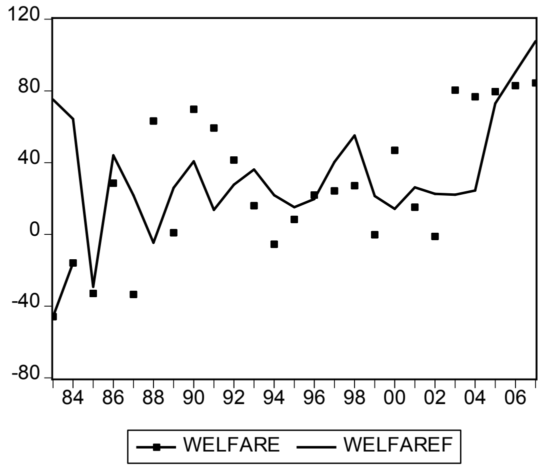
Where, *WEKFARE* represents the social welfare in Saudi Arabia *REALFDI* is an intervention variable that represents the real foreign direct inflows to Saudi Arabia, ε_t is a white noise disturbance term, *t* refers to time, and $A(L)\ [1 + a_1L + a_2L^2 + \dots + a_qL^q]$ and $B(L)\ [1 + b_1L + b_2L^2 + \dots + b_qL^q]$ are polynomials in lag operator L**.**

Prior to estimating the parameters in equation 1, the time series of the dependent variable; *WELFARE* properties is checked. The Philips Perron unit root test in level by including in test equation both trend and intercept is used for testing the stationary of the data series of *WELFARE*. No evidence of unit root test was found. The series of *WELFARE* has been also checked for the presence of autoregressive conditional heteroskedasticity (ARCH) effects by using the correlegram test. An evidence of conditional heteroskedasticity in the series of *WELFARE* has been found at the first 3-lags. Therefore; the ARCH method is used for the regression. The below equation (2) shows the results of the best-fit intervention model that has the lowest AIC and SC and satisfies all diagnostic checks, with 27 observations (1981 - 2007). The series starts from 1981 to include all periods of joining the GCC and ends at 2007 to exclude the instability happened after the global financial crisis started in the last quarter of 2007. All alternatives of ARMA models have been checked until ARMA (3, 3) with and without restricted orders. The result is illustrated in table 1 below:

Table 1: The results of the best fit intervention model specified in equation 1 above. The dependent variable is *WELFARE*. Method: ML - ARCH (Marquardt) - Normal distribution. Sample: 1981 – 2007. Sample (adjusted): 1983 2007. Included observations are 25 after adjustments. Convergence achieved after 70 iterations. Equation used: *GARCH = C(5) + C(6)*RESID(-1)^2 + C(7)*GARCH(-1)*. Residual test by using Q-statistics at 12-lags show no evidence of autocorrelation.

	Coefficient	**Std. Error**	**Z-Statistic**	**Prob.**
C	25.85788	7.766045	3.329607	0.0009
REALFDI	1.037433	0.312967	3.314835	0.0009
AR(3)	0.477350	0.195452	2.442289	0.0146
MA(3)	-0.981826	0.019494	-50.36603	0.0000
AIC	9.513271			
SC	9.854556			
Adj R^2	0.396244			
Prob. F-Statistic	0.015526			

From table 1 we can conclude that the real foreign direct investment to Saudi Arabia has a significant positive effect on its social welfare over time. Figure 3 illustrates the difference between the raw time path of *WELFARE* and the modified time path of *WELFARE that is given the notation (WELFAREF)* after taking into consideration the effect of the *REALFDI* on its series.



	WELFARE	*WELFAREF*
Mean	27.70267	34.81648
Median	24.28869	25.94602
Maximum	84.45678	107.7064
Minimum	-45.78639	-29.22310
Std. Dev.	39.57705	29.72874
Skewness	-0.087049	0.566561
Kurtosis	1.942377	3.530272
Jarque-Bera	1.196746	1.630369
Probability	0.549705	0.442558
Sum	692.5668	870.4120
Sum Sq. Dev.	37592.24	21211.16
Observations	25	25

Figure 3: The time path of both *WELFARE* and *WELFAREF* in addition to their descriptive statistics.

It is obvious from figure 3 and its attached descriptive statistics that the variability is relatively smoothed by taking the effect of the *REALFDI* into account. The plausible interpretation could be that the inflows have a real positive –not harming- impact on the social welfare of Saudi Arabia.

V. Summary, Conclusion, and Implications:

This paper adopted a theoretical macroeconomic concept of the dynamic social welfare developed by Weitzman (2001)'s theory in dynamic net social welfare and modifying it depending on the concept of consumer's surplus in microeconomics. In order to figure out the impact of the foreign direct investment inflows to Saudi Arabia; the paper utilized a linear intervention time series model that show a clear evidence of a positive significant effect of the foreign direct inflows to the country on its social welfare over time. The paper can give clear evidence to policy makers in the country to encourage more inflows of secure foreign investment to the country. However, if microeconomic – panel data are available; the paper would reach to more evidences but microeconomic panel data for each sector was difficult to be available to the author.

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Entrepreneurship activities in transition countries: self-employment vs. development

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Abstract: In many transition countries particularly in Kosovo, the entrepreneurship activities do not ensure sustainable economic development due to lack of institutional support, higher rate of informal economy and other problems with market efficiency. Based on this situation there is a dilemma whether to support the current entrepreneurs or to provide assistance for the business start-up. The absorption of young people into entrepreneurship activities is crucial for the transition countries and especially for Kosovo due to large number of new entrants on labor market, around 30.000 annually.

This paper studies the main factors effecting self-employment and entrepreneurship activities in transition countries respectively Kosovo and address the following question; how entrepreneurs behaved in business environment as well as if they switch to self employment by necessity or opportunity?

Furthermore, in order to analyze the potential of young entrepreneurs, I divided this category on: unemployed and employed non-entrepreneurs in order to address their obstacles to become self-employed.

Keywords: entrepreneurship; non-entrepreneurs, unemployment, transition

1. Introduction

The literature suggest that understanding the determinants of entrepreneurship, especially self employment, is the key importance especially for low developed countries with high unemployment rates. Self employment can increase social mobility for low paid individuals (Holz-Eakin, Rosen and Weathers, 2000) and can pool the individuals with proper skills and spirits into innovation activities (Shumpeter,1939).

It's important to analyze entrepreneurship in transition countries such as Kosovo taking in consideration transformation from the phase of reconstruction to the transition further targeting transformation to a sustainable market economy, prioritizing the economic stability and consolidation towards boosting economic growth. Entrepreneurs and self employees but also non-entrepreneurs as potential future entrepreneurs in Kosovo differ from other countries based on fact that Kosovo is a region that experienced worst political and socio economic conditions such as governmental centralized controls, controlled production quantity, quality standards based on tradition rather than competition etc.

This paper will address the following question; how the Kosovar entrepreneur behaved in business environment as well as if they switch to self employment by necessity or opportunity? Furthermore the paper will investigate the non-entrepreneurs in order to analyze their main obstacles to switch to entrepreneurship activities. The main idea is to analyze these tree different groups: self-employees, entrepreneurs and non-entrepreneurs and to identify which of the groups has more potential for entrepreneurship activities.
There are many factors affecting self-employment and entrepreneurship activities in Kosovo. Based on this research, I consider that the main factors effecting entrepreneurship activities in Kosovo are: unemployment, financial constraints, remittances, informal sector, and attitudes to risk. These factors are analysed and discussed in more details following the paper.

2. Methodology and Results

In this paper the empirical analysis of entrepreneurship is based on questionnaire survey. In order to provide reliable statistical estimates I surveyed a random sample of 300 entrepreneurs, 300 self-employees and 500 non-entrepreneurs in Kosovo, in order to analyse their potential for entreprenurship ventures. Non-entrepreneurs are defined as individuals not working for their own businesses. In addition on 2010, I surveyed a random sample of 100 entrepreneurs in order to explore the interlinkeage of education and entreprenurship, which is crucial for the new entrants. I follow the theory and existing empirical literature already available from previous studies, but adapted in accordance with Kosovo's specific environment.

3. Factors affecting entrepreneurship activities in Kosovo

3.1 Unemployment

Modern theories of entrepreneurship are based on occupational choice. According to Lucas (1978) Evans and Jovanovich (1989), at the start of a period an individual decides to become an entrepreneur or continue working for someone else, i.e. remain a wage-based worker. At the end of the period, a self-employment opportunity will yield him a gross payoff equal to (y), while wage-based work will yield him a wage of (w). Since the individual knows his profit, he will choose to start a business if and only if his expected net income from doing so exceeds that from wage-based work (Lucas 1978).

In Kosovo the decision to become an entrepreneur has been based mainly on the unemployment status of individuals due to limited occupational choices. The high unemployment rate encouraged private employment in Kosovo. One of the most problematic macroeconomic issues in Kosovo is the extremely high rate of unemployment. In 2001 the ILO unemployment rate was 57.1%. A problem also lies in the structure of the unemployed since 86% of the unemployed are either long-term unemployed, unqualified or young people. Every year an additional 30,000 young people appear in the job market (MEF, 2008). In table 1.1 is explained the reasons for selecting the entrepreneurial route of groups, entrepreneurs and the self-employed.

Table 1.1: ***Entrepreneurs*** and their main reasons for switching over to entrepreneurship

Entrepreneurs - Main reasons for becoming an entrepreneur	**%**
A sudden business opportunity	7.3%
Change in the external environment	1.3%
Have an optimistic view of business prospects	16.3%
I inherited a family business	9%
Opportunities in my old sector ceased	7%
Unsatisfied with current work	7.3%
Could not find employment &Ensure living guarantee	50.7%
Lost a job because of change in government	2.7%

Source: own survey

Table 1.2: ***The self-employed*** and their main reasons for switching over to self-employment

Self-employed - Main reasons for becoming self-employed	**%**
A sudden business opportunity	1.7%
Government's attitudes to business improved	1.0%
Have an optimistic view of business prospects	6%
I nherited a family business	8.7%
Unsatisfied with current work	5.7%
Could not find employment &Ensure living guarantee	64.3%
Lost a job because of change in government	2.7%
Have some advantages	3%

Source: own survey

The both groups (the group of entrepreneurs the group of the self-employed), the main reason for becoming an entrepreneur is due to economic reasons, to improve living conditions. However, the self-employed group is more prone to show that no other occupational choice was possible when making the decision to become an entrepreneur.

3.2. Financial constraints

The broad literature on entrepreneurship examines the links between wealth and entrepreneurship. Wealth is an important factor that affects the likelihood of becoming self-employed. In developed countries most start-up finance is supplied by entrepreneurs themselves. Based on the Evans and Jovanovich model (1989), borrowing constraints imply that personal wealth is positively related to the probability that a person will engage in entrepreneurship activity. This is also shown in Kosovo. While bank credits represent an important source of finance for established businesses (see Tables 1.3. and 1.4.), the self-employed rely much more on their own and their relatives personal savings to finance their business.

Table 1.3: Sources of finance for entrepreneurs

Financial sources	**%**
Bank credit	47.3%
Personal savings	18.7%
Remittances	30%
Relatives	7.7%

Source: own survey

Table 1.4: Sources of finance for the self-employed

Financial sources	**%**
Bank credit	14.3%
Personal savings	35.7%
Inheritance	10%
Remittances	4.4%
Relatives	13.9%

Source: own survey

However, skills and finding a good project are also important obstacles. Since financial limitations are, due to the absence of records and informational asymmetry, a general problem in financing entrepreneurs, I would argue again that in the Kosovar case there is no need for every unemployed person to become an entrepreneur, but on contrary the lack of other occupational choices is also evident from these data.

3.3. Remittances

The Kosovar diaspora is large but remittances are mostly channelled to support households rather than used as a source of investment. The Ministry of the Economy and Finance of Kosovo established that Kosovar households receive more income from relatives working abroad than from people working in Kosovo (MEF, 2008). According to World Bank analysis in 2007, Kosovo is the 3rd biggest recipient of remittances in the Western Balkans measured by the share of remittances in GDP. It is the 11th biggest in the world. According to IMF sources, the use of remittances is estimated to be as follows: 30% is assumed to be for investment and 70% for consumption (IMF, 2008).

Based on my research, around 30% of the entrepreneurs receive remittances. However, they are more important as a source of finance for entrepreneurs in a narrower sense than for the self-employed. It may be that remittances in Kosovo were a very important factor during the 1990s because many people had lost their jobs and relied on these but later there were more opportunities. The same holds for the period after 1999 due to the selective approach of banks in Kosovo, but only for the initial period of establishing an enterprise. Remittances are not so common for the self-employed. It seems that the diaspora is no longer as willing to finance their extended family. They left them along with their insufficiently developed skills to a business life in which there are very few opportunities.

