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#### **Editorial**

Information Management and Business Review (IMBR) provides a unique platform to scholars around the world to share their knowledge and publish research work in the fields of information management, business, management and related disciplines. The work submitted for publication consideration in IMBR should address empirical and theoretical developments in the subjects related to scope of the journal in particular and allied theories and practices in general. Scope of IMBR includes: subjects of finance, accounting, auditing, cost & management accounting, financial psychology, financial literacy, marketing, information management, human resource management, knowledge management, innovation, change management, enterprise management, e-commerce and information system. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to IMBR. It is IMBR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of IMBR comprises of papers of scholars from Morocco, Malaysia, Poland, Libya and Indonesia. Designing a Project Management Integrated System, Trade Liberalization & Foreign Direct Investment, Transformational Leadership & Employees' Performance, Understanding Tax-Accounting, Labor Force in the Context of Demographic Changes, Effect of Organisational Structure and Competition on Organisational Performance, Effect of Empowerment Program on the Development and Application of Accounting Information Systems are some of the major practices and concepts examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity of the purpose, Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

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### **PAPERS**

#### **Designing a Project Management Integrated System**

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**Abstract**: The assurance of a good project tracking from the analysis of his opportunity until its realization is the basic condition for its success. This tracking requires making available, the project manager or PMO, of a variety of tools that support the managerial activity and optimize the time available to management. The purpose of this study is to define a project management system that integrates twelve management functionalities (planning, project portfolio management, Content Management, collaboration platform, issues management, deliverables management, resource management, Change management, Configuration management, Workflow Management, Electronic document management and Satisfaction surveys). Thus, final system will integrate, in addition to the key features found in existing project management software, five additional functionalities and a specific additional module of portfolio management to support multi-criteria analysis projects and maturity assessment of project management.

**Keywords:** Project management system, project portfolio management, collaboration software, IT tools, maturity assessment

#### 1. Introduction

The assurance of a good project tracking from the analysis of his opportunity until its realization is the basic condition for its success. This tracking requires making available, the project manager or PMO, of a variety of tools that support the managerial activity and optimize the time available to management. I quote mainly templates, historical documents, management procedures as well as IT tools for planning and collaboration: simple (Excel, MS Project ...) or advanced (software, specific development ...). This article focuses on the planning and collaboration software. Indeed, they allow the integration of templates and documents, the involvement of stakeholders in real time and procedures automation. It thus comprises:

- Benchmarking based on an examination of a sample of project management software;
- Proposal to incorporate new features into the project management system;
- Design of a specific module for project portfolio management.

#### 2. Literature Review

A web search uncovered a wide variety of project management products from proprietary tools to free tools and substantially covering the following main features:

**Planning:** In business dictionary, planning is a basic management function involving formulation of one or more detailed plans to achieve optimum balance of needs or demands with the available resources. In project management domain, planning consist on elaborating progressively high-level Information into detailed plans throughout the project life cycle (PMI, 2013), it is involves identifying and schedule project tasks, estimating their duration and cost and determining the resources needed to achieve them in order to monitor and report on project progress and optimize its realization expenses. While in portfolio management domain, planning means creating and maintaining necessary processes and communication relative to the aggregate portfolio (PMI, 2013).

**Deliverables Management (DM):** monitors the progress of deliverables throughout the project lifecycle to project completion, not only through traditional indicators costs and time, but also in terms of quality deliverables and meeting customers' expectations outstanding project.

**Issues management (IM):** This function allows users to capture incidents or problems encountered; some of them are configurable and allow managing all tickets types (support request or assistance) or even make proposals for improvement. This function allows:

- Improving the quality of deliverables;
- User satisfaction and customers;
- Traceability and accountability of stakeholders;
- Team productivity;
- Expenditure reduction (Blair, 2004).

**Collaboration Platform (CP):** is a platform, usually web-based, enabling collaboration between several people. Collaboration is the process of creating collectively shared representations and emerging processes and results that reflect the contribution of all participants (Elliot, 2007). This platform allows:

- centralizing and sharing projects documents,
- notification and reporting new contributions or comments of others regarding deliverables issued,
- Improving productivity.

**Project Portfolio Management (PPM):** The Project portfolio management software allows a user to obtain, manage and report on client data (Ricardo, 2005). This software allows:

- Managing dependencies between projects,
- Decision making to engage projects,
- Reporting on the projects progress,
- Sharing resources,
- Financial analysis,
- Risk Analysis.

**Resource management (RM):** is a functionality that allows you to manage the resources allocated to projects in order to:

- Optimize the use and the distribution of competences,
- Manage workload of project resources,
- Minimize risks related to the availability of resources and anticipate the needs of recruitment or contracting.

#### **Electronic Document Management (EDM):** is a function that:

- Organize project documents,
- Scan paper documents and store them,
- Manage all documentation (indexing, classification and distribution of documents).

**Benchmarking on project management software:** A web search uncovered a wide variety of project management products from proprietary tools to free tools and substantially covering the main features. We present below, in a comparative grid containing functionalities described above, a No-exhaustive and varied list of fifty products, the most used and highly ranked by Gartner in the last five years. In the following table are mentioned the top ten of Cloud-Based IT Project and Portfolio Management Services (Gartner, 2015a) and IT Project and Portfolio Management Software Applications (Gartner, 2015b).

#### 3. Analyses and Results

**Results analyses:** On the sample shown below, we have:

- 10% of the presented products are free software,
- 92% of the products presented, of which five are free, covering 86% of the main features described above.
- 64% of these products, of which two are free, covering all of said features.
- 86% of these products are available in all types of areas.

However, these products do not cover all functionalities that project manager and PMO need to fulfill their missions. Hence the opportunity to focus on additional features.

**Description of the target system:** The target system is a project management integrated system that provides global visibility into the organization, standardization, measurement and process improvement, and that will help with effective decision making by providing key performance indicators, analysis and reporting functions and project portfolio optimization tools. It will integrate well:

- Twelve Families of management features, five of them are new, each described in a module for stakeholders.
- The administration and security module such role and access management.

New functionalities include:

**Content Management:** Content management is a very interesting feature that should be part of project management tools; its purpose is the management of electronic content and the knowledge base of the company, namely:

- The creation or establishment of electronic document,
- Storage and indexing,
- Cleaning,
- Distribution and publishing,
- Research and archiving

The knowledge base comprises historical projects, framework documents (project management plan, project charter, RACI matrix, risk register, register of stakeholders), internal or external policies (safety policy, procurement regulation), procedures, lessons learned. This knowledge base is shared securely by all stakeholders on the Web it either inside or outside the company.

Table 1: List of 50 Project management solutions

Logiciel	CP		PPM	RM	EDM	IM	DM		SW	10	
		Planning						Licencing mode	Gartner 2015	Gartner Cloud 2015	aria application
AtikTeam	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary			Tout domaine
AtTask/workfront	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary		2	Tout domaine
Automation center	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary	>10		Tout domaine
BrightWork/sharepoint	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary			Tout domaine
CA Technologies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary	2		IT
ChangePoint/Daptiv	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary	4	4	IT
Clarizen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary		3	Tout domaine
CoPTrack	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary			Tout domaine
Easy Projects .NET	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary			Tout domaine
Efficient360	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Proprietary			Tout
Endeavour Software Project Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Free			domaine IT

EPM360	Yes	Yes	Yes	Yes	Yes	No	Yes	Proprietary			IT
Genius	Yes	Proprietary	9		Tout						
Gladys	Yes	Proprietary			domaine Tout						
HP Project & Portfolio Software	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary	8		domaine IT
Innotas	Yes	Yes	Yes	Yes	No	Yes	No	Proprietary		1	IT —
Intra'Know	Yes	Proprietary			Tout domaine						
IOvision	Yes	Yes	No	Yes	Yes	Yes	No	Proprietary			Tout domaine
Journyx	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary			Tout domaine
Kalisseo	Yes	Proprietary			Tout domaine						
Métier's WorkLenz/	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary			Tout
PPM Central Microsoft	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary	3		domaine Tout
NQI Orchestra	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary			domaine Tout
One2team	Yes	Proprietary		5	domaine Tout						
Onepoint Project	Yes	Proprietary /	Free	7	domaine Tout						
Oracle PPM	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary	>10		domaine Tout
OTHER EYES	Yes	Proprietary			domaine Tout						
P2ware Suite 7	Yes	Proprietary			domaine Tout						
Planisware 5	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary	6		domaine Tout
Planview	Yes	Proprietary	1		domaine Tout						
ProGest		Yes	Yes	Yes			Yes		1		domaine Tout
	Yes				Yes	Yes		Proprietary			domaine
Project Business Excellence	Yes	Proprietary			Tout domaine						
Project Monitor	Yes	Proprietary			Tout domaine						
Project.net	Yes	Yes	Yes	Yes	Yes	Yes	No	Free	10		IT _
ProjectObjects	Yes	Yes	Yes	Yes	No	Yes	No	Proprietary		6	Tout domaine
Project-Open	Yes	Yes	Yes	Yes	Yes	Yes	No	Free			Tout domaine
Projektron BCS	Yes	Proprietary			Tout domaine						
ProjeQtOr	Yes	Free			Tout domaine						
Projet2Team Delivery Manager	Yes	Yes	No	Yes	Yes	Yes	Yes	Proprietary			Tout domaine
SAP RPM	Yes	Proprietary	7		Tout domaine						
Sciforma	Yes	Yes	Yes	Yes	Yes	Yes	No	Proprietary	5		Tout
Severa	Yes	Yes	No	Yes	Yes	Yes	No	Proprietary			domaine Tout
Teamwork	Yes	Proprietary			domaine Tout						
Tenrox	Yes	Proprietary			domaine Tout						
TIMETRACKER	Yes	Yes	No	Yes	Yes	Yes	Yes	Proprietary			domaine Tout
TrackerSuite.Net	Yes	Proprietary			domaine Tout						
											domaine

| Triskell Software     | Yes | Proprietary |    | Tout<br>domaine |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-------------|----|-----------------|
| Upland Software       | Yes | Proprietary | 9  | Tout<br>domaine |
| VPMi/VCSonline        | Yes | Proprietary | 10 | Tout<br>domaine |
| WorkEngine/SharePoint | Yes | Proprietary |    | Tout<br>domaine |

**Change management:** Change management is a function that allows:

- Tracing change requests,
- Following their statutes,
- And automating their processing.

**Configuration management:** This feature aims to trace the versions of documents and other information on the projects. It records different states of a project and keep track of the modification date. This functionality is a part, generally, of content management software.

**Workflow Management:** Some processes and project procedures are easier to manage if they we use a workflow management tool; this tool allows defining the tasks to be undertaken by each actor and automate the validation circuit (exp. resource allocation, acquisition of materials, project team training, change request, vendor payments, quality control and authorization a work execution).

**Management of satisfaction surveys:** The customer satisfaction surveys are highly recommended at the end of the project for future improvements and for the evaluation of completed projects. For this, we propose in this platform software, a customizable online survey model to suit the needs of the business.

#### 4. Conclusion & Recommendations

This work is a basic design and development of an integrated project management and project portfolio system. It gives developers an idea about the different features to integrate into the target system and to provide API for interfacing with existing solutions. The developer can use one of free software presented in this study and complete it by the missing features. This study will help both the customer and the developer to define the development project scope of the integrated project management system, which is a necessary condition for the success of any project.

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#### Trade Liberalization and Foreign Direct Investment in Malaysia

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**Abstract:** A decision to establish foreign direct investment (FDI) involves a lot of critical thinking, especially in deciding a place to locate the investment. Evaluation and consideration comprise of costs and benefits of launching the FDI. This study focuses on time series data for the sample period of 1970 to 2009. The main objective of this study is to identify the major determinant of the inward flows of FDI for Malaysia by employing the bounds testing (ARDL) approach to cointegration. Of all the variables being tested, trade openness is found to be the most influential variable in attracting the inflows of FDI as it shows consistent results in the short run as well as in the long run in all models being tested. Since the trade openness which represents the liberalization of the Malaysian economy could induce the inflows of FDI, some policy actions can be taken up to enhance the trade openness.

**Keywords:** Trade openness, foreign direct investment, bounds test, cointegration, Malaysia

#### 1. Introduction

A decision to establish foreign direct investment (FDI) involves a lot of critical evaluation. Many studies have attempted to examine the conditions that make a country an attractive location to FDI (Ang, 2008; Kang & Lee, 2007; Cassidy & Andreosso-O'Callaghan, 2006; Moosa & Cardak, 2006; Bevan & Estrin, 2004). GDP of the host country, trade openness, exchange rate, infrastructure development and the cost of labor are among the prominent determinants explored by most studies. Even though there are ample studies on FDI, their results are not conclusive. This is due to the differences in the characteristics of the country of study such as political stability and economic stability, the status of the country being studied, types of data employed, motives of FDI and also the period of study. Even the methodology adopted has a tendency to influence the results. Hence, a continuous study is obviously needed to assess the determinants of FDI. In assessing the determinants of the inward flows of FDI for Malaysia, this study will test a number of factors that could influence the decision to locate FDI in Malaysia. This study is organized as follows: The first section is the introduction. The second section discusses past studies reflecting the variables commonly used to assess the determinants of FDI. The third section explains the methodology, sources of data and definition of variables. The fourth section explains the methods of estimation. The fifth section discusses the results, and finally, the last section concludes the study.

#### 2. Literature Review

Since 1970s, numerous studies have been done to examine the factors that attract foreign direct investment into a host country. These studies are important in a way that they help countries to develop policies and enhance facilities that can attract multinational enterprises (MNEs). The findings tend to suggest that the factors that determine FDI of different countries are quite depending on the types of FDI (Fedderke & Romm, 2006) and the country of study (Ismail & Yussof, 2003; Asiedu, 2002). Below are empirical discussions on the variables that are tested in this study. This current study focuses on: GDP, Growth rates of GDP, Trade Openness, Exchange Rates, Inflation, and Financial Deepening.

**Gross Domestic Product (GDP):** Lim (2001), based on a World Bank survey conducted on 173 Japanese firms investing in East Asian countries in 1994, indicates that the most robust determinant for the determinants of FDI is the market size, proxied by real GDP or GDP per capita. Among the studies that highlight the significant and positive influence of GDP on FDI include Ang (2008), Cassidy and Andreosso-O'Callagahan (2006), Moosa and Cardak (2006), Fedderke and Romm (2006), Gao (2005), Li and Liu (2005), Bevan and Estrin (2004) and Bende-Nabende (2002). On the other hand, Aw and Tang (2010) reveal that the GDP per capita is not significant in the long run, but positive and significant in the short run. Cuyvers, Joseph,

Soeng and Bulcke (2008), in determining factors that influence the inflows of FDI for Cambodia indicate that the relative GDP as indicated by the ratio of the host country's GDP to the home country's GDP is not significant in determining annual inflows of real FDI for Cambodia. Meanwhile, Ismail and Yussof (2003) discover that GDP is only significant and positive for Malaysia and Philippines, but not for Thailand.

**Growth Rates of GDP:** A number of studies manage to reveal the significant and positive influence of the growth rate of GDP on FDI (Shahrudin, Yusof & Satar, 2010; Demirhan & Masca, 2008; Li & Liu, 2005; Bende-Nabende, 2002; Noorbakhsh, Paloni & Youssef, 2001). On the other hand, Cuyvers, Joseph, Soeng and Bulcke (2008), the relative GDP growth rate is not significant in determining the approved FDI. Similar to Cuyvers, Joseph, Soeng and Bulcke (2008), Moosa and Cardak (2006) also indicate that the growth rate of GDP is not significant in influencing FDI.

**Trade Openness:** Lim (2001) indicates that the significance of trade openness in influencing the inflows of FDI are mixed; however, many studies show positive correlation and the significance positive influence of trade openness on FDI (Aw & Tang, 2010; Yol & Teng, 2009; Demirhan & Masca, 2008; Read, 2007; Kang & Lee, 2007; Moosa & Cardak, 2006; Li & Liu, 2005; Bevan & Estrin, 2004; Noorbakhsh, Paloni & Youssef, 2001). A study done by Ismail and Yussof (2003) indicates that the trade openness is positive and significant for Thailand, but not for Philippines. Bende-Nabende (2002) finds trade openness as the least significant determinant of FDI. Asiedu (2002) finds that the trade openness is positive and significant, however, the effect of trade openness for the sub-Saharan Africa countries seems to be lesser compared to the non-SSA countries.

**Exchange Rates:** Studies by Almsafir, Latif and Bekhet (2011) and Cuyvers, Joseph, Soeng and Bulcke (2008) discover a positive significant relationship between FDI and exchange rates. Similarly, Yol and Teng (2009) discover that the real depreciation of ringgit causes FDI to increase in the long run as well as in the short run. On the other hand, a study conducted by Aw and Tang (2010) reveals that the exchange rate of RM/USD is negative and significant in the long run, but positive and significant in the short run. Ang (2008) finds that the real exchange rate is significantly and negatively related to FDI. A study by Kiyota and Urata (2004) indicates that the depreciation of the host country currency attracts FDI and large volatility in real exchange rate restricts FDI. On the other hand, Solocha, Soskin, and Kasoff (1989) find that FDI is positively correlated with the level and volatility of foreign exchange rates.

**Inflation:** Demirhan and Masca (2008) and Li and Liu (2005) find that the effect of inflation on FDI is negative and significant. However, results by Li and Liu (2005) further highlight that for developing countries; the coefficient of the inflation variable shows negative and significant result, and for the developed countries, the inflation variable becomes insignificant.

**Financial Deepening:** Almsafir, Latif and Bekhet (2011) further strengthen the positive relationship that exists between FDI and money supply. Shahrudin, Yusof and Satar (2010) find that money supply of M2 is a significant determinant of FDI in the long run and the short run. Ang (2008) indicates that higher financial development increases FDI inflows.

**China Factor:** Aw and Tang (2010) reveals that the China's accession into the World Trade Organization (WTO) has a positive long run impact on the inward flows of FDI. On the contrary, Cuyvers, Joseph, Soeng and Bulcke (2008) discover that the China's accession into the WTO negatively affects the flows of FDI.

**Other Factors:** Ang (2008) finds no significant relationship between Asian financial crisis and the inflows of FDI. Bevan and Estrin (2004) indicate that the announcement of the EU membership has a positive and significant influence on FDI.