3.4. The informal sector

Informal sector employment consists of three groups: 1) unpaid supporting family members; 2) workers not employed by private enterprises for whom pension contributions are not paid; 3) workers declaring out-of-employment status but reporting earnings or hours of work. In most transition countries one-third of the GDP is generated by workers involved in the informal sector. According to (EBRD Transition Report, 2006), this informal economy is due to the collapse of traditional sectors when many people were forced to take any kind of job merely to survive.

In my research, a person is considered to work operating in the informal sector if he is not paying pension contributions. Interestingly, among the surveyed entrepreneurs in a narrower sense 31% are paying health insurance, 64.3% pension insurance, while and only 4.7% are paying neither. Most entrepreneurs who operate in the informal sector represent a group of entrepreneurs from Prishtina who have chosen entrepreneurship by opportunity. Among the self-employed, 20.3% have paid health insurance, and 58.8% of them have paid pension insurance, whereas 20.9% have paid neither of these contributions. As the existing literature (Demirguc-Kunt' 2008) puts special emphasis on the self-employed as being recruits for the pool of proper entrepreneurs, I paid special attention to this group. Moreover, I found that the self-employed are less likely to serve as a potential resource for the future development of entrepreneurship in Kosovo.

3.5. Attitude to risk

It is generally accepted that the ability to take risk is a fundamental quality of entrepreneurs (Timmons, 1979). Hence, entrepreneurs need to be self-confident enough to take carefully calculated risks. As my research showed, Kosovar entrepreneurs are not heavy risk takers, especially if we compare them with Russian and Chinese entrepreneurs. Namely, only 15% of Kosovar entrepreneurs are willing to accept a risk-neutral gamble, while these numbers are much higher for Russian and Chinese entrepreneurs (77% and 90%, respectively). Kosovar entrepreneurs hence do not possess one of the main qualities required for successful entrepreneurship.

4. New Entrepreneurship ventures – Non-entrepreneurs

The occupational choice approach suggests that unemployment will lead to an increase in start-up activities because the opportunity cost of starting a business has decreased (Thurik, et al., 2007). However, unemployed people possess a smaller endowment and social capital and their entrepreneurial abilities may lead them to an early exit. On the contrary, based on the theory of occupational choice and opportunity cost employed people have a high opportunity cost of starting a business due to their dilemma of whether to start new venture and undertake risk or to continue working as an employee. But they have some experience, assets and a social network which enable them to be more sustainable.

In order to have more detailed analysis I divided non-entrepreneurs on employed non-entreprenurs and unemployed non-entrepreneurs. Among the employed non-entrepreneurs who mainly have a job in the government or public sector, 67.3% have not thought about switching, to self employment while among unemployed non-entrepreneurs 51.7% have not thought of becoming an entrepreneur. Thus 32.7% of employed non-entrepreneurs and 48.3% of unemployed non-entrepreneurs have thought of switching but have never done. I can therefore conclude that people in Kosovo become entrepreneurs mainly because of a necessity by since there is no other occupational choice. This is especially true for the self-employed group which therefore does not indicate strong potential for growth.

Table 1.5: Unemployed non-entrepreneurs and their obstacles to becoming self-employed

Unemployed non-entrepreneur	%
Did not find a good project	11.5%
Did not find the money to start business	44.1%
Did not have enough skills	18%
Due to personal reasons	6.1%

Source: own survey

Table 1.6: Employed non-entrepreneurs and their obstacles to becoming self-employed

Employed non-entrepreneurs	%
Did not find a good project	21.3%
Did not find the money to start business	32.3%
Did not have enough skills	10.4%
Found a job that brought more money	14%

Source: own survey.

Why the new entrepreneurship ventures are crucial for Kosovo? As it was stated earlier in this paper every year an additional 29,000 young people appear in the job market (MEF, 2008). But apart from the challenges mentioned above, the education is very important point to be tackled.

A UNDP (The United Nations Development Programme) survey for Kosovo in 2005 reported that the education system in Kosovo does not offer proper knowledge and skills to young generations in order to prepare them in line with market economy requirements. They proposed that vocational education and training could help young generations adapt to the labor market. Based on this UNDP report, currently there are low expectations that education will be a significant factor in supporting entrepreneurship.
The lack of resources also emerges as one of the main obstacles to establishing a new business among employed and un-employed non-entrepreneurs, as in Tables 1.5 and 1.6.

The other crucial component for the enterprise development is the interlinkeage of education, innovation and entrepreneurship. In the analysis performed on 2010 with 100 entrepreneurs in Kosovo the most important issue was to gate if university graduates could develop new strategies and accelerate growth oriented approach for the companies in Kosovo. Around 40.3% concluded that there is a possibility to interlink new knowledge's with entrepreneurial ventures while 59.7% of the respondents answered that there is no any value added coming from young graduates of Universities.

5. Conclusions

The innovative approach of this paper is because there are observed or analyzed not only current entrepreneurs and self-employees but also characteristics of potential entrepreneurs respectively non-entrepreneurs. Taking into consideration this fact we have been able to provide the main obstacles of current entrepreneurs as well as to investigate the possible challenges to non-entrepreneurs which would like to join entrepreneurship activities in the future. Furthermore the analysis is extended by investigating or dividing the non-entrepreneurs in two groups such as: employed non-entrepreneurs and unemployed non-entrepreneurs.The conclusions arise from these comparisons are as follows:

Entrepreneurs and self-employees in Kosovo were pushed to entrepreneurship activities due to unemployment problems.

Entrepreneurs are mainly based on financial institutions in order to develop their activities compare to self – employees which are mainly based on personal savings due to their weak capability of this category.

Non-entrepreneurs are people who have a small understanding of the business world, such as: different challenges and difficulties of starting a business venture, ensuring financial resources, running activities successfully, surviving in the context of market challenges and growing. They are over-optimistic regarding entrepreneurship ventures due to their lack of entrepreneurship experience and information.

Employed non-entrepreneurs are relatively well-educated; mostly work for local but also the different international organisations operating in Kosovo since 1999. They acquired benefits during this period but also gained experience in the international and local environment which could enable them to embark on a new venture in the future. They possess work experience, possible sources of self-finance and have networked with different institutions. By showing more consistency regarding motivation and greed they will work longer if they earn a large sum of money. On the contrary, their opportunity cost of switching to entrepreneurship is higher compared to the opportunity cost of an unemployed non-entrepreneur. Another important challenge for unemployed non-entrepreneurs is the unpredictable business environment of Kosovo. This environment requires entrepreneurship experience, which is different to employment experience.

Unemployed non-entrepreneurs are mostly people without proper education related to a market economy and international environment. They are less risk lovers, not optimistic about economic trends, have very low trust in their friends, businesspeople, colleagues, and the government. Taking their unemployment status, the consequent lack of finance and behaviour into consideration, their switch to entrepreneurship would be questionable. On the contrary, their opportunity cost of switching to entrepreneurship is very low given their employment status.

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The Determination of the Status of the Balance of Payment of Saudi Arabia Time Series Analysis from 1981 to 2007

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Abstract: This paper tries to address the impact of different factors that are theoretically believed to have significant impact on the status of the balance of payment. The paper applies those theoretical concepts on the status of the balance of payment of Saudi Arabia from 1981 to 2007. The paper gives interesting implications in that regard for decision makers so they can address different implications on the status of the balance of payment of the country by incorporating endogenously different macro-variables addressed by the current paper while they take decisions regarding the improvement of the status of the balance of payment economically.

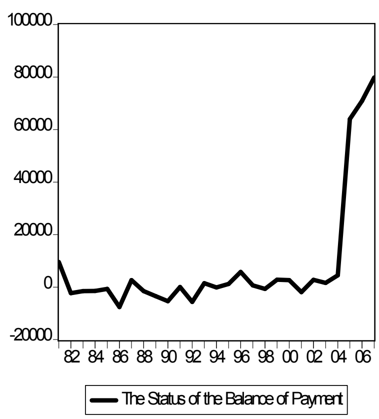
Keywords: Saudi Arabia, Balance of payment, Foreign Exchange Rate, Time Series Analysis

Introduction:

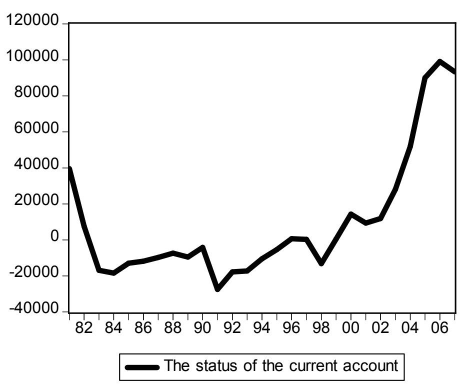
Since the establishment of the GCC in May 25, 1981; the economy of Saudi Arabia has been greatly affected by various integrated policies whether on the regional level or on the international level since it has adopted external policies affected its balance of payment. A big economic movement has also happened as a result of the adoption of the peg to the dollar foreign exchange rate regime in 1986 which linked the business cycle of the entire gulf region with the business cycle of USA. Despite obvious fluctuations in economic growth rate of Saudi Arabia, the period after the adoption of the new peg to the dollar foreign exchange rate regime experienced in average a positive economic growth rate. The country also adopted different acts to encourage foreign capital inflows. Most importantly the revised foreign investment act imposed in 2000. The country also adopted many other foreign policies and development strategies to diverse the economy away from the crude oil and natural gas resources affected with no doubt the status of the balance of payment. The paper does not aim to review those foreign policies and strategies or even to summarize previous researchers interested in this topic. The paper however tries to test empirically main macroeconomic determinants that have been believed to affect the status of the balance of payment theoretically; i.e., the national income, the inflation rate, the interest rate, the foreign exchange rate, and the government's specific foreign policies. All-time series data have been compiled from the IMF: International Financial Yearbook of 2010/2011. Yet, the paper started the analysis from 1981 to capture the entire period since the establishment of the GCC. Also the period after 2007 have been eliminated from the analysis in order to avoid the fluctuations happened because of the global financial crisis started in USA in the last quarter of 2007. The paper also controlled for all variables that believed to affect the result and it chose the regression method that can absorb potential heteroscedasticity and autocorrelation from one hand and avoid multicollinearity among integrated macroeconomic variables from the other hand. Best fit regression models show significant effects of the national income, the inflation rate, the interest rate on the balance of payment from one side and insignificant effect of the foreign exchange rate on the status of the balance of payment from the other side. The paper also presented plausible interpretation of empirical results.

The paper is structured as follows; section I illustrates the time path of the balance of payment and its economic components from 1981 to 2007. Section II explains the theoretical implications of the main macroeconomic determinants of the balance of payment. Section III sets different models that show the total effect and the partial effect of the main determinants of the balance of payment. Section IV presents the empirical results of five models tested. Section V presents the plausible interpretations of the empirical results. The conclusion then follows section V.

Section I: The behavior of the balance of payment & its components over time:



	BOP	CURRENTACCOUNT	FINANCIALACCOUNT
Mean	8070.844	9796.624	897.4163
Median	647.1320	-4146.670	5061.920
Maximum	79818.80	99066.00	27558.40
Minimum	-7613.810	-27509.30	-47428.20
Std. Dev.	23255.08	35336.17	16301.69
Skewness	2.407616	1.524155	-1.177461



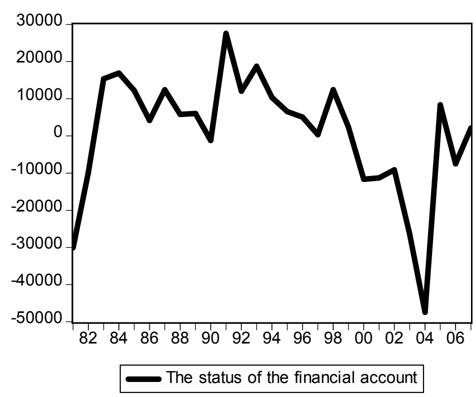


Figure1: The status of the balance of payment, the status of the current account, and the status of the financial account consecutively. (*The status of the capital account is zero for all years*).

Figure 1 illustrates the behavior of the time path of the status of the balance of payment (*BOP*) of Saudi Arabia and its main economic components; the current account (*CURRENTACCOUNT*) and the financial account (*FINANCIALACCOUNT*) over the period of the analysis. The capital account (*CAPITALACCOUNT*) and according to its time series data as presented in tables of the appendix shows balanced status in all years. This is why figure 1 illustrates only the behavior of the status of both the current account and the financial account over the period of analysis. It is obvious from figure 1 that the status of the current account dominated the status of the financial account after 2004 that has been affected the status of the balance of payment positively. The statistics attached to figure 1 shows a positive status of the balance of payment and its main economic components in average over the period of the analysis. Yet, the Skewness of the financial account only shows negative position. Section II explains the macroeconomic determinates of the balance of payment according to theories of international finance.

Section II: The main macro-economic variables affect the status of the payment:

Theoretically speaking there are five main macroeconomic determinants affect the status of the balance of payment in general; i.e., the relative national income (*NI*) , the relative inflation rate (*INF*), the relative interest rate (*INT*) as a proxy for the relative return on capital, the foreign exchange rate (*EXCHANGE*) and finally the government policies and strategies (*GOV*). The real national income affects directly the current account since it improves the relative international competitiveness of the country to import more goods and services and hence it might have a net negative effect on the status of the balance of payment. Yet, it can also have an impact on the other economic components of the balance of payment because it eventually increases the financial position of the country relatively. On the other hand; a higher inflation rate with relative to foreign inflation rates has with no doubt a negative net impact on the status of the balance of payment if other variables are controlled for. Also; the higher relative return on capital encourages more foreign capital inflows and hence a net positive impact on the status of the balance of payment. Furthermore; a higher relative foreign exchange rate enhances the position of the balance of payment and its economic components if all other variables are controlled for. Finally the government foreign policies and development strategies can be whether artificially or endogenously affect the position of the balance of payment. The integration also among all those determinants or between two or more factors may or may not have a net impact on the status of the balance of payment. The integration of those five macroeconomic factors is indeed complicated if we know that five integrated international markets do work spontaneously and dynamically on the global arena. Table 1 summarizes most important dates affected and have been affected by Saudi Arabia's foreign policies since 1981.

Table 1: summarizes most important dates affected and have been affected by the country's foreign policies from 1980 to 2007 (Excluding the period of the global financial crisis started in the last quarter of 2007):

Date	Policies taken	Dummy Variables
25 May, 1981	"The GCC is established and decided to adopt the peg to the US dollars exchange rate system in the end of 1981." ^	D_1 (Starting from 1981)
1986	"The SAR has been pegged to the US dollar."^^	D_2 (Starting from 1986)
2000	"The Revised Foreign Investment Act."^^	D_3 (Starting from 2000)
December 2005	"Adopting a development strategy to diverse the economy away from the crude oil and natural gas."^^	D_4 (Starting from 2006)

Sources:
^*Wikipedia:*http://en.wikipedia.org/wiki/Cooperation_Council_for_the_Arab_States_of_the_Gulf ^^*Foreign investment in Saudi Arabia: Document WT/TPR/S/256: The Kingdom of Saudi Arabia:* http://www.lawteacher.net/company-law/essays/foreign-investment-in-saudi-arabia.php

According to table 1 four important dummy variables have been specified as a proxy to the variable of the government control and policies (*GOV*). However, the forth dummy variable can be excluded because it can be captured in the third dummy variable. In addition the first dummy variable can be also excluded since the period of analysis starts already from 1981 which can capture the entire period since the establishment of the GCC. Accordingly, two dummy variables can only be included obviously in the analysis; D_2 and D_3 as a proxy for the government control & policies (*GOV*). Where, the D_2 takes on the value 1 since 1986 and takes on the value zero before 1986 whereas the D_3 takes on the value 1 since 2000 and takes on the value zero before 2000.

III. Total effects and partial effects of the main determinants of the balance of payment:

This section presents the empirical test of the impact of each of the previous section's macro-economic variables mainly the national income (*NI*), the inflation rate *(INF*), the interest rate (*INT*), the foreign exchange rate (*EXCHANGE*), and the two main dummy variables of the government foreign policies (D_2 & D_3) that believed to affect the status of the balance of payment (*BOP*) of Saudi Arabia as discussed in the previous section; partially by using the Generalized Method of Moments (GMM) regression method in order to control for the rest of variables including the economic growth rate of USA as a proxy of the external business cycle (*USBC*) but after testing for the total effect of the first four variables; *NI*, *INF*, *INT*, and *EXCHANGE* together on the status of the balance of payment (*BOP*) with controlling for the last 3-variables; D_1, D_2, and *USBC* in the instrument and by using the same regression method to absorb potential hetroscedasticity and multicollinearity. The time (*TIME*) also incorporated into the instrument to control for the trend in time series data. Accordingly; the following 5 models are tested and all results are presented in section IV in tables 2, 3, 4, 5, and 6 respectively.

Model 1:

$$BOP = \gamma + \beta_1 (NI) + \beta_2 (INF) + \beta_3 (INT) + \beta_4 (EXCHANGE)$$

With,

$$I = \{D_1, D_2, USBC, TIME\}.$$

Where, γ is constant, and β_4 is the coefficient of the *EXCHANGE*.

Model 2:

$$BOP = \alpha_1 + \beta_1 (NI)$$

With,

$$I = \{INF, INT, EXCHANGE, D_2, D_3, USBC, TIME\}.$$

Where, α_1 is constant, β_1 is the coefficient of the *NI*, and *I* is the instrument.

Model 3:

$$BOP = \alpha_2 + \beta_2\ (INF)$$

With,

$$I = \{NI, INT, EXCHANGE, D_2, D_3, USBC, TIME\}.$$

Where, α_2 is constant, and β_2 is the coefficient of the *INF*.

<u>Model 4:</u>

$$BOP = \alpha_3 + \beta_3\ (INT)$$

With,

$$I = \{NI, INF, EXCHANGE, D_2, D_3, USBC, TIME\}.$$

Where, α_3 is constant, and β_3 is the coefficient of the *INT*.

<u>Model 5:</u>

$$BOP = \alpha_4 + \beta_4\ (EXCHANGE)$$

With,

$$I = \{NI, INF, INT, D_2, D_3, USBC, TIME\}.$$

Where, α_4 is constant, and β_4 is the coefficient of the *EXCHANGE*.

V. The Empirical Results:

Results of models indicated in section V are presented consecutively below. *Q-statistics* is used until 12 lags to test for autocorrelation. Both the status of the current account (*CURRENTACCOUNT*) and the status of the capital account (*CAPITALACCOUNT*) have been added to the instrumental list because by using the trial-and-error technique to find best fit models, both (*CURRENTACCOUNT*) and (*CAPITALCAPITAL*) had to be controlled for; that can be claimed that the results could be interpreted mainly on the status of the financial account (*FINANCIALACCOUNT*). All results of best fit models did not show any evidence for autocorrelation.

Table 2 represents the result of Model 1 in section V:

Dependent Variable: BOP				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	66409.53	57313.35	1.158710	0.2609
NI	0.007286	0.053606	0.135913	0.8933
INF	458.6531	341.0401	1.344866	0.1945
INT	559.3638	1102.418	0.507397	0.6177
EXCHANGE	-18738.24	18493.45	-1.013236	0.3237
Instrument list:	*D2 D3 USBC CURRENTACCOUNT CAPITALACCOUNT TIME*			
Q-statistics for 12 lags shows no evidence for autocorrelation.				

It is obvious from table 2 that the best fit model shows that all variables did not have significant effect on the status of the balance of payment (*BOP*) of Saudi Arabia even after controlling for variables believed to have impact on the result; *D2, D3, USBC, CURRENTACCOUNT, CAPITALACCOUNT* and *TIME*. Models 2, 3, 4, and 5 however tests each of the determinants separately to control for the integration effect of the four integrated determinants; *NI*, *INF*, *INT*, and *EXCHANGE*.

Table 3 represents the result of Model 2 in section V:

Dependent Variable: *BOP*				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5922.079	989.6911	-5.983765	0.0000
NI	0.041468	0.006985	5.936838	0.0000
Instrument list:	*INF INT EXCHANGE D2 D3 USBC CURRENTACCOUNT CAPITALACCOUNT TIME*			
Q-statistics for 12 lags shows no evidence for autocorrelation.				

It is obvious from table 3 that the real national income (*NI*) has a positive significant effect on the status of the balance of payment (*BOP*) of Saudi Arabia. This result has been attained after controlling for the rest of the determinants in addition to other variables believed to affect the result; *INF, INT, EXCHANGE, D2, D3, USBC, CURRENTACCOUNT, CAPITALACCOUNT,* and *TIME.*

Table 4 represents the result of Model 3 in section V:

Dependent Variable: ***BOP***				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	309.6896	204.8763	1.511594	0.1449
INF	356.4116	30.78531	11.57733	0.0000
Instrument list:	*NI INT EXCHANGE D2 D3 USBC CURRENTACCOUNT CAPITALACCOUNT TIME*			
Q-statistics for 12 lags shows no evidence for autocorrelation.				

It is obvious from table 4 that the best fit model shows that the inflation rate (*INF*) has a significant positive effect on the status of payment (*BOP*) of Saudi Arabia. This result has been attained after controlling for the rest of determinants in addition to other variables believed to affect the result; *NI, INT, EXCHANGE, D2, D3, USBC, CURRENTACCOUNT, CAPITALACCOUNT,* and *TIME*.

Table 5 represents the result of Model 4 in section V:

Dependent Variable: ***BOP***				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2027.844	587.9422	-3.449053	0.0023
INT	594.2179	149.8394	3.965698	0.0007
Instrument list:	*NI INF EXCHANGE D2 D3 USBC CURRENTACCOUNT CAPITALACCOUNT TIME*			
Q-statistics for 12 lags shows no evidence for autocorrelation.				

It is obvious from table 5 that the best fit model shows a significant positive effect between the interest rate (*INT*) and the status of the balance of payment (*BOP*) of Saudi Arabia. This result has been attained after controlling for the rest of determinants in addition to other variables believed to affect the result; *NI, INF, EXCHANGE, D2, D3, USBC, CURRENTACCOUNT, CAPITALACCOUNT*, and *TIME*.

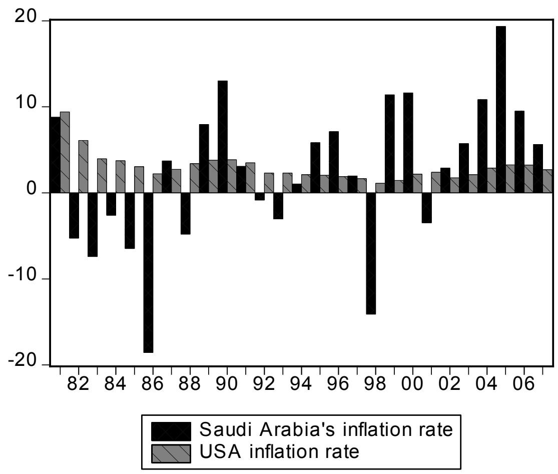
Table 6 represents the result of Model 5 in section V:

Dependent Variable: ***BOP***				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16426.94	12823.05	1.281048	0.2135
EXCHANGE	-4861.357	3471.218	-1.400476	0.1753
Instrument list:	*NI INF INT D2 D3 USBC CURRENCTACCOUNT CAPITALACCOUNT TIME*			
Q-statistics for 12 lags shows no evidence for autocorrelation.				

It is obvious from table 6 that the best fit model shows that the foreign exchange rate (*EXCHANGE*) did not have a significant impact on the status of the balance of payment (*BOP*) of Saudi Arabia. This result has been attained after controlling for the rest of determinants in addition to other variables believed to affect the result; *NI, INF, EXCHANGE, D2, D3, USBC, CURRENTACCOUNT, CAPITALACCOUNT*, and *TIME*.

V. Interpretations of the Empirical Results:

The empirical results attained from section IV show positive significant effects of the national income (*NI*), the inflation rate (*INF*) and the interest rate (*INT*) separately on the status of the balance of payment (*BOP*) of Saudi Arabia after controlling for other variables believed to affect the result. On the other hand; the foreign exchange rate (*EXCHANGE*) has a negative insignificant effect on the status of the balance of payment (*BOP*) of Saudi Arabia after controlling for variables believed to affect the result. Those results were expected because of the peg to the dollar foreign exchange regime that has been adopted by the country especially after controlling for period of adopting it. On the other hand; because of controlling for the current account (*CURRENTACCOUNT*), the national income (*NI*) that should have theoretically a negative impact on the status of the current account (*CURRENTACCOUNT*) it is theoretically also expected for its impact to be captured to have a positive impact on the status of the financial position of the country. A higher real national income is; a higher economic power will be for a better external financial position. The significant positive impact of the inflation rate (*INF*) from the other hand on the status of the balance of payment (*BOP*) of Saudi Arabia after controlling for all other variables can be interpreted relatively to the world inflation rate. Relatively speaking; by taking the inflation rate of USA as a proxy of the world inflation rate we can find that the inflation rate of Saudi Arabia in average is less than the average of the inflation rate of USA for example over the period of analysis. Figure 2 shows the behavior of the inflation rate of Saudi Arabia (*INF*) and behavior the inflation rate of USA (*USINF*) from 1981 to 2007. The attached table to the figure shows also statistics of both *INF* and *USINF* over the period of analysis. Statistics show periods of deflations are higher than periods of inflation in Saudi Arabia over the period 1981 – 2007.