#### 3. Methodology

Based on the review of literature, we specify a general model of the determinants of FDI inflows to the host country, Malaysia. We shall call this as Model 1:

#### Model 1

```
LOGFDI<sub>t</sub> = \beta_0 + \beta_1LOGRGDP<sub>t</sub> + \beta_2LOGOPEN<sub>t</sub> + \beta_3LOGEXR<sub>t</sub> + \beta_4TGRO<sub>t</sub> + \beta_5INGRO<sub>t</sub> + \beta_6PGRO<sub>t</sub> + \beta_7D<sub>t</sub> + \varepsilon_t (1)
```

#### Where

FDI = foreign direct investment (measured in current RM)
RGDP = real gross domestic product (measured in current RM)
OPEN = ratio of the sum of exports and imports over GDP

EXR = period average official exchange rate (measured as RM/USD)

TGRO = Growth rate of GDP for Thailand
INGRO = Growth rate of GDP for Indonesia
PGRO = Growth rate of GDP for Philippines

D = dummy variable of the accession of China into WTO  $\beta_i$  = parameters to be estimated,  $i = 0, 1, 2, \dots, 7$ 

 $\epsilon$  = white noise error term.

LOG = logarithm t = time

Additional variables which will be considered in other models to test the robustness of variables identified in equation (1):

M2 = financial deepening (money supply of M2)

INFL = inflation rate

GDPG = Malaysian Growth rate of GDP

Many studies have included the size of the host country's market as one of the explanatory variables proxied by gross domestic product (GDP) of the host country (Ang, 2008; Cassidy & Andreosso-O'Callaghan, 2006; Moosa & Cardak, 2006; Bevan & Estrin, 2004; Ismail & Yussof, 2003; Bende-Nabende, 2002). The market-size hypothesis is an important determinant for a vertical type of FDI. Another popularly used explanatory variable is the trade openness. According to Hasan (2004), one of the reasons for the important role played by FDI in Malaysia is the preference of the multinational corporations to establish and finance industries geared towards exports. Even since 1971 Malaysia is known to be an export-oriented economy, and highly depends on foreign investors (Bjorvatn, Kind & Nordås, 2001). By focusing on the roles performed by GDP and trade openness in attracting FDI, the two seem to benefit MNEs in boosting their sales. Since an MNE is a foreign enterprise involves in international transactions, involvement with the foreign exchange market is unavoidable. Furthermore, the physical establishment of the FDI itself engages with the foreign exchange market. Past empirical studies have been showing mixed results on the significance and signs of the exchange rates.

Another variable that has recently received considerable attention is the financial deepening of the host country which measures the depth of a country's financial development. Financial development is considered an important variable because the advancement of the financial landscape of the host country mirrors the availability and easiness of getting funds. Even though foreign investors do not depend on domestic sources of capital, the easiness of doing transactions, and the efficient services provided by financial institutions in the host country attract the attention of foreign investors to invest there. In measuring the depth of the Malaysian financial landscape, this study employs the money supply of M2. A higher degree of financial development is expected to increase the inward flows of FDI. Inflation, a rise in the general level prices of goods and services in an economy over a period of time, is also another potential determinant of FDI. Inflation defers investment and savings, and because of that it is used to represent economic stability of a country. There have been a few studies manage to expose the negative effect of inflation on FDI. For a vertical type of FDI, inflation brings a huge harm to them, especially when it relates to costs.

Another variable that is employed by this study is the growth rate of GDP. The growth rate of GDP is used to denote future market potential (Bende-Nabende, 2002). Higher growth rates of GDP indicate that the economy of a particular country is expanding. Growing economies are expected to provide more opportunities for the MNEs especially in terms of making profit. This study also addresses the impact of other countries on the Malaysian FDI. Malaysian neighbor countries of Thailand, Indonesia and Philippines are chosen to be included in the study. These three countries are selected because of three main reasons: 1) their location which makes the transportation costs of exporting and importing are not much different from Malaysia, 2) the historical trend of their FDI flows are quite similar to Malaysia, and 3) these countries share similar or nearly similar culture with Malaysia. We shall use the GDP growth rates of the neighbor countries to represent their economic performances which are expected to have a negative impact on the inward flows of Malaysian FDI. In addition, this study also assesses the effect of China's liberalization policy on Malaysian FDI. The impact of the accession of China into the World Trade Organization (WTO) has been assessed by a number of studies (for example, Aw & Tang, 2010), and they reveal it to be a significant variable. The accession of China into the WTO is used as a dummy variable, and it is expected to have a negative impact of the inflows of Malaysian FDI. In order to test for the robustness of variables as indicated in equation (1), we shall estimate four additional models with different combination of independent variables:

#### Model 2

 $FDI = F_2(RGDP, OPEN, EXR, GDPG, CWTO)$ 

#### Model 3

 $FDI = F_3(RGDP, OPEN, EXR, CWTO)$ 

#### Model 4

 $FDI = F_4(OPEN,EXR,GDPG,INFL,CWTO)$ 

#### Model 5

 $FDI = F_5(OPEN,M2,GDPG,CWTO)$ 

**Data:** The data are collected from: the World Development Indicators (WDI) and Global Development Finance (GDF) databases, the databases of UNdata, Malaysia Economic Planning Unit (EPU), Malaysia Yearbook of Statistics, ASEAN Secretariat, annual report of Malaysian Industrial Development Authority (MIDA) and annual report of Malaysian Ministry of International Trade and Industry (MITI). This study employs annual data from 1970 to 2009. Data on FDI are based on Malaysian inward flows of FDI obtained from the database of UNCTAD compiled by the World Investment Report (WIR). The data are as of current values in USD, and they are converted into RM using the period average official exchange rate of RM against US Dollar. FDI is used as a dependent variable. Independent variables include real gross domestic product (RGDP), trade openness (OPEN), exchange rate (EXR), financial deepening (M2), inflation (INFL), the growth rate of GDP (GDPG) and the growth rate of GDP for Thailand, Indonesia and Philippines (TGRO=Thailand, INGRO=Indonesia, PGRO=Philippines). The accession of China into the World Trade Organization (WTO) is assessed as a dummy variable.

RGDP is derived by deflating the current GDP data in USD, using the GDP deflator with year 2000 as the base period, and then converted into RM using the period average official exchange rate. The trade openness, OPEN, is the ratio of total exports of goods and services and total imports of goods and services to GDP to represent Malaysia's trade liberalization policy. As for the exchange rate, EXR, it is based on the period average official rate of RM per USD. The depth of Malaysian financial environment is represented by the money supply of M2 monetary aggregate while inflation is represented by the changes in the GDP deflator. Finally, the growth rate of GDP is calculated based on the changes in the current GDP in USD, and all the growth rates of selected neighbor countries are the GDP growth rates obtained from the World Bank database. The variables are converted into logarithm except for the inflation and all the growth rates.

**Methods of Estimation:** Since this study focuses on time series data for the sample period of 1970 to 2009, the first stage is to test the stationarity of all variables to avoid having spurious or nonsense regressions. To assess the stationarity of each variable, each variable is exposed to unit root tests of Augmented Dickey-Fuller

(ADF) and Phillips-Perron (PP). After testing for the unit root, this study proceeds with the cointegration estimation techniques of bounds test (Pesaran et al., 2001). Finally, the vector error correction model (VECM) is estimated to determine the dynamic behavior of the FDI. This study highlights five different robust models with different combination of variables with FDI as the dependent variable. However, for the purpose of discussing the estimation technique, only Model 1 is highlighted. Based on Model 1, the conditional VECM is specified as follows:

$$\begin{split} \Delta LOGFDI_{t} &= c_{0} + \delta_{1}LOGFDI_{t-1} + \delta_{2}LOGRGDP_{t-1} + \delta_{3}LOGOPEN_{t-1} + \delta_{4}LOGEXR_{t-1} + \delta_{5}TGRO_{t-1} \\ &+ \delta_{6}INGRO_{t-1} + \delta_{7}PGRO_{t-1} \\ &+ \sum_{i=1}^{q} \varphi_{i}\Delta LOGFDI_{t-i} + \sum_{j=1}^{q} \omega_{j}\Delta LOGRGDP_{t-j} \\ &+ \sum_{m=1}^{q} \gamma_{m}\Delta LOGOPEN_{t-m} + \sum_{n=1}^{q} \tau_{n}\Delta LOGEXR_{t-n} + \sum_{r=1}^{q} \vartheta_{r}\Delta TGRO_{t-r} + \sum_{s=1}^{q} \varpi_{s}\Delta INGRO_{t-s} \\ &+ \sum_{v=1}^{q} \theta_{v}\Delta PGRO_{t-v} + \psi D_{t} + \varepsilon_{t} \end{split}$$

The first step of bounds testing approach is to estimate equations (2) by OLS in order to determine the existence of a long run relationship among the variables by conducting an F-test for the joint significance of the coefficients of the lagged levels of the variables as shown below:

H<sub>0</sub>: 
$$\delta_1 = \delta_2 = \delta_3 = \delta_4 = \delta_5 = \delta_6 = \delta_7 = 0$$
  
H<sub>1</sub>:  $\delta_1 \neq \delta_2 \neq \delta_3 \neq \delta_4 \neq \delta_5 \neq \delta_6 \neq \delta_7 \neq 0$ 

The null hypothesis indicates no long run relationship. In determining rejection or acceptance of the null hypothesis, the F-statistic will be compared to the critical value. Since this study employs a small number of observations, the critical values are referred from the tables provided by Narayan (2005). If the F-statistic is greater than the upper critical value of I(1), the null hypothesis of no cointegration is rejected. If it falls below the lower critical value of I(0), the null hypothesis of no cointegration cannot be rejected. If the F-statistic is between the lower and upper bounds, the result is inconclusive. Once the cointegration of the variables for each model is found, the conditional ARDL (p, q1, q2, q3, q4, q5, q6 - depending on the model) long run model for FDIt can be estimated, and this would involve selecting the orders of the ARDL using Schwarz Bayesian criteria (SBC). Equation (3) below represents conditional ARDL long run estimations of Model 1:

$$LOGFDI_{t} = c_{0} + \sum_{i=1}^{p} \delta_{1} LOGFDI_{t-i} + \sum_{i=0}^{q1} \delta_{2} LOGRGDP_{t-i} + \sum_{i=0}^{q2} \delta_{3} LOGOPEN_{t-i} + \sum_{i=0}^{q3} \delta_{4} LOGEXR_{t-i} + \sum_{i=0}^{q3} \delta_{5} TGRO_{t-i} + \sum_{i=0}^{q4} \delta_{6} INGRO_{t-i} + \sum_{i=0}^{q6} \delta_{7} PGRO_{t-i} + \psi D_{t} + \varepsilon_{t}$$
(3)

Finally, short run dynamic parameters of Model 1 are estimated by estimating an error correction model in (4) associated with the long run estimates. Coefficients of  $\varphi$ ,  $\omega$ ,  $\gamma$ ,  $\tau$ ,  $\vartheta$ ,  $\varpi$  and  $\theta$  in equation (4) are the short run dynamic coefficients of the models' convergence to equilibrium and  $\xi$  represents the speed of adjustment.

$$\begin{split} \Delta LOGFDI_{t} &= \mu \\ &+ \sum_{i=1}^{p} \varphi_{i} \Delta LOGFDI_{t-i} + \sum_{j=0}^{q} \omega_{j} \Delta LOGRGDP_{t-j} \\ &+ \sum_{m=0}^{q} \gamma_{m} \Delta LOGOPEN_{t-m} \\ &+ \sum_{n=0}^{q} \tau_{n} \Delta LOGEXR_{t-n} + \sum_{r=0}^{q} \vartheta_{r} \Delta TGRO_{t-r} + \sum_{s=0}^{q} \varpi_{s} \Delta INGRO_{t-s} + \sum_{v=0}^{q} \theta_{v} \Delta PGRO_{t-v} + \xi ecm_{t-1} \\ &+ \varepsilon_{t} \end{split}$$

**Unit Root Tests Results:** Results of the ADF and PP tests (refer to Table 1 and Table 2) verify the use of bounds test in which the dependent variable, the LOGFDI, is I(1) and all other variables are either I(0) or I(1). None of the variables fall under I(2).

Table 1: Unit Root Test Results based on Augmented Dickey Fuller (ADF)

Variables	Intercept Only		Trend and Inte	rcept
	Level	First Difference	Level	First Difference
LOGFDI	-2.1440	-7.1511**	-2.8425	-7.2551**
LOGRGDP	-1.8303	-5.0371**	-1.2315	-5.4185**
LOGOPEN	-1.3306	-4.6647**	-0.5222	-4.8791**
LOGEXR	-0.8880	-4.8512**	-3.3270	-4.7422**
LOGM2	-1.1686	-7.4054**	-3.4169	-7.5800**
INFL	-6.0377**	-7.7539**	-6.1024**	-7.7243**
GDPG	-4.8556**	-7.7562**	-5.5089**	-7.6504**
TGRO	-3.1676*	-6.3431**	-3.4223	-6.3072**
INGRO	-4.3315**	-6.9753**	-4.6341**	-6.8763**
PGRO	-3.3354*	-5.9545**	-3.3173	-5.8582**

Notes: \* and \*\* indicate 5% and 1% significance levels

Table 2: Unit Root Test Results based on Phillips-Perron (PP)

Variables	Intercept Only		Trend and Inte	ercept
	Level	First Difference	Level	First Difference
LOGFDI	-2.0989	-7.1541**	-2.8425	-7.2828**
LOGRGDP	-1.8303	-5.0500**	-1.3125	-5.4185**
LOGOPEN	-1.3253	-4.5495**	-0.6357	-4.7588**
LOGEXR	-1.0561	-4.5165**	-2.6462	-4.5912**
LOGM2	-1.3514	-7.4054**	-3.3512	-7.5194**
INFL	-6.0299**	-14.9897**	-6.0939**	-12.7946**
GDPG	-4.2260**	-11.9863**	-4.4477**	-13.9593**
TGRO	-3.1676*	-9.6255**	-3.4223	-10.7716**
INGRO	-4.3472**	-17.3123**	-4.6587**	-16.9799**
PGRO	-3.3796*	-7.4136**	-3.3661	-7.1616**

Notes: \* and \*\* indicate 5% and 1% significance levels

#### 4. Results and Discussion

This section highlights results and discussions of the main objective of this study: examining determinants of foreign direct investment (FDI). As mentioned earlier, determinants of FDI are examined using the bound test approach. The following topics emphasize the results and discuss each result pertinent to the mentioned objective.

**Descriptive Statistics:** Table 3 and Table 4 summarize the descriptive and correlation information of each variable. Table 3 shows mean, median, maximum and minimum values of the variables. The values of

skewness given in Table 3 indicate that most of the variables have long left tails except for the LOGEXR and INFL which have long right tails. As for the kurtosis, only the INFL and all four growth rates of GDP exceed the normal distribution of three where their distribution is peaked relative to the normal, while the rests are flat relative to the normal. The Jarque-Bera probabilities indicate that the growth rates of GDP for all four countries are not normally distributed at 1 percent significance level. Table 4 shows correlation matrices of the underlying variables. LOGFDI has positive correlations with LOGRGDP, LOGOPEN, LOGEXR, LOGM2 and INFL, while negative correlations with GDPG, TGRO, INGRO and PGRO. Even though some of the correlation coefficients are high, in excess of 0.8 such as the correlations between LOGFDI and LOGRGDP, LOGFDI and LOGOPEN, and LOGFDI and LOGM2, which may indicate the existence of multicollinearity, its existence may not bias the results and make them inefficient.

**Bounds Test Estimation Results:** Based on the endogenous variables of FDI, RGDP, OPEN, EXR, M2, INFL, GDPG, TGRO, INGRO and PGRO with the sample period of 1970 to 2009, a VAR lag order selection criteria of Likelihood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Information Criterion (SIC) and Hannan-Quinn (HQ) information criterion conclusively suggest a maximum lag of 2.Based on equation (2), Table 5 reports cointegration test results of the bounds test approach for models of 1-5. Given that the FDI is the dependent variable for models 1-5, results in Table 5 indicate that the calculated F-statistics for Model 1 = 6.8661 is greater than the upper bound critical value of 5.686 at the one percent significance level indicating that the underlying variables of Model 1 are cointegrated. For Model 2, Model 4 and Model 5, their F-statistics of 4.9046, 5.8575 and 5.8123 respectively are above their upper bound critical values of 4.443 and 4.630 at the 5 percent significance level. These imply the existence of cointegration relationships among the underlying variables for each model. The F-statistics for Model 3 is 4.4305, and it is above the upper bound critical value of 3.898 at the 10 percent significance level.

**Table 3: Descriptive Statistics** 

	LOGFDI	LOGRGDP	LOGOPEN	LOGEXR	LOGM2	INFL	GDPG	TGRO	INGRO	PGRO
Mean	9.574262	11.24383	0.129464	0.452784	10.37739	0.040510	0.109010	0.059750	0.060250	0.037500
Median	9.584281	11.23614	0.151472	0.418553	10.35590	0.038145	0.125498	0.060000	0.065000	0.045000
Maximum	10.46330	11.72309	0.343225	0.593771	11.30300	0.178576	0.519416	0.130000	0.100000	0.090000
Minimum	8.459022	10.66984	-0.159526	0.337834	9.308000	-0.086378	-0.279464	-0.110000	-0.130000	-0.070000
Std. Dev.	0.583364	0.324347	0.160687	0.083605	0.571830	0.050680	0.128206	0.042395	0.037244	0.033417
Skewness	-0.298178	-0.135391	-0.185471	0.522221	-0.116156	0.092981	-0.160291	-1.597730	-3.470069	-1.624756
Kurtosis	1.916357	1.758522	1.604784	1.761354	1.910746	4.061362	5.911740	7.851218	18.21309	6.317777
Jarque-Bera	2.549871	2.690983	3.473709	4.375169	2.067404	1.935117	14.30167	56.24213	466.0061	35.94496
Probability	0.279449	0.260412	0.176073	0.112187	0.355688	0.380010	0.000784	0.000000	0.000000	0.000000

After proving the existence of long-run cointegration relationships between the underlying variables for models 1-5, long run coefficients are then estimated using the ARDL approach. Table 6 reports the long run estimates by normalizing on FDI. Using the Schwarz Bayesian Criterion (SBC), a maximum of lag 2 is adopted for all models given the small sample size and the use of annual data (Narayan, 2005; Narayan & Siyabi, 2005). Results in Table 6 indicate that RGDP is not a significant variable in determining the inward flows of FDI for Malaysia. On the other hand, OPEN is found to be the most robust variable for the determinants of FDI. All five models that incorporate OPEN as one of their independent variables reveal OPEN to be a positive and significant variable at one and 5 percent levels. Results in general indicate that a one percent increase in OPEN leads to more that 4 percent increase in the inward flows of FDI. The insignificant of RGDP together with the significant of OPEN indirectly reflect the motive of FDI for Malaysia. Results of the two variables provide an indication that FDIs in Malaysia are focusing more on the export oriented strategy rather than trying to exploit the host country's market.