	INF	*USINF*
Mean	2.334130	3.005289
Median	3.092784	2.691121
Maximum	19.33174	9.400444
Minimum	-18.54975	1.110995
Std. Dev.	8.581260	1.638047
Skewness	-0.440926	2.437202
Observations	27	27

Figure 2: The behavior of Saudi Arabia's inflation rate and USA's inflation rate over the period 1981 - 2007.

The interest rate (*INT*) of Saudi Arabia from another hand has a significant positive impact also on the status of payment (*BOP*) because after controlling for all other variables including the status of the current account (*CURRENTACCOUNT*), the impact is captured mainly on the status of the financial account (*FINANCIALACCOUNT*). The plausible interpretation of this result is that the domestic interest rate as a proxy to capital return was attractive enough for more foreign capital inflows. However the interest rate data were not available before 1986 have been set to be zeroes from 1981 to 1985 in order to not to affect the mean over the period of analysis.

Finally and according to the empirical result; the foreign exchange rate (*EXCHANGE*) did not have a significant effect on the status of payment (*BOP*) of Saudi Arabia after controlling for the rest of variables which could satisfy the pre expectations because of the peg to the dollar foreign exchange regime adopted by Saudi Arabia from 1986 that was captured in the dummy variable D_2.

VI. Conclusion:

The paper tried to test empirically factors that are theoretically believed to affect the status of the balance of payment in general on the status of the balance of payment of Saudi Arabia. Period of analysis was from 1981 to 2007. The period after 2007 has been eliminated to avoid biased results that might be arisen because of the severe global financial crisis started in USA in the last quarter of 2007. The analysis also started from 1981 to capture the entire period of the establishment of the GCC. The analysis controlled for all numerical and dummy variables believed to affect the results. Best fit models have been found after controlling for the status of both the current account and the capital account. The results show significant effect of the national income, the inflation rate, and the interest rate on the status of payment of Saudi Arabia while results show insignificant effect of the foreign exchange rate on the status of the balance of payment of Saudi Arabia.

All results could be also linked directly to the status of the financial account of Saudi Arabia because the other two accounts; the current account and the capital account have been controlled for in the analysis.

Appendix:

Table 1: The balance of payment status, the current account status, and the capital account status by millions of dollars: (Saudi Arabia)

Year	Balance of Payment status by millions of dollars	Current account status by millions of dollars	Capital account status by millions of dollars
1980	3937.03	51497.8	-37566.2
1981	9568.46	50675.4	-30058.8
1982	-2307.57	17321.2	-9882.82
1983	-1508.71	-7615.58	15343.2
1984	-1479.79	-9518.1	16920.6
1985	-709.427	-4483.54	12222.1
1986	-7613.81	-3987.86	4172.41
1987	2635.03	-1536	12396.3
1988	-1519.44	1666.67	5813.6
1989	-3508.16	1202.67	6022.13
1990	-5372.74	11469.3	-1222.67
1991	47.64	-7301.33	27558.4
1992	-5657.54	-3338.67	12059.2
1993	1493.75	-749.867	18738.2
1994	-145.882	7704.93	10326.9
1995	1215.16	11375.6	6533.29
1996	5741.43	16271.9	5061.92
1997	647.132	15419.3	342.061
1998	-717.874	1902	12414.1
1999	2814.62	14469.1	2403.63
2000	2664.75	29806.9	-11652
2001	-1908.77	24573.2	-11262.2
2002	2735.97	27826.7	-9137.13
2003	1608.1	42931.2	-26439.9
2004	4497.77	65581	-47428.2
2005	63963.5	104839	8361.44
2006	70910.4	115847	-7496.93
2007	79818.8	110436	2121.41
2008	137043	155334	34728.5

Source: IMF: International Financial Yearbook (2010)

Table 2: The outflows of the foreign direct investment, the inflows of the foreign direct investment, the outflows of the portfolio investment, and the inflows of the portfolio investment (By millions of dollars): (Saudi Arabia)

Year	Foreign Direct Investment abroad	Foreign Direct Investment (in the country)	Portfolio Investment (Assets)	Portfolio Investment (Liabilities)
1980	0	-3192.31	-22007.4	0
1981	0	6498.14	-32808.2	0
1982	0	11128.4	-11487.2	0
1983	0	4943.9	7530.77	0
1984	0	4849.86	13413	0
1985	0	491.423	8414.92	0
1986	0	965.936	3460.1	0
1987	0	-1173.33	6142.93	0
1988	0	-328	3056.27	0
1989	0	-653.333	-1783.2	0
1990	0	1861.33	-3337.33	0
1991	0	160	470.4	0
1992	0	-78.933	-6491.47	0
1993	0	1367.2	8202.03	0
1994	0	349.333	-2524	0
1995	0	-1874.67	4051.15	0
1996	0	-1127.47	-2638.34	0
1997	0	3039.47	-7352.07	0
1998	0	4283.47	6931.95	0
1999	0	-778.933	11700	0
2000	0	-1881.07	-9378.18	0
2001	0	19.64	-2797.3	0
2002	0	-614.133	7551.97	0
2003	0	-586.507	-18738	0
2004	0	-334.32	-26654.3	0
2005	350.139	12106.7	350.406	na
2006	38.718	18317.5	-11948.7	na
2007	135.023	24334.9	-5475.92	na
2008	-3497.6	39455.7	-3847.47	2217.07

Source: IMF: International Financial Yearbook (2010)

Table 3: Exports of goods, Imports of goods, Exports of services, and Imports of services: (By millions of dollars): (Saudi Arabia)

Year	Exports of goods	Imports of Goods	Exports of Services	Imports of services
1980	101574	-25562.5	5191.27	-30230.8
1981	112422	-29889.1	7021.42	-40236.4
1982	74202.8	-34444	4565.12	-34852.4
1983	45864.3	-33217.9	4150.8	-37258.7
1984	37544.6	-28557.2	4112.03	-32856.5
1985	27478.3	-20363.7	3561.43	-25821.8
1986	20168.6	-17052.3	2603.71	-20319.7
1987	23168	-18258.7	2512	-18805.3
1988	24344	-19778.7	2290.67	-14914.7
1989	28346.7	-19205.3	2506.67	-19848
1990	44354.7	-21496	3026.67	-22384
1991	47725.3	-25936	2904	-38752
1992	50220	-30207.5	3461.87	-32239.2
1993	42338.7	-25838.7	3278.67	-24431.7
1994	42557.3	-21296.5	3342.13	-18368.4
1995	49974.1	-25616.3	3475.47	-19257.5
1996	60647.7	-25324.5	2768.53	-24262.8
1997	60651.5	-26334.9	4250.93	-25928.9
1998	38770.1	-27497.9	4723.2	-16858.3
1999	50688.9	-25683.2	5372.53	-18829.7
2000	77480.5	-27704	4778.93	-25228
2001	67972.8	-28607	5007.75	-19280.8
2002	72464.3	-29624.3	5176.93	-19979.7
2003	93244.1	-33867.7	5712.8	-20857.4
2004	125998	-41050.4	5851.73	-25695.7
2005	180712	-54595.3	11409.9	-33120.4
2006	211305	-63914.3	14201.3	-49580.5
2007	233330	-82597.5	15988.8	-62681.8
2008	313481	-101454	9373.07	-75231.2

Source: IMF: International Financial Yearbook (2010)

Table 3: The official foreign exchange rate, the foreign exchange rate index, the national income in millions of dollars, the inflation rate, and the interest rate: (Saudi Arabia)

Year	Official foreign exchange rate (Period average)	Foreign exchange rate index (2005 = 100)	National income by millions of dollars	Inflation rate	Interest rate (Deposit rate)
1980	3.3267	112.6	160651.696876785	36.6733466933868	na
1981	3.3825	110.8	183402.80857354	8.79765395894428	na
1982	3.4282	109.3	158202.555276822	-5.25606469002696	na
1983	3.4548	108.5	134783.489637606	-7.39687055476532	na
1984	3.5238	106.3	125242.635790908	-2.61136712749613	na
1985	3.6221	103.5	107647.497308191	-6.46687697160883	na
1986	3.7063	101.2	91897.5797965626	-18.5497470489039	na
1987	3.75	99.9	90216	3.72670807453417	6.68
1988	3.75	99.9	93456	-4.79041916167663	8.029
1989	3.75	99.9	100202.666666667	7.96645702306077	9.036
1990	3.75	99.9	121112	13.0097087378641	8.014
1991	3.75	99.9	133754.666666667	3.09278350515461	5.829
1992	3.75	99.9	137658.666666667	-0.833333333333333	3.649
1993	3.75	99.9	134578.666666667	-3.02521008403358	3.521
1994	3.75	99.9	134898.666666667	1.03986135181972	5.1
1995	3.75	99.9	144456	5.8319039451115	6.178
1996	3.75	99.9	157562.666666667	7.13128038897889	5.469
1997	3.75	99.9	164712	1.96671709531018	5.79
1998	3.75	99.9	147072	-14.0949554896143	6.211
1999	3.75	99.9	163082.666666667	11.39896373057	6.137
2000	3.75	99.9	189357.333333333	11.6279069767442	6.667
2001	3.75	99.9	184786.666666667	-3.47222222222222	3.922
2002	3.75	99.9	189853.333333333	2.87769784172662	2.234
2003	3.75	99.9	215314.666666667	5.73426573426571	1.631
2004	3.75	99.9	252474.666666667	10.8465608465609	1.734
2005	3.7471	100	316012.38290945	19.3317422434368	3.754
2006	3.745	100.1	360464.619492657	9.5	5.02
2007	3.7475	100	391666.444296197	5.63835616438357	4.79
2008	3.75	99.9	475093.333333333	18.6264847761813	2.885

Source: IMF: International Financial Yearbook (2010) – The data of the national income is modified by calculating the national income in millions of dollars from the national income of billions of Saudi Rials. The inflation rate is calculated from the GDP deflator of Saudi Arabia.

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"The work in this article depends mainly on accumulated readings in the topic over time as a result of teaching international finance for a long time." Ghada Mohamed

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The empirical analysis has been done in this paper are done by utilizing version 5.1 of EViews.

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Virtual Currencies, Micropayments and the Payments Systems: a Challenge to Fiat Money and Monetary Policy?

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Abstract: In this paper we explore the concept of virtual currencies, a concept that is fairly new not only to Economic Theory but especially to Monetary Dynamic General Equilibrium models with micro-foundations. From the perspective of the conventional wisdom associated with the design and implementation of monetary policy, we are used to models where currency takes one of two forms: it is either a commodity money, from which people derive utility, or a fiat currency, whose value is mainly determined by the people's beliefs regarding its future acceptability in exchange for goods and services. Either of them may arise as the legal tender in the economy, and they both operate in close proximity with our every-day physical environment.

However, the recent advances in electronics and telecommunications, coupled with the creation and expansion of social networks, micro-products, among other things, pose a challenge to the standard models of money. In many cases, these changes are associated with the creation of alternative and "virtual" realities that differ significantly from the standard physical environment of an Arrow-Debreu economy. This paper is a first and still incomplete attempt at closing the gap between these advances, their definitions and their implications for Economics as a science.

Keywords: Virtual currencies, Micropayments, Virtual goods, Digital goods, Micro-products, Social networks

1 Introduction

Our economic environment has been characterized by continual technological advancement, especially since the last decade of the 20th century; moreover, not only have these changes been abundant but they have also occurred at break-neck speed, causing significant alterations to the way in which we carry out our day-to-day lives. Without having to look exhaustively or in the farthest places of the globe, one could find any number of middle-aged individuals who can still remember the ordeal implied by telecommunications not so long ago. Just for illustration purposes, allow us to refresh your memory by mentioning a couple of examples: we were subjected to either very expensive telephone calls of below par quality that would disconnect without any warning, or we were supposed to print, cut and paste documents together so that they could be photocopied and later faxed to their destination.

The almost incredible speed at which all these changes are being thrown at us has not allowed us yet to take a step back to try to understand and comprehend the whole picture implied by them. Nowadays, we have virtual games that create virtual realities and need virtual currencies to function, together with digital goods that are traded electronically, as opposed to the standard physical environment with traditional brick-and-mortar stores that we are used to deal with in the Arrow-Debreu economies. On top of that, we also have many kinds of electronic purses and a variety of accounts that are needed in order to transact directly or indirectly in these virtual worlds or with digital goods. We must not forget to mention either the quickly expanding social networks, which create new necessities as well. Overall, we can hardly keep up with the pace of these innovations, and so we also struggle when trying to define these many newly created objects.

It is undeniable that we all feel overwhelmed in the middle of all this over-spreading novelty. In spite of this, but maybe also because of it, some of us think that maybe the time has finally come when must take up the challenge of building a new class of general equilibrium models that are responsive to our ever-changing and complex reality. In particular, now it is the time for us monetary theorists to start moving gradually away from our standard monetary general equilibrium models, since the latter deal only with very limited kinds of currencies: they deal either with standard commodity money or fiat money in a regular physical environment. But our new reality needs more than that: to start thinking about virtual or digital currencies in virtual and/or digital worlds. Our Arrow-Debreu economies, as they are now, are not ready yet to allow us to respond to these new needs and worlds.

The empirics of common wisdom and the highly sophisticated intellectuals both agree that most of the above-mentioned changes have been concentrated on the sectors of electronics and telecommunications. We propose to start building upon three very simple ideas: first, that the emergence of virtual or electronic currencies is at the heart of these happenings and that it has been the oil lubricating its workings; second, all the events mentioned are something that our models cannot deal with yet; and third, that this is a multi-dimensional issue.

We are proposing, accordingly, to take our general equilibrium models one step forward, and for us, economic theorists, to move with them. But this must be done sequentially, little step after little step. We believe that this paper is a first step in this direction, where we propose to undertake a particularly important first task (that may not work out to be as simple as we would like): the immense undertaking of trying to come up with an all-encompassing definition of virtual/electronic/digital currency. We are aware that we are proposing to define something that we may not understand fully as yet, but this is also the beauty of this challenge. Moreover, we will follow our own advice and will be focusing mostly on the economic and financial aspects of this phenomenon at this stage; this is to be complemented later on with the legal and institutional aspects, which are equally important but are for now a bit out of our reach.

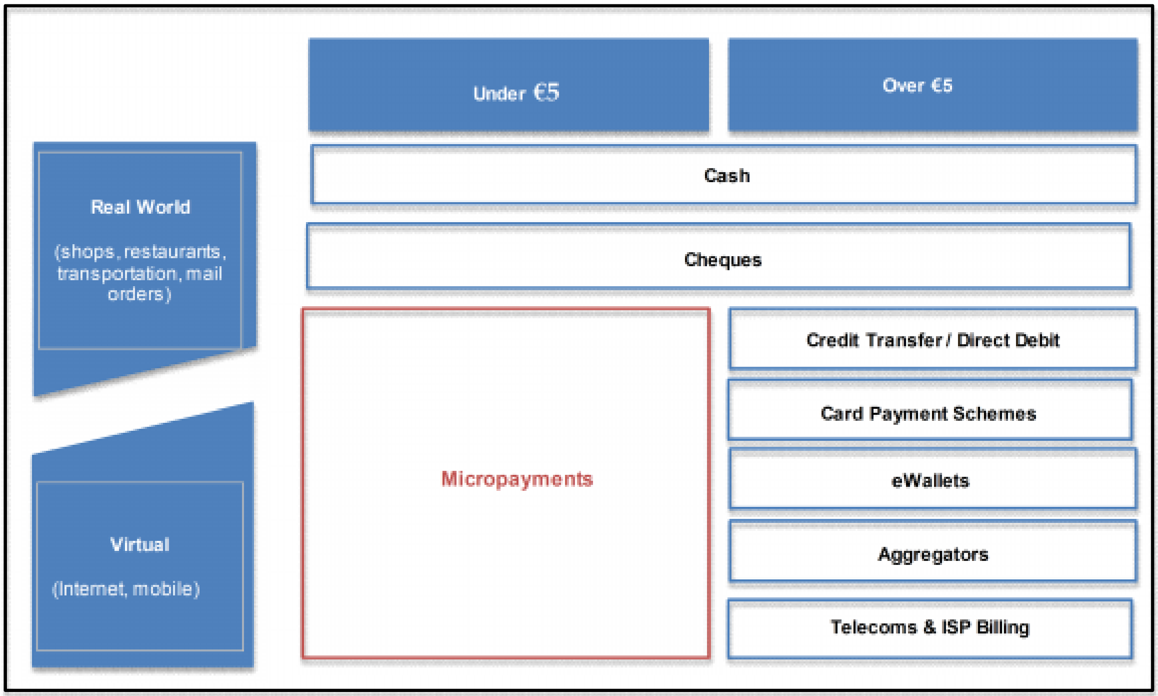
There is a notion deeply ingrained in every one of us and that comes up whenever we try to deal with the concept of a currency, whichever its form: one way or another, a currency is something that requires trust and a very high involvement by the government and related institutions. Keeping this in mind, we propose to start by mentioning these definitions as they are put in place by some "official" institutions. A first take on the subject is by the Financial Service Authority of the United Kingdom, who defines electronic money as follows:

> Electronic money (e–money) is electronically (including magnetically) stored monetary value, represented by a claim on the issuer, which is issued on receipt of funds for the purpose of making payment transactions, and which is accepted by a person other than the electronic money issuer. Types of e-money include pre-paid cards and electronic pre-paid accounts for use online.
> *Financial Services Authority*

We must be aware that assigning a value to the goods and services we wish to consume directly or that we use to produce other goods is, most frequently, expressed in monetary units, since one of the most essential functions that a money must carry out is to be a unit of account; i.e. we use the legal tender every day to value all of our transactions and things we care about. But nowadays we must also account for a new kind of money, which use is expanding rapidly: one can use virtual currencies that are redeemable in fiat money but not necessarily backed by it, as a representative currency would. The value of such transactions performed over the Internet has increased enormously: goods and services that before were purchased at "bricks-and-mortar" stores are now acquired over the Internet. Interestingly, these transactions mostly use electronic equivalents of fiat money (e.g. electronic funds transfers, debit cards or credit cards) as media of exchange. Moreover, the current forms of electronic money (including digital cash or stored value cards) have been engineered to operate in such a market.

Before getting started, we must lie out what we understand to be the most important issues related to e-commerce. Among them, we must highlight the definitions of micro payments, virtual currency, digital goods and virtual goods.

Figure 1. The position of micropayments in the payments landscape



ISP = Internet service provider

Source: Burelli et al (2011). Adaptations by the authors.

Regarding micropayments, we must say that the related technological advances have created a market for micro-products. The exact definition of what constitutes a micro-product varies widely by audience; and the differences arise from the defined monetary value below which we have a micropayment. To illustrate this wide variety, we must mention that this upper value varies from €1 (as in Innopay) to USD 12 (by PayPal). We must pick a value before moving ahead, so we will use the definition by [3]:

> ‘Micropayments’ is a term that identifies transactions of low value; however the exact definition varies considerably by audience. For the purposes of this report, a micropayment is defined as ‘an online or mobile, real-time or deferred, financial transaction below five Euros which initiates the instantaneous delivery of a digital good’. They can be used to charge customers on a purchase-by-purchase basis for a range of digital goods, including access to news content, online music, TV shows and films.
>
> *Burelli et al (2011), p. 9.*

For the purpose of comparability, we transformed the value of €5 into US dollars, which is equivalent to $6.5, and this cipher is attributed by [3] to The Economist. A couple of related definitions are those of digital goods and virtual goods. On the one hand, a digital good is defined by Webopedia as follows:

> In electronic commerce, digital good is a general term that is used to describe any goods that are stored, delivered and used in its electronic format. Digital goods are shipped electronically to the consumer through e-mail or download from the Internet. Usually when you purchase digital goods online, after payment has been received the merchant will provide you with your digital item as an e-mail attachment or they may provide you with a secure link where you can download the item. Examples of digital goods include e-books, music files, software, digital images, Web site templates, manuals in electronic format, and any item which can be electronically stored in a file or multiple files.
>
> *Webopedia.*

We must clarify as well that digital goods are sometimes labeled electronic goods in the related literature. We believe that it is also important to define a virtual good. As stated by The Computer Language Company Inc.:

> Virtual goods are images of real things that are purchased to enhance online games and social networks. For example, players can purchase elaborate avatars to represent themselves, send an image of flowers to someone.
>
> *The Computer Language Company Inc.*

For the sake of completeness, we must also define a virtual currency. As before, one could find many definitions, but we believe that they all complement each other. Wikipedia gives the following definition of virtual currency:

> **Virtual currency** (or **in-game currency** depending on environment) is used to purchase virtual goods within a variety of online communities; which include social networking websites, virtual worlds and online gaming sites…
>
> Some virtual currencies are time-based, relying upon measurement of in-game achievements in order to accrue exchangeable points.
>
> The word (sic) **virtual currency** or **cyber currency** is also often used, in a more broad sense, to indicate electronic money, that is not contractually backed by tangible assets nor by legal tender laws, and which is not a tangible commodity itself. Examples are peer-to-peer crypto-currencies like bitcoin and the above mentioned in-game currencies that are backed by virtual goods.
>
> *Wikipedia (2012)*

But we must also complement this definition by saying a couple of other things. First, there are examples of virtual currencies where their value is actually backed by tangible assets (as in the case of Ven). Secondly, a virtual currency can be issued either by a government or by private agents (like most cases). An example of the former would be Mintchips: it is a currency not in use yet but that will be issued in the near future by the Canadian government to substitute the use of small change. Mintchips are intended to cover micro transactions (with value below $10) and nano transactions, (with value below $1) [2]. Regarding examples of virtual currencies issued by private agents, we can mention (among many) Facebook Credits and Bitcoin. See Table 3 for a more complete list of examples of virtual currencies.

The remainder of the paper is organized a follows: section 2 details the nature of the transactions and the institutions that deal with micro-payments. Next, we present a brief review of the previous literature. In section 4, we present what we consider to be the main challenges that will be faced by monetary policy, and Section 5 concludes.

2 The Industry of Micropayment Services

There are many different definitions of what constitutes a micropayment, which mostly vary according to the upper limit of the price of each transaction. We believe that there is not a definition that is, a priori, better than the others, but we must pick one in order to move forward with our study. Thus, we have chosen, for the purposes of this study, to define a micropayment as an online or mobile transaction with a value below $6.50. In the remainder of this section we will present what we believe to be the main characteristics of the micropayments industry.

In this paper, we focus our attention on some particular aspects of the micro-payment system, i.e.: the Internet payments system for the micro-products market. We start by describing the recent evolution of this industry. Next, we turn to describe the different niches in this market; we will focus on two: transaction grabbers [16] and virtual currencies (although we are aware that there are more niches, they tend to overlap in this two). We believe it is very important to describe not only the market niche of virtual currencies, but also the second niche labeled as transaction grabbers, highlighting the fact that transaction grabbers are, among other things, facilitators of the use of virtual currencies.

Let us summarize the recent evolution of the micropayment industry. Most of this section is based on Burelli et al (2011). The evolution of the micro-payments has been enabled by three mutually reinforcing trends, which we list below:

a) The growth of broadband infrastructure and e-commerce

The Western European broadband penetration has grown from 19% of households in 2004, to 56% at the end of 2009; in addition a further 9% of households have access to mobile broadband. Building on this, widespread consumer adoption of online payments has fuelled considerable growth in global e-commerce. This behavioral shift, supported by a thriving online payments industry, has increased online spending from £150 billion in 2004 to over £350billion in 2009. The authors highlight that online shopping is so popular that even in the global recession of 2008/09, as UK high street retailing revenues contracted by approximately 2.5%, online sales rose 17.8%, compared year on year. Moreover, a survey of U.K. consumers showed that more than two-thirds of the population aged 14 or above bought goods and services online in 2010.

b) The growth of social networks, online gaming and virtual goods related businesses

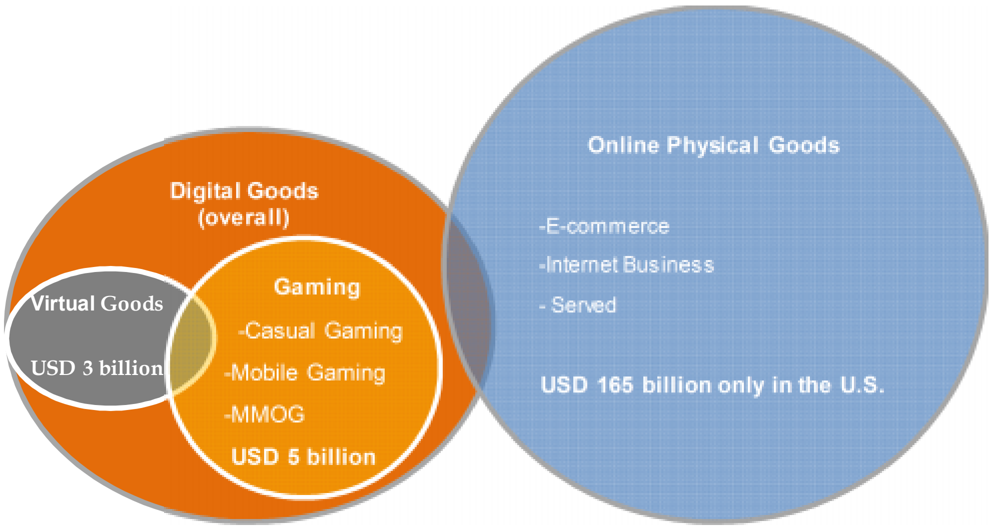
The online gaming sector has rapidly gained popularity among Internet users. The period 2007–2009 saw a proliferation of online games with built-in virtual currency systems and virtual goods stores. Currently, these systems attract over 400 million active users every month. The use of these online games has been driven by integration into social networks. For example, FarmVille, a game designed by Zynga, is accessed by more than 63 million active users who each month spend an average of 15 minutes a day in the game.