**Table 4: Correlation Matrices** 

	LOGFDI	LOGRGDP	LOGOPEN	LOGEXR	LOGM2	INFL	GDPG	TGRO	INGRO	PGRO
LOGFDI	1.000000									
LOGRGDP	0.907537	1.000000								
LOGOPEN	0.922094	0.963866	1.000000							
LOGEXR	0.490887	0.683465	0.688659	1.000000						
LOGFIN	0.902064	0.997712	0.951924	0.671627	1.000000					
INFL	0.032647	-0.109779	-0.070161	-0.152477	-0.112936	1.000000				
GDPG	-0.099990	-0.236163	-0.240008	-0.306133	-0.221922	0.684728	1.000000			
TGRO	-0.242420	-0.358311	-0.340267	-0.437428	-0.355938	0.104847	0.565227	1.000000		
INGRO	-0.233738	-0.326239	-0.370863	-0.480122	-0.309941	0.068734	0.629723	0.742164	1.000000	
PGRO	-0.077715	-0.095982	-0.069336	0.039243	-0.083546	0.338912	0.472757	0.289132	0.293069	1.000000

**Table 5: Cointegration Test Results** 

Table 5. Confedition Test Results											
Bound Test for Co	Bound Test for Cointegration:										
Critical Value Bounds of the F Statistics: Unrestricted Intercept and No Trend											
	90% level		95% lev	el	99% level						
T (k=4)	I(0)	I(1)	<i>I</i> (0)	<i>I</i> (1)	I(0)	I(1)					
35	2.696	3.898	3.276	4.630	4.590	6.368					
40	2.660	3.838	3.202	4.544	4.428	6.250					
T (k=5)	I(0)	I(1)	I(0)	<i>I</i> (1)	I(0)	I(1)					
35	2.508	3.763	3.037	4.443	4.257	6.040					
40	2.483	3.708	2.962	4.338	4.045	5.898					
T(k=7)	I(0)	I(1)	I(0)	<i>I</i> (1)	I(0)	I(1)					
35	2.300	3.606	2.753	4.209	3.841	5.686					
40	2.260	3.534	2.676	4.130	3.644	5.464					
Dependent Variabl	e: FDI										
	Mode	1(k=7)	Model 2(k=5)	Model 3(k=4)	Model 4(k=5)	Model 5(k=4)					
F-Statistics (T=37)	6.866	1***	4.9046**	4.4305*	5.8575**	5.8123**					

Notes: \*\*\*, \*\* and \* denote 1%, 5% and 10% significance levels respectively.

Unlike OPEN, even though EXR is found to be a significant variable, the sign is not as expected. Results indicate that a depreciation of RM by 1 percent is found to reduce the inflows of FDI by roughly 1.7 to 2 percent. Another variable that is found to be significant occasionally in the long run is the growth rate of GDP. Model 5 indicates that the growth rate of GDP is positive and significant at 10 percent level. The growth rate of GDP for selected neighbor countries is not significant. Interestingly, even though the growth rates of the neighbor countries are not significant, their negative signs may suggest that these countries could potentially become competitors for Malaysia in terms of attracting FDI. Conversely, the dummy variable of CWTO shows a positive coefficient in the long run, and it is significant at 10 percent level. As indicated by Aw and Tang (2010), the positive impact in the long run is due to the increase in opportunities to have access into the China's market. Finally, inflation rates (INFL) and the M2 are found to be insignificant. The insignificant of inflation may be due to the low inflation experienced by Malaysia. While for the financial market, it can be assumed that foreign investors do not heavily rely on our domestic financial market as their main source of capital since they can also get the capital from their own home countries.

Table 6: Estimated Long Run Coefficients using the ARDL Approach Selected Based on Schwarz Bayesian Criterion (SBC)

Dependent V	ariable is LOGFDI				
	Model 1	Model 2	Model 3	Model 4	Model 5
	(1,1,0,0,0,0,0,1)	(1,0,0,0,0,1)	(1,1,0,0,1)	(1,0,0,0,0,1)	(1,0,0,0,2)
LOGRGDP	-1.1359	-0.90677	-1.0185	-	-
	(0.87188)	(0.82363)	(0.85006)		
	[-1.3028]	[-1.1009]	[-1.1981]		
LOGOPEN	5.6911	5.6074	5.6159	4.0260	6.3232
	(1.5295)	(1.4879)	(1.5155)	(0.32352)	(2.4910)
	[3.7209]***	[3.7687]***	[3.7057]***	[12.4444]***	[2.5384]**
LOGEXR	-1.7275	-2.0226	-1.7747	-1.7888	_
LOGLAR	(0.95616)	(0.82590)	(0.85742)	(0.74140)	
	[-1.8067]*	[-2.4490]**	[-2.0698]**	[-2.4128]**	
	[-1.8067]"	[-2.4490]***	[-2.0698]***	[-2.4128]***	
LOGM2	-	-	-	-	-0.91311
					(0.83882)
					[-1.0886]
TGRO	-0.35111	-	-	-	-
	(1.3738)				
	[-0.25558]				
INGRO	-0.29654	-	-	-	-
	(1.8590)				
	[-0.15951]				
PGRO	-1.7205	-	-	-	-
1 0110	(1.2615)				
	[-1.3639]				
	[ 1.0007]				
GDPG	-	0.53107	-	0.48265	1.3078
		(0.32711)		(0.37909)	(0.69068)
		[1.6235]		[1.2732]	[1.8935]*
INFL	-	-	_	0.12975	_
·- <del>-</del>				(0.87758)	
				[0.14785]	
CWTO	0.43596	0.30796	0.36723	0.13633	0.14192
	(0.22479)	(0.19925)	(0.20411)	(0.11546)	(0.29452)
	[1.9394]*	[1.5456]	[1.7991]*	[1.1807]	[0.48188]
INPT	22.2456	19.8895	20.9351	9.8150	18.1574
	(9.6299)	(9.1569)	(9.4174)	(0.30074)	(8.3416)
	[2.3100]**	[2.1721]**	[2.2230]**	[32.6363]***	[2.1767]**

Notes: \*\*\*, \*\* and \* denote 1%, 5% and 10% significance levels respectively. Standard errors and t-statistics are in parentheses and brackets respectively.

In addition to the long run estimations, we also evaluate short run estimates as given in Table 7. Despite the insignificant of RGDP in the long run, some of the short run models suggest it to be positive and significant at 10 percent level. Similar to the long run estimates, OPEN is positive and significant at one percent level in all models tested. These short run results further strengthen the robustness of OPEN as a determining variable for the inward flows of FDI for Malaysia. Correspondingly, EXR is also found to be negative and significant in influencing the inward flows of FDI in the short run at 5 percent and 10 percent levels depending on the model. A one percent decrease in the value of the RM is reflected in a drop in the inward flows of FDI by 1.1 to 1.3 percent. The Malaysian growth rate of GDP is also found to be positive and significant in the short run.

Based on Model 5, a one percent increase in the growth rate of GDP is reflected in a 0.5 percent increase in the inward flows of FDI. As for the growth rates of GDP of Thailand, Indonesia and Philippines, even though their coefficients are not significant, they persistently show negative results. Opposite to the long run coefficients, CWTO is found to be negative and significant in affecting FDI at 1 percent level in all 5 models tested. Similar to the long run results, M2 and INFL are not significant in the short run.

Table 7: Error Correction Representation for the Selected ARDL Model selected based on Schwarz

**Bayesian Criterion (SBC)** 

Dependent Var	iable is dLOGFDI				
2 oponuono : m	Model 1	Model 2	Model 3	Model 4	Model 5
	(1,1,0,0,0,0,0,1)	(1,0,0,0,0,1)	(1,1,0,0,1)	(1,0,0,0,0,1)	(1,0,0,0,2)
dLOGRGDP	4.4204	-0.59743	2.8374	-	-
	(2.4691)	(0.47533)	(1.6177)		
	[1.7903]*	[-1.2569]	[1.7540]*		
dLOGOPEN	3.6899	3.6944	3.5254	2.9816	2.6324
	(0.74022) [4.9849]***	(0.71413) [5.1733]***	(0.70397) [5.0078]***	(0.44929) [6.6362]***	(0.61252) [4.2976]***
dLOGEXR	-1.1201	-1.3326	-1.1141	-1.3248	-
	(0.64999)	(0.56668)	(0.57178)	(0.58935)	
	[-1.7232]*	[-2.3516]**	[-1.9484]*	[-2.2479]**	
dLOGM2	-	-	-	-	-0.38013
					(0.26098) [-1.4566]
dTGRO	-0.22765	-	-	-	-
	(0.90170) [-0.25247]				
dINGRO	-0.19227	-	-	-	-
	(1.2001) [-0.16020]				
dPGRO	-1.1155	-	-	-	-
	(0.80562) [-1.3847]				
dGDPG	-	0.34990	-	0.35745	0.54443
		(0.19605)		(0.26834)	(0.19362)
		[1.7847]*		[1.3320]	[2.8118]***
dINFL	-	-	-	0.096092	-
				(0.64884) [0.14810]	
dCWTO	-0.63587	-0.70507	-0.66696	-0.72647	-0.82457
	(0.16779)	(0.15646)	(0.15208)	(0.16244)	(0.15005)
	[-3.7896]***	[-4.5064]***	[-4.3857]***	[-4.4724]***	[-5.4953]***
dCWTO1	-	-	-	-	0.35167
					(0.18639)
					[1.8867]*
dINPT	14.4234	13.1043	13.1421	7.2688	7.5590
	(4.7859)	(4.7508)	(4.5716)	(1.0521)	(2.1700)
	[3.0138]***	[2.7583]***	[2.8747]***	[6.9091]***	[3.4834]***
ecm(-1)	-0.64837	-0.65885	-0.62775	-0.74058	-0.41630
( 1)	(0.12488)	(0.11946)	(0.11792)	(0.10246)	(0.14044)
	[-5.1921]***	[-5.5152]***	[-5.3233]***	[-7.2279]***	[-2.9644]***
R-Squared	0.82118	0.79555	0.80747	0.78494	0.78596
R-Bar-Squared	0.75495	0.74784	0.76255	0.73476	0.73602
F-stat	15.4985***	19.4558***	25.1647***	18.2494***	18.3604***
DW-statistic	1.9314	1.8388	1.8278	1.6863	1.9907
D W - Statistic	1./317	1.0300	1.02/0	1.0003	1.7707

Notes: \*\*\*, \*\* and \* denote 1%, 5% and 10% significance levels respectively. Standard errors and t-statistics are in parentheses and brackets respectively.

Table 7 shows that the error correction terms are highly significant at one percent level for all 5 models with the correct negative sign, which ensure that the long run equilibrium can be attained. Depending on the

model, the error correction terms indicate that roughly 40 to 70 percent of the previous year's deviation from the long run equilibrium is restored in the current year. In addition, the adjusted R-squared of the error correction representation of all 5 models is more than 70 percent, indicating that more than 70 percent of the variation in the inward flows of Malaysian FDI is explained by independent variables in each model. Table 8 summarizes diagnostic tests of serial correlation, functional form, normality and heteroscedasticity for all five ARDL models based on LM version. All 5 models satisfy serial correlation, functional form and normality assumptions, while Model 1 and Model 3 fail heteroscedasticity test at 5 percent significance level. Nevertheless, according to Shrestha and Chowdhury (2005), since ARDL models can consist of a combination of I(0) and I(1) variable, "it is natural to detect heteroscedasticity."

Table 8: Diagnostic Tests (LM Version) of the Autoregressive Distributed Lag Estimates (ARDL)

	Model 1	Model 2	Model 3	Model 4	Model 5
Serial Correlation	0.065616	0.042109	0.040755	0.59848	0.21262
	$(0.798)^a$	(0.837)	(0.840)	(0.439)	(0.645)
	[1] <sup>b</sup>	[1]	[1]	[1]	[1]
<b>Functional Form</b>	0.13629	0.37189	0.60810	0.058450	2.5627
	(0.712)	(0.542)	(0.436)	(0.809)	(0.109)
	[1]	[1]	[1]	[1]	[1]
Normality	1.6442	2.2844	1.3651	2.6101	2.3933
	(0.440)	(0.319)	(0.505)	(0.271)	(0.302)
	[2]	[2]	[2]	[2]	[2]
Heteroscedasticity	4.1392	2.6843	3.8802	0.90223	1.2180
	(0.042)**	(0.101)	(0.049)**	(0.342)	(0.270)
	[1]	[1]	[1]	[1]	[1]

Notes: a,bNumbers in parentheses and brackets are probabilities and number of lags respectively.

#### 5. Conclusion

The main objective of this study is to identify determinants of the inward flows of FDI for Malaysia by employing the bounds testing (ARDL) approach to cointegration. Results show the existence of long run cointegration relationships among the underlying variables in all 5 models. Of all the variables, OPEN and EXR show consistent results in the short run as well as in the long run. OPEN has the highest significance level with a positive sign, and it can be considered as the most robust variable due to its consistency in maintaining its significance at one percent level both in the short run as well as in the long run and also in all models being tested. These results are consistent with the results of Ang (2008), Yol and Teng (2009) and Aw and Tang (2010). Since OPEN which represents the liberalization of the Malaysian economy could induce the inflows of FDI, policy makers should initiate policies that can enhance the trade openness. Since Malaysia has established Free Trade Zones and hi-tech parks for the convenience of investors to operate, the Government can always get feedback from the tenants of those FTZs and parks regarding the facilities provided and their expectations.

On the other hand, even though the EXR is found to be significant, its sign is not as expected. It is found to be negative and significant where the depreciation of RM would decrease the inward flows of Malaysian FDI in the long run as well as in the short run. These results contradict the results of some past studies (for example Almsafir et al., 2011; Yol & Teng, 2009) which indicate a positive relationship between the exchange rate and FDI. The negative relationship between EXR and FDI indicates that foreign direct investors prefer RM to appreciate in value. When RM appreciates in value, the value of assets that they are holding, particularly measured in RM, would also increase. GDP which represents the market size is significant in the short run but not in the long run which contradict the results of Ang (2008) and Ismail and Yussof (2003)but support the findings by Aw and Tang (2010). The insignificant of the GDP in the long run indicates that investors are not trying to exploit the local market. The significant of trade openness explains why the GDP is relatively not significant in the long run. Nevertheless, since GDP is one of important economic indicators of any country, in the short run, it will be used by potential investors to assist them in their decision of investing abroad. Based on the results of long run and short run estimations, we can see that foreign investors are more concern on the short run economic growth of the host country. Finally, the accession of China into the WTO has been

found to be negative and significant in affecting the inward flows of Malaysian FDI in the short run. However, in the long run, the results are positive and significant. These results strengthen the results by Aw and Tang (2010) and Cuyvers et al. (2008) where even though the accession of China in the WTO creates a shock in the short run to Malaysia, later, China's action has resulted in a positive spillover effect in the inward flows of FDI for Malaysia.

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### Impact of Transformational Leadership on Employees' Performance in Expor-based Small Medium Entreprises

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**Abstract:** The study is aimed at examining the effect of transformational leadership on employee performance through employee empowerment and organizational commitment as a mediating variables of the cluster of carving copper in Cepogo Boyolali. The research samples cover 30 employees of the CV. Intermedia Logam as part of a cluster of carving copper. Sample determination applies totals sampling or population sampling in which all members of the population are used as research samples. In examining the established model relationship, the data are analyzed by using path analysis. The results revealed: transformational leadership gives positive and significant effect on employee performance; employee empowerment gives positive and significant effect on employee performance; employee empowerment gives positive and significant effect on employee performance, employee empowerment as a mediating variables between transformational leadership and employee performance, and organizational commitment as a mediating variables between transformational leadership and employee performance, and organizational commitment as a mediating variables between employee empowerment and employee performance. This research suggests that companies disseminate the vision, mission and goals; conduct of training; and providing incentives to the agreement in order to achieve employment targets.

**Keywords:** Transformational Leadership, Employee Empowerment, Organizational Commitment, Employee Performance

#### 1. Introduction

The paradigm of competition that used to be a material or physical asset has shifted to knowledge-based competition (Tuomi, 1999). Hence, it requires both efficiency and effectiveness in the use of human resources as the foundation for organization in order to be able to compete and have a competitive advantage. The utilization of human resources as the basic capital must be followed by the development and renewal of the workers' capabilities and expertise so that every member of the organization is able to respond and be susceptible towards any changes, and therefore, every member of the organization supports the organization renewal (Khan, 2004). Thus, an organization requires continuous cooperation from various resources to grow bigger, stronger, firmer and more resilient to face any challenges and to win the competition. To ensure cooperation, a leader who can provide knowledge, expertise and capabilities in managing human resources is needed. Here, each section understands its duties and responsibilities to support one another and provide the best contribution for the organization. In a complex and ever changing business environment, it currently needs a leader who is able to anticipate the future and have relevant policies in today's complex situation. The essence of leadership is facilitating individual development to realize his potential (Haryanto, 2002).

There are various strategies that can be applied by organizations to develop and renew the capabilities and expertise of employees in facing more complex organizational problems. At this point, empowerment is one of the many ways in developing employees through employee involvement; that is, giving enough authority and responsibility to complete the task and to make decision (Chaudron, 2005). A leader has a strategic role as an agent of change in the process of empowerment since it involves the process of distribution of power (Khan, 2004). Therefore, a leader is required to have awareness towards the distribution of power and authority as part of the process of regeneration and continuous human resources upgrading to achieve optimal productivity and performance. The effectiveness and success of an organization are determined by the quality of the leader in leading the organization and the quality of the employees as members of the organization. Employees must find it interesting and have the sense of belonging so that they maintain their presence in an organization. The sense of belonging towards an organization will encourage employees to

perform his/her job well; even they are also willing to do work or duties outside his/her responsibilities for the sake of the sustainability of the organization.

Transformational leadership is a concept that is able to answer this challenge. Based on this concept, the duty of a leader is to motivate his/her subordinates to perform the work beyond their expectations and previous estimation. Transformational leaders are trying to raise subordinates' awareness by encouraging idealism and higher moral values, such as, freedom, justice, peace, balance, and humanity which are not based on emotional feeling such as fear, greed, jealousy and hatred (Burns in Yukl, 2009). As human beings, subordinates also have to fulfill their needs. Fulfilling the needs of subordinates will be beneficial to both the subordinates and the organization. Organization demands the willingness of its subordinates to succeed the objectives of the organization; meanwhile, the subordinates need a pleasant job, an opportunity to participate, adequate wages, an opportunity to be promoted, and a good relationship between superiors and subordinates. Steers and Porter (in Purwanto & Adisubroto, 2001) argued when the agreement between both parties can be performed fairly, it eventually fosters a high commitment of the subordinates towards the organization which stimulates the subordinates to work well and to be able to compete in tight and competitive conditions.

Organizational commitment can be interpreted as the relative strength of a person's identification and involvement in a particular organization (Mowday, 1979 in Yukl, 2009). The existence of employees with high commitment to the organization will lead the organization to a favorable condition. Such employees will compete with one another to help the organization by working more effectively in normal situation and will actively maintain the organization when unfavorable condition exists (Dessler, 2006). Employees with high commitment are likely to act in accordance with the values and norms existing in the organization, hence, deviation and disobedience can be prevented. Besides, such organizations with high committed employees will acquire higher efficiency and will not require a lot of supervision. On the other hand, such organizations having employees with low commitment will reduce the effectiveness of the organization (Gibson, 1978 in Purwanto & Adisubroto, 2001). Employee commitment to the organization is necessary since high commitment is correlated with low employee's turn over having moved to another job, absenteeism level, and the slowness of work can be reduced. In fact, it increases job satisfaction and higher awareness of the employees towards the existence and success of the organization. Organization needs employees willing to do anything exceeding their duties and work, even sacrificing themselves for the success and sustainability of the organization (Borman & Motowildo in Muchiri, 2002)

In addition, the commitment of an organization arises in an atmosphere providing opportunity for the employees to participate, and it can be created by the hands of the leaders. Pfefer (1996 in Khan, 2004) states the entanglement can only be created and maintained through participation. When people are involved in their humans side, the desire to participate is increasing, or in other word, participation increases engagement and engagement forms a commitment. Transformational leadership provides encouragement, and developing experiences to its followers (Yukl, 2009). It means they provide broad opportunities to its followers in order to exploit and develop their potentials. Every employee participating and involving actively with the company will strive to create and manifest his/her abilities in order to be in line with the objectives of the organization. Hence, the Transformational leadership is considered capable of forming the commitment of the employee. The export-based SME sector is considered as the industry having competitive spirit of which its products serve the international market performed by individuals or traders/mediator (RI-PIKM, 2002-2004). Issues on leadership style, the empowerment of the employee, organizational commitment and the performance of the employee are interesting issues to discuss. The export-based SME sectors have several characteristics; among others, sufficient competitiveness, domestic natural resource based, labor intensive, providing opportunities to work and vast market opportunities. For the SME of cooper carving crafts in Boyolali regency, the development on human resources covers improving design, capacity building in export-import and negotiation techniques and improving expertise in product quality. Creativity and innovation are considered as the determining factor of their products. The objectives of the study is to find out the effect of transformational leadership on employee empowerment, organizational commitment, employee performance as well as to determine the mediating variables on the effect of transformational leadership on employee performance and the effect of employee empowerment on employee performance in small-medium enterprise of cooper carving center.

#### 2. Literature Review

Leadership is a person's process in leading, guiding, influencing mind or thought, feeling and other person's behavior to achieve certain goal. In general, leadership is defined as the activity to influence a group of people towards the achievement of goals (Robbins, 1996). Meanwhile, Thoha (1995) argues that leadership is the activity to influence the behavior of others or the art of influencing human behavior, both individual and groups. Burns in Yukl (2009) defines transformational leadership as a process of raising the morale and motivation of leaders and subordinates to a higher level. Here, transformational leaders are trying to raise the awareness of the subordinates by encouraging higher idealism and moral values, such as, freedom, justice, peace, balance, humanity that are not based on emotional feeling such as fear, greed, jealousy and hatred. Bass in Yukl (2009) proposes a theory of transformational leadership based on the earlier ideas of Burns in Yukl (2009). The degree to which a leader is considered as transformational is mainly measured in the relation between the leader and his/her effect towards the followers. The followers of a transformational leader feel the presence of trust, admiration, loyalty and respect in the characteristics of the leader. They are even motivated to do more than what the leader initially expected them to do. There are various definitions on the word empowerment proposed by theorists. According to Chaudron (2005), empowerment is an assignment of responsibilities and authority to the workers in making decision regarding the development of products and decision making. Meanwhile, Khan (2004) states that empowerment is a continuous interpersonal relationship to establish trust between employees and the management. Further, Byars & Rue in Handoko & Tjiptono (2000) explain empowerment as a form of decentralization involving the assignment of responsibilities to the subordinates in decision-making process.

From the above definitions, there are some important points on the notion of what an empowerment is, namely: First, the assignment of responsibilities and authority to the employees. Second, empowering the agent of change since the distribution of power occurs in the empowerment process. Third, the existence of employee involvement in the process that involves employees in decision-making. Organizational commitment is often defined as: (1) a strong desire to remain a member of the organization; (2) the willingness to use all skills/efforts on behalf of the organization interests; (3) trust, the acceptance of values and goals of the organization. In other words, organizational commitment is an attitude reflecting the loyalty of employees to the organization and a continuous process in which members of the organization express their concern at the sustainable success and the life of the organization (Luthans, 1998). Dessler (2006) explains one of the definitions related to employee performance. According to Dessler, performance is the result of the work accomplished by a person or group of people within an organization in a certain period based on the authority and responsibilities of each member as an effort to achieve the goals of the organization legally in accordance with the law, moral and ethics. There are various strategies that can be applied by organizations to develop and renew the capabilities and expertise of employees in facing more complex organizational problems. Empowerment is one of the ways in developing employees through employee involvement; giving sufficient authority and responsibilities to complete the job and to make The leader has a strategic role in the empowerment process as the agent of decision (Chaudron, 2005). change since the distribution of power occurs in the empowerment process. (Khan, 2004). Therefore, a leader is required to have awareness towards the distribution of power and authority as the process of regeneration and enhancement of sustainable capabilities of the human resources in order to achieve optimal productivity and performance.

Commitment to the organization is influenced by many factors one of which is leadership factor that is considered as the influential factor in forming a commitment (Yukl, 2009). The growth of the subordinates commitment is related to whether the needs of the subordinates are fulfilled or not (Pfefer, *dalam* Yukl, 2009). It is commonly known that human beings have five kinds of needs. Those five needs, according to Maslow, are placed in a hierarchy starting from the lowest need to the highest need. The needs of the subordinates can be fulfilled by applying transformational and transactional leadership style. Bycio et al. (1995) argues that the lower need of the subordinates such as physical needs, security and affiliation can all be fulfilled by applying transactional leadership style. It is basically an exchange process between superiors and subordinates over previous agreement. On the other hand, the higher need of the subordinates such as self-esteem and self-actualization can be fulfilled, according to Keller (1992), through the practice of transformational leadership. The fulfillment of the higher needs will have an impact on increasing

commitment (Bass in Yukl, 2009). The fulfillment of the needs of employees actually reflects the success of empowerment conducted by an organization. Employees who have experienced the feeling of being "powerful" will have higher commitment comparing to those who still feel "powerless".

Several of the previous studies relevant to the issues in this research include the study of Bycio et al. (1995) entitled "Further Assesment of Bass's (1985) Conceptualization of Transactional and Transformational Leadership" and it has been published in the *Journal of Applied Psychology* using *Multifactor Leadership Questionaire* with the samples of members of nurses association. This study related to the transactional and transformational leadership style with effectiveness, performance and satisfaction towards the leader and the commitment to the organization. Five variables are used in this research and three of them are considered as transformational leadership variable—charismatic leadership, individualized consideration and intellectual stimulation. Meanwhile, the other two variables are considered as transactional leadership style—contingent reward and management by exception. The analysis applies correlation and multiple regression. The result shows high correlation between the study variables. The study also shows a strong and positive relationship between the variables of transformational leadership and the effectiveness, performance, satisfaction towards the leader and commitment to organization, as well as contingent reward variable. However, management by exception variable shows negative relationship and charismatic leadership is a variable having the dominant influence.

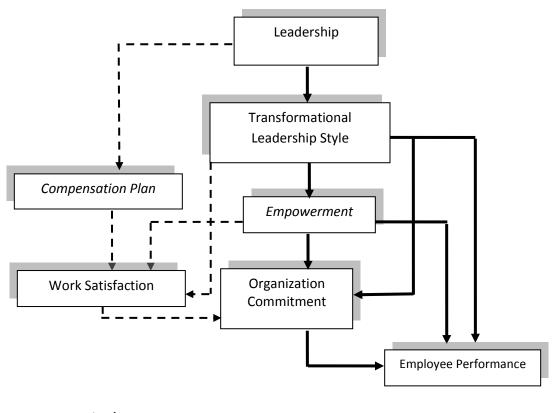
The next research is the study of Keller (1992) entitled "Transformational Leadership and the Performance of Research and Development Project Groups" and it has been published in the *Journal of Management*. The study is aimed at finding out the influence of transformational leadership style towards the performance of employees in several projects. The samples involve 342 respondents consisting of employees working in the project. The respondents are asked to assess the leadership style shown by the manager of the project. Statistical analysis uses path analysis and it is found that overall transformational leadership style variables have positive influence and are considered significant to the performance of the employees. The study of Schappe (2011) entitled "The Influence of Job Satisfaction, Organizational Commitment, and Fairness Perception on Organizational Citizenship Behavior" and it has been published in the Journal of Psychology. The study is aimed at finding the effect of job satisfaction, employee commitment towards organization and the perception of fairness to the behavior of the members of organization. The samples involve 130 employees of an insurance company in the Atlantic. The result of the regression analysis shows that the three independent variables are tested together and it reveals only employee commitment variable to the organization that has the lowest correlation to the behavior of the organization members.

Another research is conducted by Purwanto & Adisubroto (2001) entitled "The Relationship between Transformational and Transactional Leadership Style with Commitment to Organization". It has been published in the Jurnal Sosiohumanika. The study is aimed at applying the relationship between transformational and transactional leadership style towards organizational commitment. The research subjects are female nurses at Dr. Sardjito Hospital and Bethesda Hospital who have worked for at least one year. A number of 202 subjects are randomly determined. Data are collected by using two questionnaires— Multifactor Leadership Questionnaire (MLQ) to obtain data on leadership and Commitment Questionaire to data on the level of commitment to organization. Data analysis applies partial correlation analysis and multiple regression. The result shows positive and significant relationship between transformational and transactional leadership style and the organizational commitment. The study of Muchiri (2002) entitled "The Effect of Leadership Style on Organizational Citizenship Behavior and Commitment" has been published in Gadjah Mada International Journal of Business. It is aimed at finding the effect of transformational and transactional leadership style of the supervisor towards the behavior of the members of organization and the commitment of the subordinates at the Railway Company Indonesia. The subjects of the research are all male workers and are randomly chosen by using purposive random sampling method. The analysis of regression and correlation shows transformational and transactional leadership style has significant effect towards the behavioral variables of the members and commitment to organization.

The research of Khan (2004), entitled "The Key to Being a Leader Company: Empowerment" is published in the Journal of Personality and Participation and is aimed at determining the effect of leadership on empowerment and organizational performance in several manufacturing companies in the United States of

America. The empowerment process steps described in the model uses several stages, among others desire, trust, confident, credibility, accountability and communication. The results of the path analysis show that leadership has significant ands positive effect on the empowerment and organizational performance. The empowerment variable strengthens the effect of leadership on the performance of the organization, or in other words, empowerment variables are used as mediating variables. The latter is a research conducted by Chaudron (2005) entitled "Creating an Empowering Environment". It has been published in the Personal Journal. The study is aimed at determining the effect and relation of empowerment to business performance. Statistical analysis is used with multiple linear regression and product moment correlation. The result shows that there is a significant and positive effect of the empowerment to business performance. Based on the above concepts of transformational leadership style, employee empowerment, organizational commitment and performance of employees, the framework used in this study can be described in Figure 1 as follows:

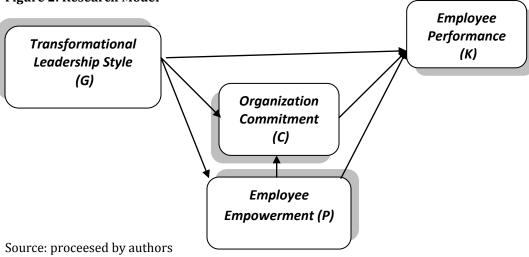
**Figure 1: Conceptual Framework** 



- - - not examined
to be examined
Source: proceesed by authors

The Model for this study based on the conceptual framework on Figure 1 as follow:

Figure 2: Research Model



#### 3.Methodology

The method of research applies survey method with the research type of explanatory research. The location of research is at the CV. Intermedia Logam in Tumang Kradjan village RT 04 / RW 14 Cepogo, District of Boyolali as part of the cooper craft clusters. The population in this study are the workers / employees at CV. Intermedia Logam with the total of 30 workers. All employees are used as samples of population, so the technique of collecting samples applies census or total sampling. Measurement of scale uses Likert scale. Techniques of data collection use documentation method, questionnaires, interviews, and library research method. Data analysis technique applies qualitative and quantitative analysis. The instrument used in the data analysis is path analysis.

#### 4. Results

All respondents are male (100%) with the majority of respondents are in the age of 31-35 that is equal to 36.6%. The majority of respondents are married with the percentage number of 73.3%. The majority of respondents are primary school graduates that is equal to 53.3% with the dependents of 1 – 2 persons. The majority of respondents has worked for > 4 years with the level of income per month at 500,000 Rupiah to 750,000 Rupiah. Mean variable of transformational leadership style is equal to 3.72, which means that the variable of transformational leadership style is in good condition. Mean variable of employee empowerment is at 3:27, which means that the variable of employee commitment is equal to 3.73, which means that the variable of employee commitment is in good condition. Mean employee performance variable is 3.10, which means that the variable performance of the employees is in good condition. All of question items are valid and reliable. It is reflected in all grades of corrected item total correlation (r value results) in which all question items are greater than the value of r table (0.349), as well as all the alpha value of each variable that is greater than 0.60. Results of regression analysis to determine the effect of transformational leadership style among the variables (G), empowerment of employees (P), organizational commitment (C) and employee performance (K), either directly or through mediating variables, have shown the following data

Table 1: Recapitulation of Influences Inter Variables Directly

		Regression	Sig. t	Correlation	Determitation	Decision to Ho
Relationship	Constanta	Coefficient		Coefficient	Coefficient	
G – K	8.439	0.105	.029	0.400	0.160	Rejected
G – P	-7.570	0.942	.000	0.659	0.434	Rejected
P – K	11.461	0.0727	.031	0.395	0.156	Rejected
P – C	35.187	0.239	.024	0.412	0.169	Rejected
G – C	11.685	0.549	.000	0.661	0.437	Rejected
C – K	7.647	0.162	.004	0.511	0.261	Rejected

Table 2: Recapitulation of Influences Inter Variables through Intermediary Variables

Relationship	Correlation Coefficient	Comments
G-C-K	$r_{GC} = 0.437$	Commitment organization variable as the intermediary variable
	$r_{CK} = 0.511$	bridging relations of transformational leadership style and
	$r_{GK} = 0.400$	employee performance.
P-C-K	$r_{PC} = 0.412$	Commitment organization variable as the intermediary variable
	$r_{CK} = 0.511$	bridging relations employee empowerment and employee
	$r_{PK} = 0.395$	performance.
G-P-K	$r_{GP} = 0.659$	Employee empowerement variable as the intermediary variable
	$r_{PK} = 0.395$	bridging relations of transformational leadership and employee
	$r_{GK} = 0.400$	performance

**Discussion:** In principle, this study is aimed on analyzing the influence between the variables in the research model, namely the effect of transformational leadership style variable, employee empowerment, and organizational commitment to employee performance. Other objectives are to identify the mediating variables of organizational commitment and employee empowerment that affect the style of transformational leadership on employee performance. The results of this study are empirically in line with the research of Bycio, Allen & Hackett (1995) who conclude that there is a strong and positive relationship between transformational leadership style variables on organizational commitment and employee performance. Some relationships between variables in this study are also empirically in line with the research of Keller (1992), Purwanto and Adisubroto (2001), Muchiri (2002), Khan (2004), and Chaudron (2005). Keller (2992) concluded that overall the variables of transformational leadership style have positive and significant impact on employee performance. The result of Purwanto&Adisubroto (2001) research also concludes that there is a positive and highly significant relation between transformational leadership style and organizational commitment. Multifactors Leadership Questionnaire (MLQ) and Commitment Questionnaire in the research of Purwanto and Adisubroto is used and adopted in this study in order to obtain data on transformational leadership and the level of commitment to the organization.

Muchiri also has the same conclusion. There is significant relationship between transformational leadership style and organizational commitment. Meanwhile, Khan (2004) concluded that the leadership variable has positive and significant effect on the empowerment and organizational performance and identifying variables as mediating variables. The result of Chaudron's (2005) research strengthens Khan's study that there is a relationship and a positive and significant effect between empowerment and business performance. Overall, the results of this study confirms that the concept of transformational leadership has the essence of sharing of power involving subordinates to make changes. By applying various managerial practices, leaders with transformational style are able to empower subordinates, in other words, they can significantly strengthen the confidence of the subordinates concerning their ability. With more powerful sense of self-efficacy, the employee will be able to work and succeed in a variety of challenging tasks. Many new leadership studies reveal that the practice of empowerment or creating a sense of power is the root of organizational effectiveness, especially in transition and transformation era. Today the concept of empowerment has appeared to be one of the new views to improve employee motivation and productivity. Through this concept, employees are entrusted with bigger authority and responsibility in decision making. Here, communication or exchange of information and knowledge between managers and employees is required so that the employees can truly understand their duties and can make a real contribution to the achievement of the

organization. Empowerment is different from participatory approaches in the past, which tend to only emphasize the collection of input / feedback from employees, but never uses it and / or is never accompanied with the delegation of authority.