Typically, virtual goods are bought for small sums of money within online games and are supported by a range of micropayment-style processes. For example, Facebook introduced their own virtual currency, called Facebook Credits, in mid-2010, which can be used to buy virtual gifts or spent within applications. In 2011 the overall market for only virtual goods in the US was headed towards $2.9 billion for 2012, against $2.2 billion in 2011, and $1.6 billion in 2010.

c) The emergence of new online payments services and user interfaces

Value Partners estimates the European micropayments market was worth €6 billion in 2011, and is set to grow to over €15 billion by 2015. The use of electronic equivalents of fiat money became excessively costly, especially because of the size of the fees charged relative to the value of the micro-products. What seemed to be a serious problem in the micro-product market was the presence transaction costs so high that precluded very small transaction values: the currency available was not divisible enough, because it could not be used for transactions of value below the transaction costs [21]. The presence of these indivisibilities precluded some trade in this market.

Figure 2. Market size of online trading in the U.S. in 2009



MMOG: Massively multiplayer online game *Source: Glenbrook Partners (2011)*

Reducing the scope of these indivisibilities by introducing a new electronic medium of exchange that is cheap and accepted in different Internet communities has proven to improve social welfare. As comScore Inc. indicates, 29.7% of social gamers do not have the ability or the means to pay for virtual currency with cash options [15]. Companies like Google, PayPal and Amazon have leveraged their respected brand names and established trust-based customer relationships to enter the financial services market, while incumbent payment and banking infrastructures have increased their reach and new entrants are trying to establish themselves. Even so, according to Osama Bedier Google's vice president of payments and of Google Wallet, only about 7% of retail sales occur online, compared to the 93% that is still spent in person at stores [43].

Consumers and merchants are driving the alternative payments market as they look for new ways to pay and get paid. Mobile commerce has lowered the costs for merchants to accept old and new types of payments. Take Square, founded by the creator of Twitter, lets people accept credit cards with their smart phones.

The parameters that we will take into account for analyzing the examples that we mention below are based on Burelli et al (2011), and they are displayed in detail in Table 1.

Table 1. Parameters for assessment for virtual currencies and transaction grabbers

Payment functionality that supports many digital content providers that may be available also for either on-line or off-line payments across multiple retail industries.	**Openness** Open- Closed ¬ O - C ®	Payment functionality that supports one or very few digital content provider(s) and works in a closed transaction environment.
Transaction funded on the base of an instant, real-time transaction.	**Payment finality** Real Time - Both- Pre Paid ¬ RT B PP®	Transaction enabled by advanced deposit of value prior to the transaction.
Transaction denominated by monetary currency value.	**Type of currency used** Real money[a/] - Virtual Currency ¬ RM - VC ®	Transaction denominated by units other than monetary currency.
Settlement of micropayment transactions made on a one-by-one basis.	**Rule for settlement** Single Payment-Aggregator ¬ SP - A ®	Settlement of multiple micropayment transactions that are processed in an aggregated manner.

[a/] *This refers to actual fiat legal tenders.*

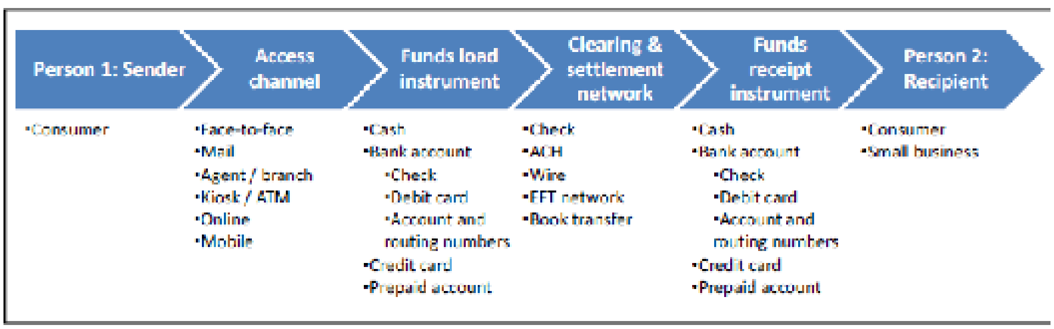
Source: Burelli. et al. (2011). Elaborated by the authors.

In the next two sections, we present a detailed description of each of the market niches of the micropayments industry.

2.1 The Transaction Grabbers

In the first niche, we find micro-payment companies playing the role of intermediaries between senders and recipients of money; we will call them the transaction grabbers; mainly they all work like peer-to-peer payments systems, as in Figure 3. Table 1 presents the cost structure of some of the existing electronic payments systems and Table 2 presents the way that these systems normally work. According to Investing Answers, peer-to-peer payments systems (P2P) are an online technology that allows customers to transfer funds from their bank accounts and credit cards to another individual's account via the Internet or a mobile phone. We think one shall include as well pre-paid accounts or other sources of funds.

Figure 3: The peer-to-peer (P2P) payment lifetime cycle



Source: Windh, J. (2011). *Surveying a rapidly changing landscape.*

For example, PayPal introduced their micropayment product worldwide in 2008. PayPal is a Web-based application for the secure transfer of funds between member accounts. There is no application fee for the user, and also there is no cost for sending money through the service, but there is a fee structure for those members who wish to receive money. That fee is still high for products with prices around ¢5-¢10, that is why they release a special micropayment service, and also in July 2011 PayPal bought Zong for $240 million, one of the main reasons was to attract this market on a full scale. Zong allows you to pay for purchases from your mobile phone or computer by adding the payment to your wireless bill. Zong verifies your wireless phone number and account, and clears the payment on your mobile phone bill: there is no credit card number, expiration date, nor billing address to enter [45]. They charge a transaction fee of 5-10% depending on the volume of the sale, without setup or monthly fees.

Table 2. Main characteristics of transaction grabbers

Transaction grabber	**Application or set-up fee**	**Monthly fee**	**Transaction fee charged to the recipient**	**Openness**	**Payment finality**	**Type of currency used**	**Rule of settlement**
Zong	None	None	5-10% transaction fee	O	RT	RM	SP
Payclick (only for Australia and some cities in the U.S.)	Not revealed until applying	Not revealed until applying	Not revealed until applying	O	B	RM	SP
PayPal	None	None	¢5 plus 5% for micropayments (i.e. transactions under $12)	O	B	RM	A
PayNear Me	Around $199*	Around $1,199 (annual)*	• Standard fee of $2.99 for cash payments up to $300*. • $3.99 for payments ranging from $300 to $500*. • $4.99 for payments up to $1,000*	O	RT	RM	SP
Dwolla	None	None	• No fee for transactions up to $10. • ¢0.25 for all transactions above $10	O	RT	RM	SP
Google Checkout	None	None	Based on the value of monthly sales: For less than $3,000: 2.9% + $0.30 per transaction. Between $3,000 and 9,999.99: 2.5% + $0.30 Between $10,000 and $99,999.99:2.2%+ $0.30 Above $100,000: 1.9%+ $0.30	O	RT	RM	SP

** This information does not appear in the official PayNearMe website.*
Source: official websites.

Visa launched their own micropayment system in Australia in 2010, which was called Payclick, and it is similar to PayPal´s micropayments product, the system just asks you to fill in your password and the transaction is done, they do not reveal their fees until you apply for the account (this means give information about your business) but they claim to be very competitive. Visa has recently declared their interest in opening Payclick in the U.S. and Europe as well.

Almost all the transaction grabbers share the common characteristic that they do not require the clients to reveal their financial information at the time when the transaction is made, since doing so would be involve more risk and it would also be annoying if the client would have to do this on every purchase for only a small quantity of money.

2.2 Virtual Currencies

The second niche is occupied by virtual currencies. Its main use is to buy virtual goods in online games, social networks and massively multiplayer online role-playing game (MMORPG). On the one hand, Facebook credits are an example of virtual goods in online games and social networks (their value as today is 1 credit for 0.10 USD). On the other hand, Linden Dollars in Second Life is an example of virtual currency that works in a MMORPG. The growing mass of online gaming and social networks has facilitated the rapid increase in the global virtual goods market. Players of online games and members of virtual communities are spending more and more on virtual goods to enhance their gaming experience. In 2010, Europeans spent over $1 billion on virtual goods, the Asian market is already worth over $5 billion annually, and Americans will spend over $2 billion by 2011 [3]. Their growth will continue as it is becoming easier and cheaper to be a part of this market.

Some virtual currencies are exchangeable for other virtual currencies and a few for fiat money, you can purchase them by the payments services explained above and/or trade them at web sites like Virwox or First Meta Exchange. Because there are ways to create wealth in these virtual worlds and online games, this opens an interesting area of business to study. For example, players of Entropia Universe (an MMORPG) already exchange real money for a virtual currency. And virtual money they make in the game, through virtual hunting, mining, trading or other activities, can be cashed out into real money. The virtual currency Project Entropia Dollars has a fixed 10-to-1 exchange rate to the U.S. dollar. Credit card companies are aware of this, for example, American Express bought in 2011 a company called Sometrics, which in 2010 did 3.3 trillion units of virtual currency on their platform. You can buy virtual goods such as gold coins or whatever it may be. That acquisition let the company tap into the massively growing space of online gaming and to develop capabilities to manage virtual currencies, a business that is projected to nearly double by 2014 [25].

One should notice two things about virtual worlds: in the first place, they have no measure to control money supply. The balance between goods and money is determined by collective consumption/saving decisions by players. Secondly, there are no interest rates in virtual worlds in general. The absence of interest rates, ceteris paribus, reduces incentive for saving and raises that for consumption. Since many virtual worlds do not have inflation of the general price level, we cannot say in general that consumption is preferred in virtual worlds relative to the real world. Nevertheless, still there should be greater incentive for consumption compared to the case in which there are interest rates [51].

There are other types of virtual currencies that work directly in the global economy. For example, Bitcoin; defined by its creator as a purely peer-to-peer version of electronic cash that allows online payments to be sent directly from one party to another without going through a financial institution [30]. The main challenge for developing this kind of currency relied on the "double spending" problem. According to [26], [10], Bitcoin´s solution was to ensure that each coin was its own certificate of authenticity. As soon as a transaction takes place, the recipient publishes the transaction to the global Bitcoin network. Now every Bitcoin user has evidence that the coin has been spent, and users will only accept that coin from the new owner. Also, Bitcoin is almost 100% anonymous. "In the Bitcoin system, a new coin is produced whenever a computer can calculate an answer to a difficult problem, and then attaches that answer to a digital record of every transaction of every Bitcoin ever traded" [10]. Anyone is free to create a new coin, within proscribed supply limits, by providing computer power that helps to prove that it was in fact a valid Bitcoin. Bitcoins can also be traded for dollars and they are accepted in different online retail stores an also in a few "bricks and mortar" retail stores and cafés (for the list of the different currency exchange business, and stores that accept Bitcoins, visit Bitcoin Wiki web site). Also its target market is not only digital and virtual goods you can also obtain physical goods in some retail business. In 2011 they were seven million of these "coins" in circulation and the rate of increase —currently 50 coins are added every 10 minutes— will slow each year until the number tops out at 21 million coins around 2025.

Another example is Ven currency: The value of Ven floats against other currencies and the price is based on a basket of currencies, commodities (like gold, silver, brent crude) and carbon futures which intends to make the value of this currency very stable because no single unit has a strong influence relative to the other influences in the basket. Also, the introduction of carbon to the basket is to support and stimulate demand for carbon credits and social impact development, driving offsets for every transaction used with Ven. At the moment $1 is equivalent to 9.35 Ven. Ven trades against other major currencies at floating exchange rates and is mainly used in an online community called Hub Culture a site when members can trade goods and services as well as knowledge. Nevertheless you can also use it in Pavilions (retail places specially developed to accept the currency). According to At the beginning of the present year over $100 million in assets were available for purchase in 130 hubs worldwide using Ven [40]. As opposed to Bitcoin, Ven does not provide anonymity, and is generated centrally (though exchanged).

Nevertheless, almost all of today's existing electronic currencies (with the exception of Bitcoin and Ven) are surrogates of fiat money: they are denominated in fiat currency, and their purchasing power fluctuates with the purchasing power of the denominating currency. Moreover, except for Bitcoin, they are fiat in the sense that there is no backing of these electronic monies, and thus they are not redeemable to the issuers. For example, Avios is a currency that you accumulate for traveling on Iberia airplanes and that you can trade for traveling tickets and some products in partners' stores; one may also transfer Avios to other Iberia clients as gifts or one could buy them, but they are not redeemable in fiat money. The exchange rate between Avios and euros depends on many things. First, the exchange rate is different whether you are purchasing or transferring Avios; second, there are economies of scale since the euros you pay increase less than proportionately to the amount of Avios traded (for example 2,000 Avios are worth €54 and 8,000 Avios represent €164).

On the one hand, since Avios only works for 3 airline groups (Iberia, Vueling, British airways) and a limited retail market, it will not likely become a generally accepted transaction medium: people who are not interested in their offers may not value them at all, and might not want to accept Avios currency.

On the other side of the spectrum, we have the case of the Facebook credits: because Facebook is a most popular company, it is easy to imagine that such a currency would be more generally accepted than others. Until now, Facebook credits could mostly be used to buy virtual goods inside online games and some digital products like movie rentals. Nevertheless, Facebook have started an initiative called Deals that makes users able to purchase a voucher that is redeemable for real goods. According to [19] "Mark Zuckerberg, Facebook's chief executive, said recently that the company may choose to do 'a lot more' with Credits in the future. Over time, the company plans to turn Credits into a system for micropayments that could be open to any application on Facebook, be it a game or perhaps a media company, people with direct knowledge of Facebook's plans said. They spoke anonymously because plans have not been announced publicly".

There are several advantages of this kind of virtual currencies: its value would not fluctuate with the value of fiat currencies, but instead it would depend upon the value of the commodity bundle backing it and/or maintaining its reputation as an issuer. This type of electronic currency has its similitudes with commodity money it is now the product bundle that serves as the anchor. This new form of electronic money has the potential of being a currency with more stable value than fiat currency [21]. In addition, a global

Internet currency would eliminate the need of foreign exchange. This is also why the issuer of such a currency should be a firm that is world-wide recognized, like Facebook (that it has a user base of some 800 million people worldwide).

Hernandez-Verme et al (2004) claimed that three technical elements are necessary for any virtual currency to be accepted by the public: low cost, security, and privacy. In particular, these authors highlight greatly the importance of low costs in micropayment transactions, practically regardless of the payment method utilized. They also point out, nonetheless, that there exist alternative ways of reducing costs; in this regard, they emphasized the importance of the avoidance of expensive intermediaries, such as banks and credit card associations, in this kind of transactions, since they could act as an indivisible sunk cost that may reduce the firms' margins and their profitability within the network. According to [27] p.3 "… about 2.5 billion people in the world do not have access to a bank account", because of this some of them are out of these kinds of markets. Security plays an important role in generating trust is an electronic environment: security becomes a must for electronic payments, where cryptographic security mechanisms, including encryption and digital signature schemes, are often used to provide the desired security for the transactions. Finally, privacy, the third element of the list, has become a much bigger concern in today's information world; so much so, that an ideal virtual currency should provide anonymity or at least a high level of privacy so it can compete against fiat money [21].

Table 3. Main characteristics of virtual currencies

Virtual currency	Openness	Payment finality	Type of currency used	Rule of settlement	Exchange Rate in USD (selling price)
Bitcoin	O	RT	VC	SP	$10.87 for 1 BTC
Ven	C	RT	VC	SP	$1 is equivalent to 9.35 Ven
Avios	C	RT	VC	SP	Depends on how much Avios you buy. For example 2000 Avios are €54 and 8000 Avios are €164
Project Entropia Dollars	C	RT	RM	SP	1 credit for .10 USD
Linden Dollars	C	RT	RM	SP	280.1 L$/USD
Facebook Credits	C	PP	RM	SP	1 credit for .10 USD

Source: official websites. Elaborated by the authors.

Notice from Table 3 that Bitcoin satisfies two of the three characteristics mentioned above: it has low cost and it is anonymous, but it has a bad reputation for its safety and has been victim of speculation, this has caused that its exchange rate fluctuates unpredictably over time. In table 4 we provide an historical review of the exchange rate of Bitcoin. One reason could be that, as according to [38] p. 14 “In the United States and Europe, Bitcoin’s meteoric rise was mostly driven by speculators; hardly anyone used the currency to actually pay for goods and services”.

Table 4: Historical exchange rate of bitcoin as traded by Mt Gox
(USD per unit of Bitcoin at the closing time of the day)

Date	Exchange rate	Important event
04/25/2010	¢0.3	Bitcoin trade publicly for the first time (1,000 go for 0.3 cents each).
02/10/2011	¢0.98031	Bitcoin receives a write-up on Slash-dot for achieving dollar parity.
04/20/2011	$1.1421	Forbes publishes "Crypto Currency" a profile of bitcoin.
06/01/2011	$9.57	Gawker runs a story about Silk Road, an online bazaar of illicit goods that accepts bitcoins.
06/09/2011	$28.919	Bitcoin reaches its peak value.
06/19/2011	$17.51	Mt. Gox, the largest bitcoin exchange admits its database was compromised and user information leaked.
07/29/2011	$13.49832	Wallet service MyBitcoin. Com becomes inaccessible; six days later, it comes back online with 51% (roughly $250,000) of its bitcoin holdings missing.
11/18/2011	$2.04999	Bitcoin exchange rate falls dramatically.
01/04/2012	$4.8808	Bitcoin exchange rate starts to grow again.
08/12/2012	$ 11.67001	Latest exchange rate.

Sources: Bitcoin Charts and Wallace, B. (2011).

2.3 Benefits and Disadvantages of Virtual Currencies

In this section, we present a summary of what believe to be some of the pros that an "ideal" virtual currency should have to be widely accepted, together with the cons that it may find along the way. It is crucial to take each of the elements in this list into account for a proper analysis of existing virtual currencies; but it is equally important to consider them when designing the main characteristics of prospective virtual currencies. This part of the paper was mostly based in [1], [15], [38], [47].

2.3.1 The Benefits of Virtual Currencies

Below, we list what we believe are the advantages that an ideal virtual currency shall possess:

- Allows almost anybody to buy goods online without the need of using a credit card or disclosing private information.

- Acts as a substitute currency allowing customers to buy, sell, and trade items without having to use real world money.
- Provides anonymity or privacy to a point.
- Allows users to generate revenues and create profits online, which can then be exchanged for other goods (real and virtual).
- Reduces cost of entry to the market.
- Issuance is decentralized or centralized but only in the case that is from a private issuer that cannot induce inflation (like Ven).
- Distributed middleman or no middleman.
- Faster transfer than banks.
- Always available and instantaneous.
- Ubiquity.
- Good reputation of the issuer.
- Recorded in a public ledger.
- Solves the double-spending problem, encrypted transactions and friendly -fraud immune.
- Safer and better store of value than fiat money.
- Expandable and divisible.
- Deflation/Inflation Hedge. According to [16] "…the potential for fiat currency devaluation or appreciation in the face of mounting debts and uncontrolled deficit spending has given everyone with significant wealth an interest in finding a liquid, hedge to the big three (dollar, yen, euro). Gold has been the traditional

favorite in this spot, but with gold prices soaring and the threat of a bubble looming….the need for alternatives is strong".

2.3.2 The Drawbacks of Virtual Currencies

- Vulnerable to system failures.
- It could be used to pay for "illegal" activities or products, such as money laundering or buying prohibited products or services.
- Its valuation can fluctuate in some cases.
- Difficulty for making futures contracts or floating against fiat currencies (with the exception of Ven).
- Risk of Unknown Technical Flaws.
- Not accepted for paying taxes or as bank reserves.
- Decentralization is both a curse and a blessing, since there is no valuation guarantee. Since there is no central authority governing, no one can guarantee its minimum valuation. If a large group of merchants decide to "dump" virtual currency and leave the system, its valuation will decrease greatly which will immensely hurt users who have a large amount of wealth invested in this currency [1].

Notice that most of the disadvantages listed above are not particular of virtual currencies: historically, fiat currencies have also been used for money laundering and the financing of illegal activities –such as illegal drug dealings; but, because of their lack of intrinsic value, fiat currencies are prone as well to speculation, and particularly to the kind of self-fulfilling attacks that make their value fluctuate without any noticeable alteration in the fundamental of the economy; finally, we must also keep in mind that both inflation or hyperinflation crises might hinder severely the acceptability of a currency and the credibility of the government in general, and of monetary authorities in particular.

3 Review of the Previous Literature

Two of the most important papers about the potential effects of private money are Williamson (1999) and Temzelides and Williamson (2001). They both used a random matching model of the foundations of money for economies populated with infinitely lived agents. Among their results and recommendations, they emphasized that transaction costs, informational frictions, and related factors are the main causes explaining the discounts observed when trading different private currencies (most of the virtual currencies can be seen as private electronic currencies). The private money they study is a surrogate of fiat money that takes the form of a medium of exchange issued by financial intermediaries. However, according to Hernandez-Verme et al (2004):

> … However, as argued convincingly by Schreft (2001), even though the models offered by Williamson (1999) and Temzelides et al (2001) are a good representation of how the financial system worked during the 19th century, they do not provide a clear insight on how a modern system of private electronic money would work and how the necessary network shall function. Moreover, these models are clearly not designed to address the problems faced in the micro-product market.
> *Hernandez-Verme et al (2004), p. 4*

Nevertheless Temzelides et al (2001) did address the importance of restudy private money systems because there are fewer government impediments to private money issue and advances in information technology now permit private money systems where private liabilities are electronically transferred rather than by way of a physical medium of exchange thus it reduces the cost of operating a private money.

Williamson (2004) explored the implications of private money issue for the effects of monetary policy, for optimal policy, and for the role of fiat money. He uses a locational model and finds that when private money issue is permitted it changes dramatically the nature of optimal monetary policy. With private money, fiat currency is no longer used in transactions involving goods, but currency and central bank reserves play an important part in the clearing and settlement of private money returned for redemption, because private money has the advantage of being "elastic," in that its quantity can respond to unanticipated shocks in ways that the stock of fiat currency cannot. In this model private money is redeemable in outside money instead of commodity money (either gold or silver), which was a common feature of historically observed private money systems.

Schmitz (2005) gives a general critique to some of models of electronic and private money and concludes that the method of institutional analysis is the appropriate conceptual framework to investigate the impact of the diffusion of electronic money on the efficacy of monetary policy and the future of central banking; and that existing models do not particularly take this into account. He states that the analysis of recent and long run institutional change in payments systems demonstrates that its main drivers are politico-economic factors and demand of commercial banks and final customers rather than technological innovations. Although he does not propose a model his contribution is important because he raises the question of how much weight does technological innovations have in monetary policy evolution.