Empowerment aspect is actually not absolute, but it is rather "a matter of degree". That is, the level of empowerment for individuals and teams doest not have to be in equal portions or levels. Even for a certain individual tasks or responsibilities in different field of decision (decision areas) can apply different levels of empowerment. Selection of the applied empowerment strategies can be done by considering two dimensions, namely job content and job context (Ford & Fottler, 1995 in Yukl, 2009). Job content describes processes and tasks required to perform a specific job. While the job context illustrates the correspondence between the work and the mission, goals, and objectives of the organization as a whole and the organizational setting in which the work is performed. It is recognized that this study has some limitations, though the utilization of the existing resources has already done optimally. The limitations are as follows: 1) the location of this study is limited to a single company in Cepogo copper craft carving, so that the results can not be used to generalize the study of transformational leadership style in Copper Carved Cluster in Boyolali; 2) the number of the respondents is quite small, i.e. 30 respondents, so that the data obtained do not describe the general conditions of employees on Copper Carved Cluster in Boyolali; and 3) information provided by respondents in the questionnaire may be bias, and they do not show the actual condition of the respondents.

#### 5. Conclusion and Suggestions

Some of the conclusions of this research are 1) there is a positive and significant effect between transformational leadership style variable to variable of employee empowerment. It is reflected on the significance value of 0.000 which indicates a value of less than 0.05 so that the regression model is feasible to predict the effect of transformational leadership style variable to employee empowerment variable; 2) there is a positive and significant effect between transformational leadership style variable to employee performance variable. It is reflected on the significance value of 0.029, which indicates a value of less than 0.05, so that the regression model is feasible to predict the effect of transformational leadership style variable to employee performance variable; 3) there is a positive and significant influence between the variables of employee empowerment on employee performance variables. This is reflected on the significance value of 0.031, which indicates a value of less than 0.05 so that the regression model is feasible to predict the effect of employee empowerment variable to employee performance variable; 4) organizational commitment variable is a mediating variable that relates the associations between variables of transformational leadership style and employee performance variables, or in other word, the relationship of transformational leadership style variable to variable of employee performance does not have a direct relationship; 5) employee empowerment variables are mediating variable relating variables of transformational leadership style and employee performance variables, or in other words, the relationship of transformational leadership style variable to variable employee performance does not have a direct relationship; and 6) organizational commitment variable is a mediating variable relating the associations between variables employee empowerment and employee performance variables, or in other words, the relationship of employee empowerment variable to variable employee performance is indirect relationship

Based on the conclusions above, the advices given are 1) transformational leadership style that is applied is still weak and needs to be improved, especially those regarding with notification to the employee's vision and mission, the involvement of employees in decision-making and award from the superiors when the employee works well. Therefore, it is necessary to encourage higher ideals and morals by giving inspiring motivation, stimulation and attention to employees; 2) empowerment of employees in terms of giving them responsibility and authority is still weak. This should be enhanced by providing the opportunity for employee to explore ideas, initiative and to conduct training for the betterment of employee performance; 3) the commitment of employees does not fully reflect employee loyalty. Existing rules need to be informed to employees, personal values which are in line with the rules of the company need to be fostered to enhance a sense of belonging; and 4) the employee's performance is still weak, especially on the number of defective products and the inability to fulfill the target required by the company. It is suggested that the company needs to improve the skills of employees with training and incentives, as long as target is reached.

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# The Influence of Understanding Tax-Accounting towards Compliance Tax Payers Business Entity in the Field of Industry (Empirical Study in North Makassar Tax Office)

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**Abstract:** Understanding of tax accounting has contributed greatly to the taxpayer compliance in meeting tax obligations. This study aims to determine the effect of accounting understanding of tax on tax compliance business entities in the field of industry in the North Makassar STO. The approach used in this study is descriptive-quantitative approach. The population in this study is all tax professional company manufacturing middle class listed on STO North Makassar, The sample in this study is the tax professionals who work for companies with criteria (1) have served at least one year, and (2) never fill SPT Agency. The sampling technique in this study using sampling techniques with incidental sampling method. Hypothesis testing using simple regression with the help of statistical software package for the social sciences (SPSS) version 22. Questionnaires were distributed utilizing an ordinal scale through a 5-point Likert Scale. Results from this study indicate that the value of the variable regression coefficient of understanding of accounting tax of 0.722 with t value of 8.832 is greater than the value that is equal to 2.040 t table so it can be stated that the understanding of tax accounting positive and significant (0.02 <0.05), thereby understanding the tax accounting has contributed greatly to the taxpayer compliance in meeting tax obligations. This means that the continuity of work between taxpayers with tax officials.

**Keywords:** *Understanding Tax Accounting, Compliance taxpayer* 

#### 1. Introduction

**Background:** Taxes are a major source of income of any country in the world. Certainly where taxes are very important in the implementation of the functions of state and government. In developed countries and growing, most potential state revenues through the tax has been used for the purposes of innovation and technological upgrading of enterprises and their national industries. Taxes are a common phenomenon as a source of state revenue prevailing in different countries. Reform of tax regulations in 1983 has rolled renewal of the tax system that was originally the official assessment system becomes self assessment system. Such systems give confidence to the taxpayer to count payment and report its own tax. In the mechanism of taxpayer self assessment system requires the media to be able to calculate the amount of tax paid, and the media is realized in the form of bookkeeping. In practice in Indonesia, the company concerned generally bookkeeping based financial accounting standards drawn up by the Ikatan Akuntan Indonesia and prepares financial statements fiscal through a reconciliation process (Sari, 2005). Tax accounting is used to facilitate the preparation of report tax (SPT) Period and Annual Income Tax to the Tax Office (KPP) where the taxpayer is registered. SPT Annual Income Tax must be completed in accordance with the financial statements of fiscal and must be attached between commercial accounting with tax accounting are policy differences in the recognition of income and expenses, this will impact any difference in the amount of tax owed between commercial accounting with tax accounting (Ernawati and Wijaya, 2011). To make the financial reports right it should be understood the accounting process. Because of the financial statements is as a reference for determining the tax rate, if there is a mistake in making financial reports, the value of the resulting tax was wrong. Bookkeeping in the business is very necessary and very supportive in taxpayer compliance.

Basically the entire taxpayer shall make bookkeeping as stated in the Act KUP Article 28 paragraph 1 that require the individual taxpayer conducting business or independent personal and corporate taxpayers in Indonesia are required to keep books (Rahayu, 2010: 219). For that each taxpayer is required to have knowledge or understanding of good tax accounting in order to keep books properly and correctly which will be reported in the tax return in order to create compliance (Directorate General of Taxation, 2012). Some research on tax compliance has been conducted by (Rulyanti and Wardhani, 2005) in his research on understanding the effect of tax accounting on tax compliance in KPP Palembang. The independent variables used are tax accounting while the dependent variable is the taxpayer compliance. The results show that

understanding of accounting and significant positive effect on tax compliance in meeting tax obligations. Ernawati and Wijaya (2011) in his research on understanding the tax accounting on tax compliance business entities in the field of trade in the tax office pratama Banjarmasin. This study consists of the independent variables and the dependent variable, where the independent variable is understanding the tax accounting and which is the dependent variable is the taxpayer compliance entities in the field of trade. The results showed that the Tax Accounting Understanding factors contributed greatly to the taxpayer compliance in meeting tax obligations. This means that the continuity of work between taxpayers with tax officials. This research is the development of research and (Ernawati and Wijaya, 2011).

#### 2. Literature Review

**Understanding Of Tax Accounting:** Understanding of tax (Veronica, 2009: 7) states "the tax information that can be used taxpayer as a basis for action, make decisions and to take direction or a particular strategy in relation to the implementation of rights and obligations in the field of taxation". (Arifin, 2007: 12) says understanding the tax accounting aims to understand the tax laws in force and effect for the company and the presentation of the fairness of the financial statements of a company. Understanding of tax accounting does not emphasize the mastery of tax laws but also emphasizes how the application of these regulations within the company. Company is expected to conduct an analysis of the transactions related to taxation and presenting them in financial statements. However, this may because he did inspection of taxpayers by fiskus that could have caused outstanding tax returns to be paid taxpayers be bigger. Therefore, tax accounting (Tax accounting) is very important because it emphasizes the need for understanding of good tax by the taxpayer (especially corporate taxpayers) to avoid errors in the recording because it may lead to examination by the tax authorities (Agoes and Trisnawati, 2009: 10). The tax planing is a reduced the payment of tax all types of taxes or delays in the payment of taxes to the following years without breaking the provisions of a statute tax walk in the manner; choose right methods, use facilities taxation or a stimulus taxation and use cracks the act of taxation . Any activity or a transaction that would done so that considered influence taxation (Pardiat, 2009: 3-2).

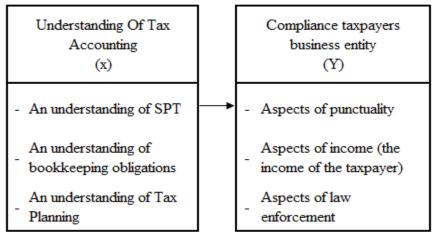
**Definition of Tax Accounting:** Simply put tax accounting can be defined as an accounting system that calculates, handle, record, analyze and make even the taxation strategy with respect to economic events (transactions) of the company (Yuniasih, 2014). Indonesian compliance according to the dictionary means submission or obedient to the teachings or rules (Abdillah and Prasetyo, 2012). According Nurmantu (2005: 148) tax compliance can be defined as a situation where the taxpayer fulfills all tax obligations and the implementation of the right of taxation. Then tax compliance is an adherence to the provisions or the rules of taxation that are required to be implemented. There are two kinds of compliance according to Rahayu (2010: 138), namely: Formal compliance is a state where the taxpayer formal obligations in accordance with the provisions of the tax laws. Compliance material is a state where the taxpayer is substantive or material nature to fulfill all terms of taxation, according to the contents and spirit of tax laws. Compliance material can also include formal compliance. As for taxpayers, the benefits of tax compliance as proposed Rahayu (2010: 143) is as follows: Give a time limit issuance of Decree Returns Introduction Excess Tax (SKPPKP) no later than three (3) months after the application of tax overpayment proposed taxpayer received for income tax and 1 (one) month for VAT, without through investigation by the Directorate General of Taxation (DGT). The policy of controlling the acceleration of the Decree of Introduction Excess Tax Returns (SKPPKP) into at least two months and seven days for the income tax to VAT.

In the practice of execution that took place today at the Directorate General of Taxes in accordance with law No. 28 of 2007 concerning General Provisions and Tax Procedures, tax compliance indicators according Simanjuntak and Mukhlis (2012: 103), among others, can be seen from: Aspects of punctuality, as an indicator of compliance is the percentage of reporting tax return submitted on time in accordance with prevailing regulations. Aspects of income or the income of the taxpayer, as an indicator of compliance is the willingness to pay installments of tax liabilities (income tax) in accordance with applicable regulations. Aspects of law enforcement (sanctioning), as an indicator of compliance is payment of tax arrears are set based on Tax Assessment Letter (SKP) before maturity.

**Industry Definition:** Industry is a business or activity raw material processing finished or semi-finished goods into finished goods with added value for the benefit (Raha; 2015). The types of industries based on the

Minister of Industry No.19 / M / I / 1986: Basic chemical industries, such as cement, pharmaceuticals, paper, fertilizer, and so on, Industrial machinery and base metals, such as aircraft industry, motor vehicles and textiles. Small industries, such as industrial bread, stove oil, snacks, ice, and so on.

Figure 1: Framework



#### 3. Methodology

**Population, Sample and Data Collection Techniques:** The population in this study is all taxpayer industry company listed on Tax Office North Makassar. The sampling technique in this study using a sampling technique with purposive sampling method, the sampling technique subjectively assuming that the sample is representative for the research (Sugiyono, 2013). In this case study with purposive sampling techniques set out some criteria for the sample as follows:

- a. The entire corporate taxpayers listed industrial companies in Tax Office North Makassar.
- b. Industrial companies and large middle class.

**Analysis Method:** This study uses a simple regression studies. According (Bungin, 2005) is based on a simple regression causal relationship (casual) one independent variable with the dependent variable, the data obtained from the questionnaires completed by the taxpayer, by the formula:

$$Y = \alpha + \beta X + e$$

Where:

Y = Compliance corporate taxpayers

X = Understanding tax accounting

 $\alpha$  = the value of the intercept (constant)

 $\beta$  = coefficient of regression

e = error (error rate)

$$\alpha = \frac{\sum y - b \sum y}{n} \qquad \beta = \frac{n \sum xy - \sum x \cdot \sum y}{n \cdot \sum x^2 - (\sum x)^2}$$

#### 4. Results and Discussion

**Descriptive statistical analysis of data:** Descriptive statistics were used to summarize the data dissemination of research variables are Understanding Accounting and Tax Compliance Taxpayer Corporate In the field of Industry has done well. Here are the results of recapitulation data.

Based on the data in the table above for the measurement instruments Tax Accounting Understanding with an average of 39.59 is greater than the standard deviation of 4.765 indicates a good spread of data. The same is the Taxpayer Compliance instrument in the field of Industrial Corporate with an average of 38.09 is greater than the standard deviation of 5.164. It can be concluded that the spread of the data on the instrument

Understanding Accounting and Tax Compliance Taxpayer Corporate In the field of Industry in this study is said to be good because the average of each instrument is greater than the standard deviation.

**Table 2: Descriptive Statistics Variable Research** 

	N	Minimum	Maximum	Mean	Std. Deviation
Understanding of Tax Accounting	32	29	45	39.59	4.765
Compliance corporate taxpayers		29	45	38.09	5.164
Valid N (listwise)	32				

Source: SPSS 22.0 Output For windows based on research results.

Calculation Regression Coefficients and Regression Equations: After the results of classical assumption test done and the results overall showed regression model to meet the assumptions of classical, to answer hypothetical regression analysis simple by Understanding Tax Accounting (X) as the independent variable and the Taxpayer Compliance Enterprises In the field of Industry (Y) as the dependent variable. In this study, used a simple regression equation. Simple regression can be analyzed because it is based on the causal relationship (causal) of the dependent variable with the independent variable. Simple regression equation is: By the formula:

Y = a + bX + e

Where: Y = Compliance corporate taxpayers in the area Industry

a = Constant

b = koefensien regression

X = Understanding Tax Accounting

e = Error

For a simple regression equation, it can be seen as follows:

**Table 4: Simple Regression Testing Equation** Coefficients<sup>a</sup>

			Unstandardized Coefficients		Standardized Coefficients		
Model			В	Std. Error	Beta	t	Sig.
1	(Constant)		1.623	4.158		.390	.699
	Understanding of Accounting	Tax .921	.104	.850	8.832	.000	

a. Dependent Variable: Compliance corporate taxpayers

Source: SPSS 22.0 Output For windows based on research results

From the calculation table above, can be made simple regression equation of this study as follows:

$$Y = 1,623 + 0,921X + e$$

The above equation can be interpreted:

Regression coefficient (b) for the variable X is positive. This indicates that the variable understanding of tax accounting have a positive influence on tax compliance entities (variable Y).

Correlation or the relationship between variables X and Y is 0.85. That is the relationship between the two variables is strong. So increasing understanding of accounting, the tax would also increase the compliance of corporate taxpayers in meeting their obligations.

**Hypothesis test (t-test):** Testing was conducted to observe the magnitude of the relationship between the variables examined in the Likert scale measuring and analyzing and evaluating the extent of the influence of Understanding Tax Accounting for Taxpayer Compliance In the field of Industrial Corporate in North Makassar STO. For it is necessary to test the previous hypothesis "Understanding the Tax Accounting affect the Taxpayer Compliance In the field of Industrial Enterprises in North Makassar STO".

From the research, it was found that the regression coefficients, t and significant values are as follows: Y = 1,623 + 0,921X + e

Table 5: Output t*Count* on coefficients Coefficients<sup>a</sup>

			Unstand Coeffici	dardized ents	Standardized Coefficients		
Model		В	Std. Error	Beta	T	Sig.	
1	(Constant)		1.623	4.158		.390	.699
	Understanding Accounting	of	Tax .921	.104	.850	8.832	.000

a. Dependent Variable: Compliance corporate taxpayers

Source: SPSS 22.0 Output For windows based on research results

T-test can be seen in the table above is the value of t with a value of t with a value of df = n - k - 1 = 32-1-1 = 30, then t-table obtained is 2.040. In the table 4.10 Tax Accounting Understanding the value in the column amounted to 8.832 t. Based on these data, it is known 8.832> 2.040. Meaning Understanding Tax Accounting affect the Taxpayer Compliance Corporate In the field of Industry. From the results of this calculation, then H0 is rejected and H1 accepted meaning significant regression coefficients. With so it can be concluded that the understanding of tax accounting has a positive and significant impact on tax compliance body.

**Determination Analysis:** Analysis of the coefficient of determination (R2) function to see the extent to which the overall independent variables can explain the dependent variable. The coefficient of determination is between 0 and 1. If the coefficient of determination is getting closer to 1, the ability to explain the independent variable on the dependent variable is the stronger, which means that the independent variable provide all the information needed to predict the variation of the dependent variable. While the value of the coefficient of determination (R square) is small means showing the ability of the independent variables in explaining the dependent variable is limited (Ghozali, 2011: 97). Here are the results of testing the coefficient of determination shows the influence of independent variables on the dependent variable. This coefficient sought to determine how much the change of tax compliance in the field of industry entities that can be explained from the understanding of tax accounting. Based on the results of data processing of the obtained value of the coefficient of determination (R2) as follows:

Table 6: Results of coefficient determination test Model Summary<sup>b</sup>

				Std.	Error	of	the
Model	R	R Square	Adjusted R Square	Estir	nate		
1	$.850^{a}$	.722	.713	2.76	660		

a. Predictors: (Constant), Understanding of Tax Accounting

b. Dependent Variable: Compliance corporate taxpayers

Source: SPSS 22.0 Output For windows based on research results

Based on the above table are known R square of 0.722. Based on the R-square value of this can be said that it amounted to 72.2% variable tax compliance in the field of industrial enterprises can be explained by understanding the tax accounting, whereas tax compliance in the field of industrial enterprises that can't be explained by other variables not included by researchers was 27.8% (100% - 72.2%). This suggests that factors understanding of tax accounting (X) have a positive influence on tax compliance body (Y) in meeting tax obligations. While other variables not examined in this study, for example, variable understanding of taxation procedures, socialization taxation, law and tax law and others. Statistically based testing provides evidence that the understanding of tax accounting and significant positive effect on tax compliance body. It means that there is influence between variable understanding of tax accounting and tax compliance business entities in the field of industry in the North Makassar STO.