Micropayments systems are not a simple market to study or develop since most of them exhibit two-sided network effects. According to Rochet et al (2004) p. 2 "Two-sided (or more generally multi-sided) markets are roughly defined as markets in which one or several platforms enable interactions between end-users, and try to get the two (or multiple) sides "on board" by appropriately charging each side". See-To et al (2007) found that the underlying dynamics of these two-sided markets are not very well understood and this may lead to the mixed results of various micro-payment initiatives. They concluded that a "survival mass" of merchants and consumers is required for the market to exist and a "critical mass" for the acceptance levels to take off and remain stable. The survival mass is completely determined by the normalized cost of adoption. The critical mass is higher than the survival mass due to two-sided network effects. Merchants will not adopt the system unless there are enough consumers who use the system. At the same time, consumers will not consider the system until there are enough adopters on the merchant side. Thus, the value of a micro-payment system to a consumer increases as more merchants adopt the system. Similarly, the value of the system to a merchant will augment as more consumers are willing to transact with the merchant using the new electronic means. They use anecdotal evidence to reinforce their conclusions, they compare the failure of initiatives like Mondex and Visa Cash with the success of the Octopus Card in Hong Kong, the latter was originally introduced to the public in 1997, targeting a public transportation market with 10 million passenger journeys per day. Octopus card system has been growing almost ever since its appearance to support non-transportation micro-payment transactions too because it quickly gained a critical mass. We need to take to account that this analysis was made when new technologies that make transaction costs cheaper (like mobile payments) weren't develop as today, so that could be another cause of the failure of the first initiatives like the Visa example mentioned above.

Edward Castronova (2001) is the pioneer in analyzing economies of virtual worlds in MMORPGs from an academic perspective. He analyzed the economic activity in the virtual world "Everquest". In Castronova (2003) he proposes a model with a utility function that differs substantially from ordinary ones, but what an economic agent does in the model is not so different. According to Yamaguchi (2004) in the model of Castronova (2003), avatars are like goods, and an economic agent purchases the avatars by spending time instead of money. The utility maximization through allocation of time to avatars is in essence the same as that through allocation of money to goods to consume. In Castronova (2008) they show the results of an experiment of massively multiplayer online gaming called "Arden: The World of Shakespeare". They documented that people in fantasy games act in an economically normal way, purchasing less of a product when prices are higher, all other things being equal. This finding may open the way for future study in synthetic worlds of real economic behavior, he gives a very good insight of how virtual worlds can be studied from on the same basis of the "real" economy. Another paper of virtual currencies is the one of Irwin et al (2005) he proposed a self-recharging virtual currency model as a common medium of exchange in Cereus, a computational market for community resource sharing. Self-recharging means that the purchasing power of spent credits is restored to the consumer's budget after some delaying effect, the credits recharge automatically, ensuring a stable budget but bounding the opportunity for hoarding. The purpose of self-recharging currency is to eliminate reliance on fragile mechanisms to recycle currency through the economy. A community admits members based on their identities; in return for the benefits of membership, members submit to accepted standards of behavior within the community. Community resource sharing in Cereus is accountable: actions taken with a member's identity are non-repudiable, and members are subject to auditing and sanctions for misbehavior, including forfeiture of currency or ejection from the community. Similar to Castronova (2008) he concludes that alternative currency models can help to harness market principles as a technology for flexible, robust distributed resource allocation, enabling market-inspired systems that are simpler, more stable, more predictable, and/or more controllable than real-world economies.

4 The Future of Monetary Policy

Electronification and the use of alternative means of payment has been growingly at tremendous speed over the years changing the incentives and costs structure underlying particular institutional arrangements in payment systems. Thus, the ratio of central bank money to total value of payments has decreased considerably. This development gives rise to concerns about the future role of money and the central bank. Although we are still far from living in a cashless society, the role of monetary policy is in the verge of changing dramatically, especially because of two elements: a) the falling use of cash as a form of payment and b) the changes of regulation.

a) The falling use of cash as a form of payment.

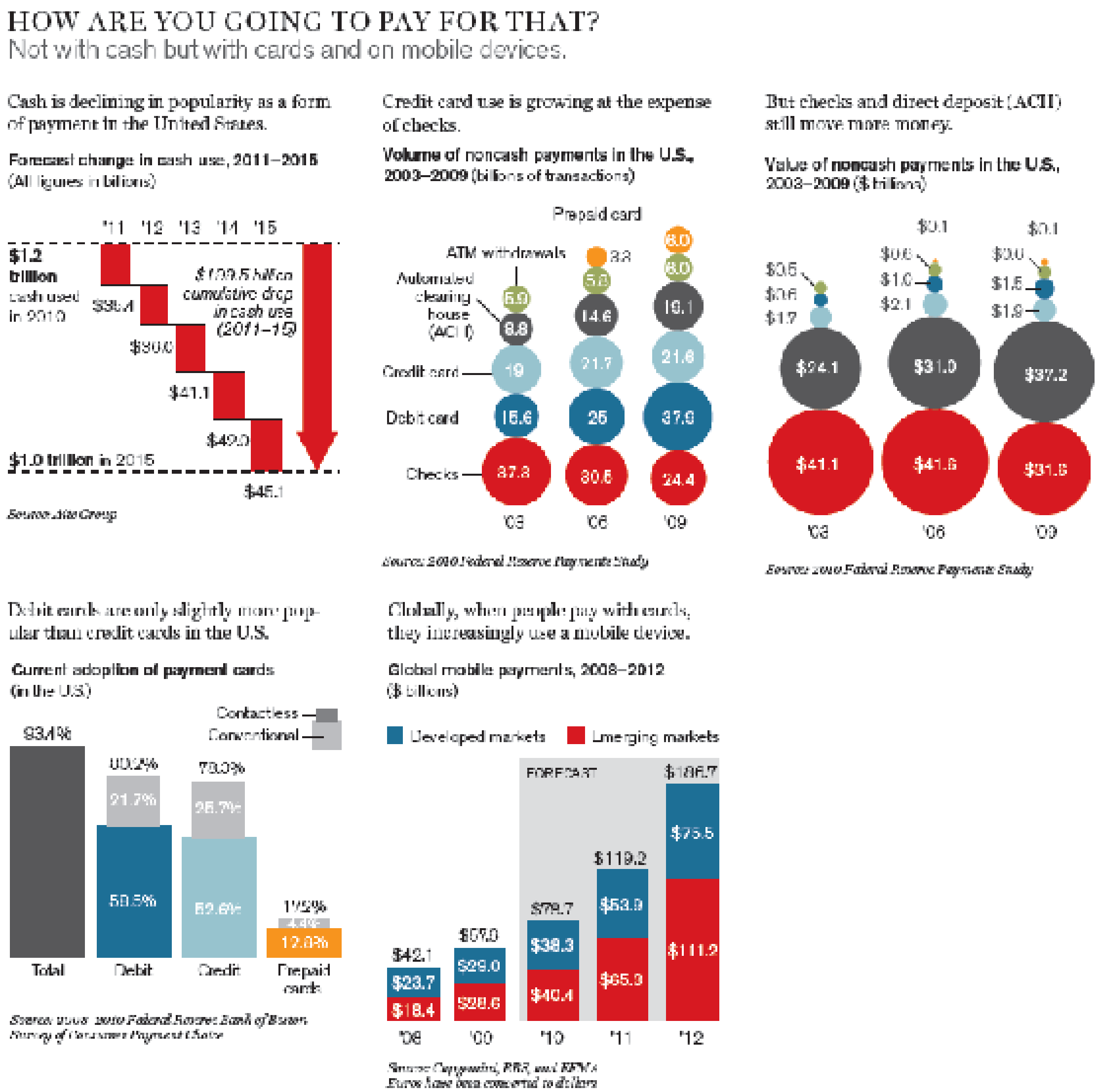
   The use of cash as a payment method has been clearly decreasing over the years and it has been substituted by cards, mobile devices and alternative means of payment like the ones described in this paper. According to [37] p. 63 "The costs of handling cash are high compared to that of electronic money. Printing, distributing and controlling cash are estimated to cost approximately for a developed economy 0.75% of annual GDP and an emerging economy 1% to 2%. Social savings of using electronic micro-payment means over cash are substantial."

The role to be played by the central bank in the near future will be as important as it is today, and will remain the same for quite a while, almost all of new payment instruments in the retail payment market (e.g. electronic bill presentment and payment; person-to-person payments via PayPal; stored value prepaid cards; phone-based payments) are linked to the banking system and eventually settle in central bank money [35]. The demand for virtual currencies that are not denominated in fiat currencies is still low, but is increasing at such a pace that is important to improve the way that we study them. The existence of private monies is hardly new, but technological innovations could lead the way to a world where private monies have an important role in the world economy.

b) Regulation

Money and banking are highly regulated improvements on technology in the payment systems so they have a slow effect in the change of them policies. According to [27] p. 3 "… the intricacies of regulation make it difficult for banks to be truly customer-centric".

Figure 4: The declining use of cash in the U.S.



Source: Pontin, J. (2011).

According to [35], in recent history central banks have demonstrated their determination and their political ability to maintain control of the monetary system in the face of institutional change in the payments system and to actively shape. They have a large range of instruments at their discretion to react to but also to influence institutional change in the economy-wide payment system, they can adapt the instruments of monetary policy implementation and their own payment systems policies to cope with institutional change in the payments system. Changes in the reserve-maintenance system of the generally accepted medium of exchange (GAME) are of particular relevance in this respect (i.e. the averaging of minimum reserve requirements, the averaging period, its relation to the interval of central banks' refinancing operations and the potential employment of minimum reserves for settlement purposes).

Actually, you can only pay your taxes with fiat money, and virtual currencies do not allow you to create a positive return by saving or lending (other than to your friends, like at RipplePay) or making futures contracts at a large scale, and, thus, fiat money will stay around the map. Nevertheless, is important to improve the way we study this markets for developing the appropriate banking policies. One example on how far we still far from adapting to this alternative means of payment is the fact that almost all virtual currencies are not taxable. The profits you make online can be converted into real monies without tax deductions.

5 Conclusions

The analysis carried out in this paper attempts to provide readers with an important insight of the list of tasks that are ahead of academic researchers in furthering their study of both virtual currencies and the micropayment systems. It intends to reach a more unified way to use the definition of virtual currencies, micropayments and virtual and digital goods.

Modern transaction grabbers have facilitated the emergence of virtual currencies by lowering costs of entry to this new market and making this alternative means of payment easier to manage. Virtual currencies are still in an early stage of development; as of now, they mostly work in the micropayments market for virtual goods. But the impressive growth of this market's size and scope, like in the case of Bitcoin and Ven, foretells that sooner or later they will have a crucial role in the design and implementation of monetary policy and on the future discussions of the political and economic agenda.

The potential benefits that these monies may provide are something we cannot ignore, since although they are not perfect, many of their defects are also similar to the ones presented in fiat money. A smaller role of the central bank should not be something to be “afraid” of as in [11]:

> Time and again, banks have been willing to increase their portfolio of mortgage loans in response to higher real estate prices. These higher real estate prices, however, have often been caused by excessive money creation. This has often led to bank crises and collapses. In the absence of a central bank this feature of private banking could go on unchecked”.
> *Costa et al (2001), p. 9*

It is plausible that the generalization of alternative ways of payment could also prevent central banks on acting in an irresponsible way, for political purposes.

We must point out that there is a significant dearth of academic studies related to these emergent currencies. Among them, the work by Schmitz (2008) presents an interesting proposal for studying the effects or the arising of these currencies on monetary policy, from an institutional perspective. Also, the works by Castronova provide a helpful way to study the way that virtual currencies are used inside virtual worlds and online gaming.

It seems crucial that academics and banks reconcile the benefits of a world with both fiat and virtual currencies and try to find ways to integrate physical cash into the electronic world; the former should start changing some aspects in the modeling of monetary policy, and the latter must change their former structure in a way that allows people to take full advantage of this novel means of payment.

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Websites List

Site 1: Avios

www.avios.com

Site 2: Bitcoin

http://bitcoin.org/

Site 3: Bitcoin charts

http://bitcoincharts.com/

Site 4: Bitcoin Wiki

https://en.bitcoin.it/wiki/Main_Page

Site 5: Dwolla

https://www.dwolla.com/

Site 6: Entropia universe
http://www.entropiauniverse.com/

Site 7: Financial Services Authority (FSA)
http://www.fsa.gov.uk/

Site 8: First Meta Exchange
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Site 9: Gaming Surplus
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Site 10: Google Checkout
https://checkout.google.com/seller/fees.html

Site11: Hub Culture
http://www.hubculture.com/

Site 12: Iberia
http://www.iberia.com/

Site 13: InvestingAnswers
http://www.investinganswers.com/

Site 14: payclick
https://www.payclick.com.au/

Site 15: PayNearMe
http://www.paynearme.com/

Site 16: PayPal
www.paypal.com

Site 17: PayPal Developer Central
https://cms.paypal.com/us/cgi-bin/?cmd=_render-content&content_ID=developer/home

Site 18: PC Magazine (PCMAG)
http://www.pcmag.com/

Site 19: Ripplepay
https://ripplepay.com/

Site 20: Second Life
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Site 21: The Computer Language Company Inc.
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https://www.virwox.com/

Site 23: Ven
http://www.vencurrency.com/

Site 24: Webopedia
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