The amount of Standard Error of the Estimate (SEE) is 2.76660 (variable understanding of accounting for taxes) and Figures Standard Deviation (STD) can be seen on the descriptive statistic of 4.765. Standard Error of the Estimate (SEE) is smaller than the figure Standard Deviation (STD), the figure SEE good to be a predictor in determining the compliance of corporate taxpayers (SEE <STD). Data analysis and hypothesis testing results, a simple regression results obtained from this study that the understanding of tax accounting effect on tax compliance business entities in the field of industry. Assuming other factors that affect the size of taxpayer compliance body is considered constant. Variable X with figures regression coefficient of 0.921 indicates that the greater understanding of tax accounting, the greater the influence on taxpayer compliance in paying their income taxes. Based on the respondents that the indicator "Understanding concerning the obligation to submit an annual tax return" has the highest value at 22 respondents or 69% who strongly agreed that the annual tax return is a letter that is used by the taxpayer to report the calculation and payment of taxes. Then in the second indicator "Understanding of Liability Bookkeeping" has the highest value that is equal to 20 respondents or 62% agreed that the board of the company, association, airlines, agencies, and entities who run companies whose profits taxed must keep books, and 2 respondents or 6% who expressed doubt in understanding the accounting obligations. then the indicators third "Understand About Tax Planning" has the highest value that is equal to 21 respondents or 66% who strongly agree that to understand tax planning by choosing the right method taxpayer to minimize tax payments without violating the provisions of tax laws, and only 1 or 3% of respondents who expressed doubt or not in favor of an understanding of tax planning. Based on the respondents that the indicator "Understanding Aspects Timeliness in Delivering the Notice" has the highest value that is equal to 16 respondents or 50% who strongly agree that the reporting of tax returns submitted on time according to regulations and a low of 1 respondent or 3% which expressed doubt or not in favor of the statement. Then in the second indicator "Understanding Aspects of Income or Income Taxpayer" has the highest value at 22 respondents or 65% who agree that the profitability of the company is one of the factors that affect the company's compliance and comply with tax regulations for profitability will press the company to income tax report, and the lowest as much as 2 or 6% of respondents who expressed doubt or not in favor of this claim. Then the indicators third "Understanding Sanctions Applicable Against the taxpayer" has the highest value that is equal to 21 respondents or 66% who agree that criminal sanctions (criminal fines, confinement / imprisonment) as a means of last sentence used the tax authorities that the norms of taxation obeyed.

### 5. Conclusion

Based on the discussion of research that has been described previously. After a test data using simple regression analysis can be explained that when the understanding of tax accounting increased by 1%, the taxpayer compliance in the field of industrial enterprises increased by 0.921%. From the results of calculations by t-test, can also be obtained that the understanding of tax accounting and tax compliance business entities in the field of industry are positive and significant impact on the confidence level ( $\alpha$  = 0.05) to get a significant level of 0.000. Understanding of tax accounting has contributed greatly to the taxpayer compliance in meeting tax obligations. This means that the continuity of work between taxpayers with tax officials. During taxpayers understand the tax accounting, the taxpayer will be obedient to calculate, pay, and report on their income tax openly and honestly.

**Suggestion:** As for suggestions that can give the writer associated with this study are as follows: For the DGT (government). To further enhance the socialization in spreading the tax rules newest covering procedures for calculation, reporting payable tax, the applicable tax rate, the sanctions or penalties that apply, and provide a great service to the taxpayer which raised awareness to comply with the obligations taxation. For taxpayers. Understanding correctly and in a timely manner so that development in this country regarding the accounting and tax provisions that must be known by the taxpayer because then there will be no negligence / difficulty in carrying out tax payments. For further research. It is hoped that further research further investigate the other factors that have an impact on taxpayer compliance.

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### Labor Force of the Visegrád Group Countries in the Context of Demographic Changes-Selected Aspects

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**Abstract:** The process of reduction of the number of births, accompanied by longer life expectancy, will have serious consequences for the supply of labor force (shrinking of the working age population) on the future labor market. Labor market participation of the Visegrád Group residents is increasingly higher. In this situation, promoting labor market participation among the elderly seems a significant solution to mitigate the effects of population ageing. In view of the above, the aim of the paper is to present the impact of demographic changes on the size of labor force in the Visegrád Group countries.

**Keywords:** Labor force, labor market, demographic trends, population ageing, active population

### 1. Introduction

In the period of transformation, societies of these countries underwent deep demographic, economic and social changes. A low birth rate and an increased number and percentage of the elderly are phenomena that have been observed in the Visegrád Group countries for over ten years (Philipov & Dorbritz, 2003; Frejka, 2008; Sobotka, 2008). They can cause certain difficulties in demographic development and pose a huge challenge for social and economic policies of these countries. After accession to the EU, unfavorable tendencies in population reproduction in the analyzed countries have continued, especially in the context of a labor force figure (Skibiński, 2009). This is a very important issue, as labor force depends, among other things, on a growth level of working age population. According to Holzer & Serek (2000), " in the face of current changes in the population age structures, it is now necessary to strengthen the sense of intergenerational responsibility in the society for the elderly, but the role of social responsibility for their fate will probably grow". In view of the above, the main aim of this publication is to present the impact of demographic changes on the size of labor force<sup>1</sup> in the Visegrád Group countries. For achieving this research objective, selected demographic indicators as well as labor market participation and employment indicators for specified study periods were analyzed. Special attention was given to analysis of determinants of labor market participation among population in these countries, as active population is often equated with real labor force. Due to a wide scope of the subject, this publication will present only the most significant relationships.

#### 2. Methodological information

The quantitative and qualitative analyses used herein were conducted based on data from Eurostat and OECD Statistics statistical databases, taking into account demographic projections. Absolute increases and dynamics indicators (single base and chain ones) were the methods used for time series changes. The temporal scope of the analyses was largely determined by data accessibility and the fact that the Visegrád Group countries started the process of system transformation around the same time, joining the European Union in 2004. The year 1990 was chosen as the beginning of the period of temporal comparison. The following study periods were selected to indicate the dynamics of changes: (before the EU accession: 1990 - 2004 - it refers to demographic analysis), (after the EU accession: 2004 -2013, 2013 - 2060). For every of the characteristics discussed, spatial comparisons were made, with a country accepted as a comparison unit.

<sup>&</sup>lt;sup>1</sup> Labor force (labor supply). Working age population actively participating in the labor market. For the purpose of this analysis, the working age is from 15 to 64 (after Eurostat).

### 3. Demographic trends in the Visegrád Group countries and their impact on labor force - quantitative dimension

The dynamics of the process of population ageing can be considered in two aspects: as changes in the population age structure between two selected time periods or as continuous changes (e.g. annual) in the age structure, which form a trend (Kurek, 2008; Lutz, 2010). In general, the bigger the dynamics of the process, the bigger the increase in the share of the elderly and the share of young population. The relationship between the past and present development of the processes that are part of natural growth on the one hand and future age structures of population on the other hand is obvious and has a character of feedback. It is also obvious that both a low birth rate and increasing life expectancy contribute to the intensification of the process of population ageing from the bottom of the age pyramid (i.e. decreasing share of young people) and from the top of the age pyramid (increasing share of the elderly) (Jóźwiak, 2013). What is important for the demographic future in the countries analyzed is the pace of this process as well as the process of transformations of the population age structure, understood as changes in proportions of the different age groups. In view of the above, the starting point for analyses will be presentation of the population pyramid by age groups (figure 1) in the European Union countries.

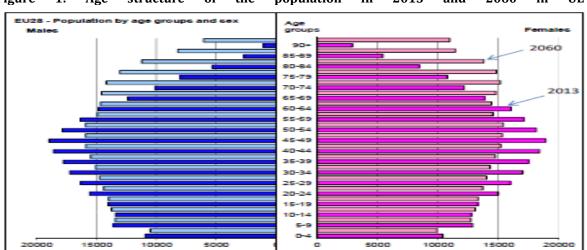


Figure 1: Age structure of the population in 2013 and 2060 in UE 28

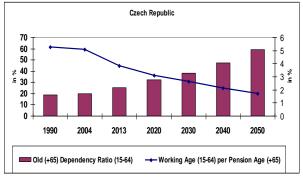
Source: Eurostat EUROPOP 2013 data

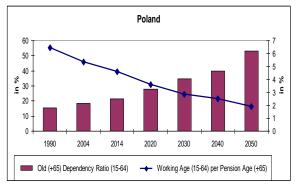
The population pyramid presented in fig 1 shows that the age structure of the EU population is projected to change dramatically. While in 2013 the most numerous cohorts for both males and females are around 45 years old, in 2060 the number of elderly people is projected to account for an increasing share of the population, due to the combination of the numerous cohorts born in the 1950's and 1960's and the continuing projected gains in life expectancy. At the same time, the base of the age pyramid becomes smaller due to below replacement fertility rates. As a consequence, the shape of the age-pyramids gradually changes from pyramids to more evenly sized pillars. The proportion of young people (aged 0-14) is projected to remain fairly constant by 2060 in the EU28 and the euro area (around 15%), while those aged 15-64 will become a substantially smaller share, declining from 66% to 57%. Those aged 65 and over will become a much larger share (rising from 18% to 28% of the population), and those aged 80 and over (rising from 5% to 12%) will almost become as numerous as the young population in 2060 (The ageing report, 2014). This shows a clearly regressive character of the age structure of the population in the EU countries. Processes taking place in the Visegrád Group countries coincide with the general European tendency, but are more intensive. The phenomenon of labor force ageing was also evident when the analysis took into account the old-age-dependency ratio², which data in Fig. 2 seems to confirm.

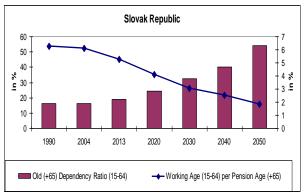
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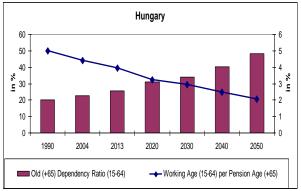
<sup>&</sup>lt;sup>2</sup> Old–age-dependency ratio. According to Eurostat, it is quotient of the number of people aged over 65 to the number of people aged 15-64.

Figure 2: Old-age-dependency ratio in the Visegrád Group countries between 1990 and 2050 taking into account demographic projection









Source: Own study based on: Eurostat data

In the first analyzed period, i.e. 1990 - 2004, the pace of labor force ageing in the different countries was at a similar level, as shown by the values of the old-age-dependency ratio. We can thus see clear convergences between analyzed countries in this respect. However, the highest value in this period of analysis was recorded in Hungary and in the Czech Republic, whereas the lowest in Poland and Slovakia. In the second analyzed period (i.e. 2004 - 2013), the upward trend in the old-age dependency ratio in the countries examined increased. This process should be expected to intensify in the future, especially in Poland and Slovakia. By analyzing observed demographic changes, it is possible to predict not only further ageing of labor force, but also their shrinking, which data in table 1 seems to confirm.

Analysis of the data in table 1 allows a few important detailed conclusions to be drawn. First, between 2990 and 2004, a clear increase in the percentage of working age population can be observed. However, the growth rate of this population group varied in the countries analyzed. The biggest working age population growth occurred in Slovakia (growth by 11.7%) and in Poland (growth by 7.7%), whereas the lowest in Hungary (growth by 0.7%) and in the Czech Republic (growth by 5.8%). Second, between 2004 and 2013, the situation looked different. This period saw clear differences in the growth dynamics of working age population. Only Poland and Slovakia recorded a slight increase in this group of population. Third, projections data indicates that the above trends will continue, the labor force will further shrink and the overall population will decrease. We can thus conclude that the decrease in the working age population growth was especially visible in the analyzed countries after 2004. Among the causes of labor force ageing and shrinking are lower fertility rates and longer life expectancy. Table 2 presents selected demographic indicators for the Visegrád Group countries.

Table 1: The number of working age population (15-64 years old) in the Visegrad Group countries in

Years	Working age	population		•	g age population l population	percentage in	Total population change
	(in thousands)	Dynamics index single base 1990 = 100	chain	in (%)	Dynamics index single base 1990 = 100	chain	(in%) 1990 =100
Czech F	Republic						
1990*	6843,4	100,0	-	66,0	100,0	-	in 2013
2004*	7239,7	105,8	105,8	70,9	107,4	107,4	+1,2
2013*	7153,2	104,5	98,8	68,1	103,2	96,0	
2020^	6801,0	99,3	95,1	63,8	96,6	93,7	in 2060
2040^	6619,0	96,7	97,3	58,0	87,9	90,1	-5,5
2060^	6247,0	91,3	94,4	56,4	85,4	97,2	
Poland							
1990*	24794,0	100,0	-	65,2	100,0	-	in 2013
2004*	26720,0	107,7	107,7	70,0	107,3	107,3	+1,2
2013*	27148,0	109,5	101,6	70,5	108,1	100,7	
2020^	25456,0	102,7	93,8	66,3	101,7	94,0	in 2060
2040^	22511,0	90,8	88,4	62,2	95,4	93,8	-12,7
2060^	17951,0	72,4	79,7	54,1	83,0	87,0	
Slovaki	a						
1990*	3413,8	100,0	-	64,4	100,0	-	in 2013
2004*	3815,6	111,7	111,7	71,0	110,2	110,2	+2,2
2013*	3852,8	112,8	100,9	71,1	110,4	100,1	
2020^	3688,0	108,0	95,7	68,1	105,7	95,8	in 2060
2040^	3203,0	93,8	86,8	62,8	97,5	92,2	-13,2
2060^	2429,0	71,1	75,8	53,3	82,7	84,8	
Hungar	y						
1990*	6889,9	100,0	-	66,4	100,0	-	in 2013
2004*	6941,9	100,7	100,7	68,7	103,4	103,4	-4,7
2013*	6746,0	97,9	97,1	68,2	102,7	99,2	
2020^	6397,0	92,8	94,8	65,3	98,3	95,7	in 2060
2040^	5809,0	84,3	90,1	61,1	92,0	93,6	-11,3
2060^	5136,0	74,5	88,4	56,1	84,5	91,8	

<sup>\*</sup>real data 1990 - 2013

Source: Own calculation based on: Eurost and OECD Statistics data.

Analysis of statistical data shows that life expectancy is getting systematically longer in the Visegrád Group countries. Projections data indicates a future increase in the average further life expectancy both among females (over 4 years on average) and males (over 6 years on average). This is a very positive tendency indicating civilization success. On the other hand, negative demographic trends include low fertility rate of the Visegrád Group countries' residents. It's worth noting that 25 years ago the fertility rate in most EU countries<sup>3</sup> exceeded 2 or was slightly below 2 (which ensured simple generational renewal)<sup>4</sup>. For comparison, in 2013 the fertility rate in the countries analyzed did not exceed 1.5. This shows that the issue of population ageing is becoming a key problem in the EU countries, especially in the Visegrád Group

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<sup>^</sup> prognostics data

<sup>&</sup>lt;sup>3</sup> Demographic stability is ensured by fertility rate of 2.1 – 2.15, i.e. when in a given year there are 2 children on average per one female during the reproduction age (15 - 49).

<sup>&</sup>lt;sup>4</sup> Explain the reasons for demographic change should be sought inter alia in the context of the demographic transition theory. The demographic transition theory (DTM) is a generalized description of the changing pattern of mortality, fertility and growth rates as societies move from one demographic regime to another. The term was first coined by the American demographer Frank W. Notestein in the mid-twentieth century, but it has since been elaborated and expanded upon by many others. Demographic changes observed in the the Visegrád Group countries are characteristic for fourth stage of demographic transition.(low fertility, low mortality, life expectancy is getting systematically longer).

countries. Longer life expectancy on the one hand and low fertility rate on the other hand are two phenomena that have a significant impact on the increase in the number and percentage of people outside working age in the whole population (Schmidt & Vosen, 2013). Ageing recently became a very important policy issue, as it has wide-ranging implications in various areas of social, economic and political life. The most important side-effects of the ageing process include (United Nations, 2005):

- increasing public expenditure on pensions, social security and health services, caused directly by the growing number of elderly (and thus of pensioners) in the population,
- a decreasing percentage of people in the working age, causing a shrinkage of the labor force and an increase in the overall burden on the working population in terms of various intergenerational transfers: taxes, other contributions, family support etc.,
- increasing risk of failure of repartition (pay-as-you-go) pension systems,
- growing demand for medical care and changing public health patterns (even though the elderly become relatively fitter and healthier),
- Increasing risk of the emergence of intergenerational conflicts, due to the changes in the patterns of resource distribution between the generations.

Summing up, the elderly age groups (65 years old and over) are increasing and will increase their share in the social structure in each of the countries analyzed, though with varying intensity.

Table 2: Selected demographic indicators for the Visegrád Group countries between 1990 and 2060

Years		tility rate (TFR)		rther life exp	ectancy	
		change	<b>Females</b>	Males	change	
					Females	Males
Czech Re	public					
1990*	1,90	2013-1990	75,4	67,5	2013-1990	
2004*	1,23	-0,45	79,1	72,5	+5,9	+7,7
2013*	1,45		81,3	75,2		
2020^	1,63	2060-2013	82,3	76,5	2060-2013	
2040^	1,77	+0,35	85,3	80,1	+6,6	+8,1
2060^	1,80		87,9	83,3		
Poland						
1990*	2,05	2013-1990	75,5	66,5	2013-1990	
2004*	1,22	-0,77	79,2	70,6	+5,7	+6,5
2013*	1,28		81,2	73,0		
2020^	1,39	2060-2013	82,2	74,5	2060-2013	
2040^	1,53	+0,34	85,3	78,8	+6,9	+9,6
2060^	1,62		88,1	82,6		
Slovakia						
1990*	2,08	2013-1990	75,4	66,6	2013-1990	
2004*	1,25	-0,74	78,0	70,3	+4,7	+6,3
2013*	1,34		80,1	72,9		
2020^	1,32	2060-2013	81,1	74,3	2060-2013	
2040^	1,44	+0,19	84,5	78,6	+7,3	+9,4
2060	1,53		87,4	82,3		
Hungary						
1990*	1,86	2013-1990	73,7	65,1	2013-1990	
2004*	1,27	-0,51	77,2	68,7	+5,4	+7,9
2013*	1,35		79,1	72,2		
2020^	1,50	2060-2013	80,2	73,0	2060-2013	
2040^	1,68	+0,39	83,8	78,1	+13,3	+16,9
2060^	1,74		87,0	82,0		

<sup>\*</sup>real data 1990 - 2013

Source: Own calculation based on: Eurostat and OECD Statistics data.

<sup>^</sup>prognostics data

### 4. Changes in labor market participation of people in the Visegrád Group countries after 2004

The concept of labor market participation<sup>5</sup> was defined in accordance with the methodology of the International Labor Organization and recommendations of Eurostat. EU labor force surveys are regulated by law. The main regulation implementing labor force survey in the European Community Member States is the Regulation of the European Council No. 577/98 of March 9th, 1998 on the organization of the labor force sample survey in the Community (as amended)<sup>6</sup>. Given the process of population ageing accompanied by the decrease in the number of working age people, the authors of this publication will focus on assessment of labor market participation in older age groups (i.e. 55 - 64 years old). The downward trend in labor market participation of people aged 55 and over has been present for many years in European countries with developed market economy, causing concern due to predicted decrease in the number of working age people and accelerated ageing of labor force and population. After 1989, similar changes have been observed in Central and Eastern European countries. According to Kotowska (2005), Fallick & Pingle (2007), Leridon (2005), various activities undertaken in the 1990s in an increasing number of countries looking for ways to increase labor market participation of older people at working age reflect how important it is for governments to reverse the early retirement trend. Indications of reversal of this trend have been observed in EU countries from the second half of the 1990s.

Table 3: Labor force participation rate<sup>7</sup> in the Visegrád Group countries between

2004

lata	Activ	ity rate ii	ı the ag	e group	os [in%]	·			·			
	<b>15-6</b> 4	-	Ū	15-24			<b>25-5</b> 4	ŀ		55-64		
	tota	femal	mal	tota	femal	mal	tota	femal	mal	total	femal	male
	l	e	e	l	e	e	l	e	e		e	
<b>UE 28</b>												
2004	69,3	61,7	77,0	44,3	40,7	47,8	83,4	75,4	91,4	43,5	33,7	53,9
2013	72,0	66,0	78,0	42,2	39,3	44,9	85,5	79,1	91,4	54,3	46,5	62,6
chang	+2,7	+4,3	+1,0	-2,1	-1,4	-2,9	+2,1	+3,7	0,0	+10,	+12,8	+8,7
e										8		
2013-												
2004												
Czech R	onublia	•										
2004	70,0	62,2	77,9	35,2	31,5	38,7	87,8	80,9	94,6	45,1	31,3	60,2
2004	70,0 72,9	65,1							94,0 95,8	43,1 54,8	•	
	+2,9		80,5	31,5 <b>-3,7</b>	26,1	36,8	89,1	81,9		-	44,2	66,1
chang	+4,9	+2,9	+2,6	-3,/	-5,4	-1,9	+1,3	+1,0	+1,2	+9,7	+12,9	+5,9
e 2012												
2013- 2004												
Poland 2004	640	F7.0	70.1	25.0	22.0	20.7	01.0	76.0	87.8	20.6	21.4	20.1
	64,0	57,9	70,1	35,9	32,0	39,7	81,9	76,0	- ,-	29,6	21,4	39,1
2013	67,0	60,1	73,9	33,3	27,9	38,4	84,6	79,1	90,0	44,0	33,3	55,9
chang	+3,0	+2,2	+3,8	-2,6	-4,1	-1,3	+2,7	+3,1	+2,2	+14,	+11,9	+16,
e 2012										4		8
2013-												
2004												
Slovakia	ì											

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<sup>&</sup>lt;sup>5</sup> Active population refers to all people participating in the labor market (employers, employees, self-employed, family members providing help free of charge) and registered unemployed. Active population does not include students learning profession, housewives or people living only on capital.

<sup>&</sup>lt;sup>6</sup> http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32010R0220

<sup>&</sup>lt;sup>7</sup> Labor force participation rate calculated as the relation of active population (i.e. working and unemployed) to the overall population for a given age group.

	Information Management and Business Review (IMBR)											
			Vol.	7, No. 6	, Decem	ber 201	5 (ISSN	2220-3	796)		·	
2004	69,7	63,0	76,5	39,3	35,7	42,9	88,9	84,1	93,8	31,7	14,8	51,9
2013	69,9	62,5	77,2	30,8	23,7	37,6	87,2	80,5	93,6	49,5	40,4	59,5
chang	+0,2	-0,5	+0,7	-8,5	-12,0	-5,3	-1,7	-3,6	-0,2	+17,	+25,6	+7,6
e										8		
2013-												
2004												
Hungar	y											
2004	60,5	54,0	67,2	27,9	24,3	31,4	77,9	70,9	85,0	32,0	25,8	39,7
2013	65,1	58,8	71,7	27,2	24,0	30,4	83,2	76,9	89,4	41,7	34,8	50,2
chang	+4,6	+4,8	+4,5	-0,7	-0,3	-1,0	+5,3	+6,0	+4,4	+9,7	+9,0	+10,
e	,	,	,	,	•	ŕ	ŕ	•	ŕ	,	·	5
2013-												

Source: Own calculation based on: Eurostat and OECD Statistics data

Data presented in table 3 clearly indicates an increase in labor market participation among people aged 55-64. This is very important given that labor force is ageing. The biggest growth was recorded in the Czech Republic and Slovakia, whereas the lowest in Hungary and Poland, where labor force participation rates, especially in the 55-64 age group, are among the lowest in the European Union. Clear differences in labor force participation are also seen as far as the gender is concerned - lower labor force participation rates are among females. In general, the employment rate of working age population in EU28 is above 70 percentage points, with low employment level among people from older age groups mainly contributing to the decrease of its value. Analyses also took into account employment rates (tab. 4)

Table 4: Employment rate<sup>8</sup> in the Visegrád Group countries between 2004 and 2013

lata	Empl	oyment r	ate in t	he age	groups [i	<u>-</u> in%]						
	<b>15-6</b> 4	-		<b>15-2</b> 4		_	<b>25-5</b> 4	ļ		55-64		
	tota	femal	mal	tota	femal	mal	tota	femal	mal	total	femal	male
	l	e	e	l	e	e	l	e	e		e	
UE 28												
2004	62,9	55,5	70,3	36,0	33,1	39,0	76,2	68,5	84,7	39,9	31,5	50,3
2013	64,1	58,5	69,4	32,3	30,4	34,2	76,8	71,1	82,5	50,1	43,3	57,5
chang	+1,2	+3,0	-0,9	-3,7	-2,7	-4,8	+0,6	+2,6	-2,2	+10,	+11,8	+7,2
e		•	-	•		•		•	•	2		
2013-												
2004												
Czech R	epublic	2										
2004	64,2	56,0	72,3	27,8	25,4	30,1	81,4	73,4	89,2	42,7	29,4	57,2
2013	67,7	59,6	75,7	25,6	21,0	29,9	83,5	75,5	91,2	51,6	41,4	62,5
chang	+3,5	+3,6	+3,4	-2,2	-4,4	-0,2	+2,1	+2,1	+2,0	+8,9	+12,0	+5,3
e												
2013-												
2004												
<b>Poland</b>												
2004	51,7	46,2	57,2	21,7	18,6	24,8	68,2	62,6	73,9	26,2	19,4	34,1
2013	60,0	53,4	66,6	24,2	19,5	28,6	77,0	71,2	82,7	40,6	31,0	51,3
chang	+8,3	+7,2	+9,4	+2,5	+0,9	+3,8	+8,8	+8,6	+8,8	+14,	+11,6	+17,
e										4		2
2013-												
2004												
Slovakia	1											

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2004

<sup>&</sup>lt;sup>8</sup> Employment rate is calculated as a ratio of the number of those employed to the overall number of people from a given age group.

			Informa	tion Ma	nageme	ent and E	Busines	s Reviev	w (IMBR)			
			Vol.	7, No. 6	, Decen	ıber 201	5 (ISSN	2220-3	796)			
2004	57,0	50,9	63,2	26,3	24,6	28,0	74,7	69,3	80,0	26,8	12,6	43,8
2013	59,9	53,4	66,4	20,4	16,2	24,4	76,0	69,6	82,2	44,0	35,7	53,3
chang	+2,9	+2,5	+3,2	-5,9	-8,4	-3,6	+1,3	+0,3	+2,2	+17,	+23,1	+9,5
e										2		
2013-												
2004												
Hungar	У											
2004	56,8	50,7	63,1	23,6	20,8	26,3	73,6	67,0	80,5	31,1	25,0	38,4
2013	58,4	52,8	64,3	19,8	17,2	22,4	75,5	69,8	81,1	38,5	32,3	46,2
chang	+1,6	+2,1	+1,2	-3,8	-3,6	-3,9	+1,9	+2,8	+0,6	+7,4	+7,3	+7,8
e		•	•	,	,	•	•	•	·	•	·	•
2013-												
2004												

Source: Own calculation based on: Eurostat and OECD Statistics data

The employment rate of males is higher than that of females. Lower employment rate among females results, among other things, from lower retirement age and specific biologic, economic, social and cultural factors, as: maternity, bringing up children, caring for dependants and performing other household duties to a much larger extent than males (D'Addio et al., 2010; Gorzeń – Mitka, 2014). The employment rate was systematically increasing, especially in the group of people aged 55-64. Expressed in percentages, over the study period, these increases were generally as follows: Czech Republic (20.8%), Poland (54.0%), Slovakia (64.1%), and Hungary (23.8%). Thus, analysis of employment rates for the period 2004-2013 shows that the upward trends in labor market participation of people aged 55-64 continued. The reversal of unfavorable trends in changes in labor market participation, in particular for older people at working age, may have resulted, among other things, from pension system reforms and labor market reforms implemented in several EU countries (more: Scherer, 2001; Stauner ,2008; Zsuzsa, 2013). In view of the above, duration of working life in the Visegrád Group countries was analyzed (table 5).

Analysis of data presented in table 5 shows that the period 2004-2013 saw an increase in the duration of working life of people in all the Visegrád Group countries. In EU-28 countries, the biggest increase, 2.5 year, is visible among females. Of the Visegrád Group countries, the biggest increase was recorded in Hungary (2.9 year) and in Poland (1.8 year), whereas the lowest in Slovakia (0.2 year) and the Czech Republic (1.3 year). In the male population, these increases were as follows: Hungary (2.7 year), Poland (2.2 year), the Czech Republic (1.5 year), Slovakia (0.6 year). The average age of exiting labor force among females also saw an increase. As far as the male population is concerned, the countries analyzed saw a slight decrease in duration of working life at the moment of exiting labor force. What's interesting, at the EU28 level, an upward trend was recorded (1, 3 years). Low access to current data in this respect makes analyses in this area difficult. However, the age at which people are going into retirement is moving upwards. A longer period of working life is a factor impacting labor force participation rates, especially for people aged 55-64 (OECD, 2013).

Table 5: Duration of working life (DWL9) in the Visegrad Group countries

Country	Years			•	Change	
	2004		2013		2013 -2004	
Duration of	f working life (I	OWL)				
	Females	Males	Females	Males	<b>Females</b>	Males
EU 28	30,0	36,4	32,5	37,7	+2,5	+1,3
Czech	30,2	36,3	31,5	37,8	+1,3	+1,5
Republic						
Poland	27,8	32,6	29,6	34,8	+1,8	+2,2
Slovakia	29,8	35,2	30.0	35,8	+0,2	+0,6

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<sup>&</sup>lt;sup>9</sup> DWL - indicator understood as the number of years of expected labor market participation of people aged 15 throughout their life.

Hungary	25,5	30,4	28,4	33,1	+2,9	+2,7	
Average age	e at the mom	ent of exiting la	bor force		•	•	
EU 28	60,4	61,6	61,3*	61,7*	+0,9	+1,3	
Czech	59,1	62,3	59,6*	61,4*	+0,5	-0,9	
Republic							
Poland	57,4	62,0	57,5*	62,0*	+0,1	+0,0	
Slovakia	57,6	61,1	57,5*	60,4*	-0,1	-0,7	
Hungary	58,7	61,2	58,7*	60,1*	+0,0	-1,1	

<sup>\*</sup> data for 2011. (Change 2011 – 2004)

Source: Own calculation based on: Eurostat and OECD Statistics data

### 5. Conclusion

That's why active ageing policy becomes so important. Already in late 1990s, the European Commission developed a basis for nation-level activity in Europe as a response to the increasing problem of demographic ageing and proposed the implementation of policies to encourage older employees to stay at work as well as introduction of equal retirement requirements, specifying four key components (European Parliament resolution, 2012):

- increase in the employment rate of the elderly,
- reversal of the tendency to retire earlier,
- development of medical and social research to support healthy ageing and development of new prohealth tools,
- Fighting discrimination and social exclusion.

The analysis of quantitative data in the Visegrád Group countries shows that:

- The first period of the analysis (1990-2004) saw the biggest increase in working age population, decrease in fertility rate and longer average life expectancy. The analysis of the old-age-dependency ratio exposed the process of labor force ageing in the countries analyzed. Despite clear convergences between the Visegrád Group countries, there are differences in the intensity and dynamics of observed demographic tendencies.
- The second period of the analysis (2004-2013) saw a decrease in the dynamics of the increase in the number of working age population, which indicates shrinking of potential labor force in all the countries analyzed. The process of population ageing was even more evident. In the context of unfavorable demographic tendencies, there was an increase in labor market participation of people aged 55-64 and in employment rates.

Summing up, there is increasing awareness of the process of population ageing in the Visegrád Group countries, and strategies developed at the EU level are conducive to an increase in labor market participation, employment rate and longer working life, especially of older workers.

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### Effect of Organisational Structure and Competition on Organisational Performance in Libyan Commercial Banks

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**Abstract:** This paper investigates the relationship between contingency factors (organisational structure and competition) and organisational performance within Libyan commercial banks. 154 usable questionnaires from branch managers of Libyan commercial banks were investigated for the hypotheses of study. The results of this study indicate that the relationship between organisational structure and organisational performance is significant and positive. In contrast, the results of the study found that the relationship between competition and organisational performance is negative and insignificant.

**Keywords:** Organisational structure and competition; organisational performance; Libyan commercial banks

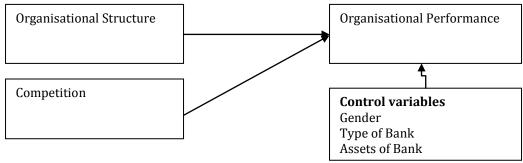
#### 1. Introduction

Organisational performance refers to the organisational effectiveness to achieve the objectives of an organisation (Henri, 2004). The increasing in performance of banks has a significant impact on the development and economic growth in any country (Levine, 2005; Paradi & Zhu, 2012). The Libyan banking sector is the most important service sector; however it suffers from obvious weaknesses (Ahmed, 2010). In particular, the commercial banks that suffer from poor performance are represented in a high level of nonperforming loans and decrease in revenues (CBL, 2012; Chamiea, Elfeturi & Abusneina, 1997; Gabgub, 2009). Although organisational performance is affected by multiple factors, the contingency factors have been widely recognised as important factors that can effect on organisational performance, particularly, organisational structure and competition (Hoque, 2004; Hussain & Hoque, 2002; Van der Stede, Chow & Lin, 2006). The organisational literature suggests that improved performance requires a management style that is related to organisational structure (e.g., Venkatraman, Henderson & Oldach, 1993), Furthermore, the performance increases when banks work in strong competition environment (Neely, 2005). This study deals the issues regarding by effect organization structure and competition on organisational performance. The next section is related to literature review and hypotheses of the study. The third section describes the methodology of the study. The fourth section presents the results and discussion. Finally, the fifth section gives conclusion and recommendations of the study.

#### 2. Literature Review

The paper relies on the contingency theory to help explain the relationship between factors. The contingency theory suggests that the fit between contextual factors (competition and organisational structure), and the design of management control systems is related to superior organisational performance (Chenhall, 2003; Langfield-Smith, 1997). This study aims to investigate the influence of two contingency factors (organisational structure internally and competition externally) on organisational performance. The research framework of this study is presented in Figure 1.

Figure 1: Research framework



Organisational Structure and Organisational Performance: The accounting literature indicates that less attention has been paid to the influence of organisational structure on organisational performance (Child, 1972; Lee & Yang, 2011; Miles, Snow, Meyer & Coleman, 1978). Although, the organizational structure is one of the important factors that effect on management accounting practices (Lorenzo, 2008). Furthermore, organisational structure is one of the mechanisms used to control conflicts, and it should have a significant effect on the firm's financial behaviour (Mayers & Smith Jr, 1981). Organisational structure is associated with organisational performance for aggregate and integrated information (Chenhall & Morris, 1986). The relationship between organisational structure with firm performance is very important (Meijaard, Brand & Mosselman, 2005). Therefore, the organisational structure has a significant positive effect on performance (Lai & Limpaphayom, 2003; Lee & Yang, 2011). Based on the discussion above, the hypothesis is presented as follows:

H1. There is a positive relationship between organisational structure and organisational performance.

**Competition and Organisational Performance:** Competition is a powerful contextual factor affecting performance (Lee & Yang, 2011). The competition is an important impact on the use of management accounting in Libya (Alkizza, 2005). The performance of banks in the presence of competition, such as low quality and price of services is considered the best (Neely, 2005). Competition effects on the firm's overall performance (Hussain & Hoque, 2002). Furthermore, Mia & Winata (2014) found that there a positive relationship between competition and financial performance. The previous mentioned issues explicitly show that competition can positively influence the organisational performance. Accordingly, this study hypothesis that:

**H2.** There is a positive relationship between competition and organisational performance.

### 3. Methodology

**Data Collection:** Data were collected by questionnaire survey from 485 Libyan commercial branches (CBL, 2012). Questionnaires were delivered to branch managers. The sample size of the study was 217 branches. However, only total of 154 usable questionnaires were received, with a response rate of 70 % were used for the analysis of the findings. Table 1 reports information on the sample branches' classification, gender, type of bank, and assets of the bank. The greatest proportion of gender (95%) was from the male, the most proportion of type of bank (75%) was from the public, and the greatest proportion of assets (47%) was between 1000 to15000 million of Libyan Dinar.

**Table 1: Characteristics of Respondent Banks** 

Variable	Classification	Frequency	Percentage	
Gender	Male	146	95	
	Female	8	5	
Types of Bank	Private	38	25	
	Public	116	75	
Banks Assets	Less than 1000	14	9	
	Between 1000 to15000	73	47	
	More than 15000	67	44	

**Measurement of Variables:** The items of all variables are measured using a five-point Likert scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree.".

**Organisational Structure:** Organisational structure is adopted from Chia (1995), Gordon and Narayanan (1984), and Gosselin (2005). The manager branches are asked the extent of making these decisions by the top management of the bank for measuring the degree of decentralisation of decision-making. The mean score for the construct is 4.47, and the standard deviation is 0.7. The Cronbach Alpha coefficient is 0.78.

**Competition:** Competition is adopted from Hoque and Hopper (1997), and Libby and Waterhouse (1996), that developed from Lee and Yang (2011), which describes the branch's competitive position compared with their counterparts in the banking sector. The mean score for the construct is 3.62, and the standard deviation is 0.772. The Cronbach Alpha coefficient is 0.78.

**Table 2: Measures of Competition** 

Variable	Items
Organisational structure	Pricing policies are set of services by the top management of the bank.  Decisions on major changes are made only at the top management of the bank.  Decision of hiring and firing of managerial personnel generally are made only by top management of the bank.  Selection of large investments is usually made only at the top management of the bank.  New service decisions are made only at the top management of the bank.

**Table 3: Measures of Competition** 

Variable	Items
Competition	There is a high degree of market competition in the new service development faced by our branch.
	There is a high degree of competition in marketing the services that faced by our branch. Branch faces a high degree of competition to gain market share in services.
	The level of competition in the market for the major services of our branch is extremely intense.
	Behaviours of competing banks are taking a great threat to our branch.
	There is a high degree of market competition in the new service development faced by our branch.

**Organisational Performance:** Organisational performance was measured from prior studies Khong and Richardson (2003), Ringim (2012), and Ringim, Razalli and Hasnan (2012). This study used questionnaire for assessing bank's performance over the past three years. The mean score of the construct is 3.51, and the standard deviation is 0.62. The Cronbach Alpha coefficient is 0.88, indicating a satisfactory internal reliability for the scale.

**Table 4: Measures of Organisational Performance** 

Variable	Items
Organisational Performance	The volume of current and saving account customers.
	The reputation of our branch in the banking sector.
	Revenues collected from fees on transactions.
	The customer service delivery in branch.
	The new services' development in the branch.
	Branch's share of the services in the banking market.
	Rate of speed of service provided to the customer.
	The financial performance targets achievement by branch.
	Rate of the yearly profit.
	The growth of branch deposit.
	The level of our customer satisfaction with our services.
	The volume of fixed deposit.

#### 4. Results and Discussion

Table 5 presented the Pearson correlation coefficients for variables. Independent variables like organisational structure has a significantly influence on all variables in the model; some of them are positive direction and others are negative direction, while the competition has a significantly influence only on organisational structure in positive direction.

Table 6 shows investigated the results for the hypotheses of the study. Hypothesis 1 assumes that there is a positive relationship between organizational structure and organizational performance. The results presented in Table 6 shows that there is a positive and significant effect between organizational structure and organizational performance. Furthermore, the  $\beta$  value = 0.250 which indicate that this relationship is positive (t =2.901, P < 0.05). Thus, hypothesis H1 is supported. Hypothesis 2 assumes that there is a positive relationship between competition and organizational performance. The results presented in Table 6 shows that there is an insignificant (t= -.428, p > 0.10) direct effect between competition and organizational performance. However, the  $\beta$  value = -.037 which indicates that the relationship is positive. Therefore, these findings not support hypothesis H2.

**Table 5: Correlation Matrix for Variables** 

Variables	OS	С	OP
Organisational Structure (OS)	1		
Competition (C)	.333**	1	
Organizational Performance (OP)	.244**	.000	1

<sup>\*\*</sup> Correlation is significant at 0.01 level (2-tailed).

Table 6: Regression Model the Relationship between Organisational Structure and Competition, and Organisational Performance

Model	Coeff.(B)	Std. Error	t	Beta (b	) Sig		
(Constant)	2.526	.476	5.307		.000		
Organizational Structure	.232	.080	2.901	.250	.004		
Competition	030	.069	428	037	.669		
$R^2$		.106					
Adjusted R <sup>2</sup>		.076					
F change		3.520**					
**** P < 0.001, *** P < 0.05 and * P < 0.10.							

Dependent Variable: Organisational Performance

One of the control variables (i.e. Type of bank-private and public) has a significant role in influencing the organisational structure through the level of making decisions, and on the nature of competition among banks. Consequently, this effect on the results of relationship between organisational structure and competition, and organisational performance.

#### 5. Conclusion and Recommendations

This paper investigates the relationship between contingency factors (organisational structure and competition) and organisational performance within Libyan commercial banks. The paper used a framework of contingency theory to examine the study phenomena. The results found a significant relationship between organisational structure and organisational performance. This result also is consistent with other studies (Hao, Kasper & Muehlbacher, 2012; Lai & Limpaphayom, 2003; Lee & Yang, 2011). Furthermore, this result is in line with the contingency theory that suggests the effectiveness of organisation depends on the organisational design (Lee & Yang, 2011). Consequently, this result supports hypothesis 1. In contrast, the result of the study found that the relationship between competition and organisational performance is negative and insignificant (See Table 2). This result does not support the hypothesis of the study. However,

<sup>\*</sup> Correlation is significant at 0.05 level (2-tailed).

the result is consistent with other studies (Murayama & Elliot, 2012; Uddin & Suzuki, 2014). This is due to the low competition between the Libyan banks. In other words, owning of the Libyan state of major banks impedes competition for credit expansion and the development of services in general (Bank of Commerce & Development, 2013). Therefore, Hussain and Hoque (2002) indicated that if the competition is not significant in the financial industry, the banks would realise that there is a need to improve their service. In this case, the banks neglect to improve their services (quality, timeliness, and reliability) to satisfy customers. This in turn would affect the bank's overall performance. Thus, this result not support hypothesis 2.

This study has contributed to the knowledge of issues related to the organisational performance by investigations of the relationship between organisational structure and competition, and organisational performance in Libya. This would lead to the exchange of ideas between Libya and other countries on the most important factors affecting the performance, consequently leading to improve the performance in these countries. Hence, this study recommends that: First, banks should focus more on enhancing competition among each other that eventually will lead to encourage banks to improve their services to satisfy customers. This in turn would lead to increase the bank's overall performance. Second, other studies can use organisational structure factor as a moderator variable in the relationship between competition and organisational performance. Third, comparison between the results of the topic extracted from private banks and public banks. Finally, mixed methods such as survey and interviews can be used for further understand the relationships between variables. This might obtain stronger results.

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### The Effect of Empowerment Program on the Development of Scavenger's Welfare at Mancani Trash Centre in Palopo District the Province of South Sulawesi

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**Abstract:** This study aims to see The Effect of Empowerment Program on The Development of Scavenger's Welfare at Mancani Trash Centre in Palopo District the Province of South Sulawesi. Data analysis method applied in the study was quantitative analysis using Simple Linear Regression involving two variables. The results from analysis of the effect of empowerment program on the development of scavenger's welfare at Mancani trash centre in Palopo the province of south Sulawesi presented in table 4.4 showed R-value of 0.684 reflected that there is positive and significant relationship between the program and the development of scavenger's welfare. From these results, double determinant coefficient value (R²) of 0.467 implied that X-variable, which is the program itself, contributed of 46.7% on the development of scavenger's welfare. The rest of 53.3% was influenced by other factors.

Keywords: Empowerment, Scavenge, Welfare, Palopo

#### 1. Introduction

**Background:** The rapid growth of science and technology in many fields are followed by the changes of paradigm on national development based on human resource views as both subject and object of such nation development. Economic development of such region/area highly depends both on its natural and human resources as well as the ability to manage those resources. Therefore, the local government of Palopo in the province of South Sulawesi keeps developing their regional resources through policies and decision-making as well as take some strategic steps then to be actualized in the form of recent development. Workforce is an essential aspect in the economic development since it is one of payback of production factor. Recently, the issues of both job opportunity and economic development either in national or regional level received high attention in the public. From the recapitulation of Social and Labour Agency of Palopo known that 1.390 of 5.676 new job seekers are male and rest, 2.286 are female. According to data on education background level it could be concluded that these new job seekers were highly competent because 1.206 of those who were succeed in getting their job, 36.07 percents were in bachelor degree, 61.61 percents were in high school to diploma degree, and the other 2.33 were in primary to junior high school degree. This is good enough if they are empowered according to their own skills and preferences. Economically, activities of the scavenger have an excellent prospect to be developed. This group of society never create some troubles for their environment, contrarily, clean the environment up by collecting inorganic trashes that treat the ecosystem of natural environment.

**Problem Formulation:** From the background above, the problem could be formulated as follows: "How is the effect of The Effect of Empowerment Program on The Development of Scavenger's Welfare at Mancani Trash Centre in Palopo District the Province of South Sulawesi".

#### 2. Literature Review

The Meaning of Social Empowerment: Social empowerment is such efforts to empower the society in order to make them to have a power to live on their own. These efforts including to growth the consciousness, willingness and ability to increase their welfare accompanied with supporting climate development. These efforts are performed together from, by and for the society according to the condition, problem and potency of such area. Thus, social empowerment is a process while both self-reliance of the society and welfare development are the output. (Depkes, 2006:8). Sumodiningrat (2007:29) claimed empowerment as an alternative concept of development stressed the autonomy of social group taken based on personal resources, participation, democracy and social learning through personal experiences. The focus is on locality, since civil society is more empowered by local issues. However, Friedman reminded that it is unrealistic to ignored

economic power and structures outside the civil society. Therefore, social empowerment is not limited in economic area but political as well so that the society has bargaining power in both national and international level. As the anti-thesis of development above, bottom-direction development strategy viewed that such development should be based on, particularly, the full mobilization of human, natural and department resources in the orientation of the fulfilment of basic needs of the people in related area. Furthermore, it oriented to basic needs, the empowerment of small-scale industries, local natural resources, and village and tends to utilize such efficient technology rather than high technology.

The Meaning of Welfare: Etymologically, welfare means the feeling of safe, prosperous, wealth and well-being (Yuwono and Abdullah, 1994:368). It always related with such a condition or level of life that become a dream, hope and the expectation of everyone, family and even in society and national level. It always becomes the goal of everyone and group of society either they pursue it by their own or together with another so that all of the activities and thoughts in their daily life were directed to the question on how to achieve this condition of life. In short, from the explanation above it could be says that, in essential, welfare is such a high-value condition in the level of life that human expected. So far there is no appropriate concept generated on welfare family. Often, it merely interpreted in economic sense. The meaning of welfare itself is such condition where the basic needs, either as consumer or other material needs are fulfilled so that individual needs no worry with his/her own life (Suyono, 1996:43).

**General Review on Scavenger:** Scavenger is individual who picked commercial value-contained garbage in such area including in trash box, on the street, at ditches and anywhere they can found it. According to Main Dictionary of Indonesian, scavenger is individual who, in order to fulfil their needs of life, pick up and collect waste and trash to be used as material raw in production process and so on. They are person who looking after, picked-up and utilize recyclable trashes by sell it to someone who will recycling it into a new commodity (KBBI, Depdikbud, 2002).

### 3. Methodology

**Location:** The study was held in Mancani Trash Centre in Telluwanua, Palopo in the Province of South Sulawesi. The location was chosen since the group of scavenger who lived together was found here so it was expected will make the study easier.

### **Data Collecting Method**

- Questionnaire, by spreading such a list of enclosed-question contains alternative answers for each question given.
- Interview, by directly asking some questions to the respondent in order to get a clear understanding about the question given.
- Observation, by observing the activity of the scavenger in direct ways.
- Documental review, by learning several sources including books, journals, documents, reports and laws and rules related to the variable of the study.

**Analysis Method:** Data analysis method used in the study was quantitative analysis using Simple Linear Regression involving two variables, Y-dependent variable and X-independent variable (Hasan, 2002:15) with the formulation as follows:

$$Y = \alpha + bX$$

Where:

Y = variable of criteria X = variable of predictor a = constant number

b = the coefficient of regression, indicating increasing or decreasing number of dependent variable based on independent variable

### 4. Analysis and Discussion

The description of Scavenger's Empowerment Variable and Score Calculation. In order to know responses of the respondent on the indicator as well as score calculation for the variable of scavenger's empowerment divided into three indicators, including planning, application and self-reliance/followed-up, it could be seen in table 1 as follows:

Table 1: Response of the respondent on the variable of scavenger's empowerment (X)

Nmbr. of	Response level of the respondent										C
	1		2	2			4		5		Score
quest.	F	%		F	%		F	%		F	calc.
1	-	-	-	-	6	25,0	8	33,3	10	41,7	100
2	5	20,8	12	50,0	5	20,8	2	8,3	-	-	52
3	3	12,5	3	12,5	3	12,5	9	37,5	6	25,0	84
4	1	4,2	5	20,8	5	20,8	7	29,2	6	25,0	84
5	-	-	-	-	3	12,5	12	50,0	9	37,5	102
6	-	-	3	12,5	7	29,2	11	45,8	3	12,5	86
7	3	12,5	3	12,5	7	29,2	10	41,7	1	4,2	75
8	-	-	-	-	3	12,5	18	75,0	3	12,5	96
9	-	-	-	-	7	29,2	11	45,8	6	25,0	95
10	6	25,0	13	54,2	5	20,8	-	-	-	-	47
11	-	-	-	-	2	8,3	14	58,3	8	33,3	102
12	-	-	-	-	7	29,2	11	45,8	6	25,0	95
13	-	-	1	4,2	6	25,0	16	66,7	1	4,2	89
14	-	-	-	-	9	37,5	13	54,2	2	8,3	89
15	4	16,7	6	25,0	3	12,5	7	29,2	4	16,7	73
16	-	-	1	4,2	10	41,7	7	29,2	6	25,0	90
17	6	25,0	13	54,2	4	16,7	1	4,2	-	-	48
18	-	-	-	-	1	4,2	20	83,3	3	12,5	98
19	-	-	1	4,2	7	29,2	12	50,0	4	16,7	91
20	-	-	-	-	4	16,7	17	70,8	3	12,5	95
21	-	-	1	4,2	7	29,2	12	50,0	4	16,7	91
Mean value	of th	e question									84,86
Mean value	divid	led by num	ber of re	spondents							3,54

Source: Post-processed Primary Data, 2014

According to the table above, some responses of the respondents on the variable could be explained then as follows:

- On the first question, 6 respondents (25%) were response with agree-enough, 8 respondents (33.3%) were agree and 10 respondents (41.7%) were very agree.
- On the second question, 2 respondents (8.3%) were response with agree, 5 respondents (20.8%) were agree-enough 12 respondents (50%) were less-agree and 5 respondents (20.8%) were disagree.
- On the third question, 3 respondents (12.5%) were response with always absent, 3 respondents (12.5%) were less often, 3 respondents (12.5%) were quite often, 9 respondents were often and 6 respondents (25%) were very often.
- On the fourth question, 1 respondent (4.2%) were always absent, 5 respondents (20.8%) were just presence, 5 respondents (20.8%) were presence and asking some question, 7 respondents (29.2%) were presence, asking some question and give some opinion and 6 respondents (25%) were presence, asked question, give opinion and have some acceptable opinion.
- On the fifth question, 3 respondents (12.5%) were response quite fair, 12 respondents (50%) were fair and 9 respondents (37.5%) were very fair.
- On the sixth question, 3 respondents (12.5%) were response with less agree, 7 respondents (29.2%) were quite agree, 11 respondents (45.8%) were agree and 3 respondents (12.5%) were very agree.
- On the seventh question, 3 respondents (12.5%) were always absent, 3 respondents (12.5%) were less frequent, 7 respondents (29.2%) were quite often, 10 respondents (41.7%) were often and 1 respondent (4,2%) were very often.

- On the eighth question, 3 respondents (12.5%) were response with quite fair, 18 respondents (75%) were fair and 3 respondents (12.5%) were very fair.
- On the ninth question, 7 respondents (29.2%) were response with agree-enough, 11 respondents (45.8%) were agree and 6 respondents (25%) were very agree.
- On the tenth question, 6 respondents (25%) were response with disagree, 13 respondents (54.2%) were less agree and 5 respondents (20.8%) were very agree.
- On the eleventh question, 2 respondents (8.3%) were response with agree-enough, 14 respondents (58.3%) were agree and 8 respondents (33.3%) were very agree.
- On the twelfth question, 7 respondents (29.2%) were response with agree-enough, 11 respondents (45,8%) were agree and 6 respondents (25%) were very agree.
- On the thirteenth question, 1 respondent (4.2%) were response with less agree, 6 respondents (25%) were agree-enough, 16 respondents (66.7%) were agree and 1 respondent (4.2%) were very agree.
- On the fourteenth question, 9 respondents (37.5%) were response with agree-enough, 13 respondents (54.2%) were agree and 2 respondents (8.3%) were very agree.
- On the fifteenth question, 4 respondents (16.7%) were always absent, 6 respondents (25%) were less frequent, 3 respondents (12.5%) were quite often, 7 respondents (29.2%) were often and 4 respondents (16.7%) were very often.
- On the sixteenth question, 1 respondent (4.2%) were response with less agree, 10 respondents (41.7%) were agree-enough, 7 respondents (29.2%) were agree and 6 respondents (25%) were very agree.
- On the seventeenth question, 6 respondents (25%) were response with disagree, 13 respondents (54.2%) were less agree, 4 respondents (16.7%) were quite agree and 1 respondent (4.2%) were agree.
- On the eighteenth question, 1 respondent (4.2%) were response with agree-enough, 20 respondents (83,3%) were agree and 3 respondents (12.5%) were very agree.
- On the nineteenth question, 1 respondent (4.2%) were response with less agree, 7 respondents (29.2%) were quite, 12 respondents (50%) were agree and 4 respondents (16.7%) were very agree.
- On the twentieth question, 4 respondents (16.7%) were response with agree-enough, 17 respondents (70.8%) were agree and 3 respondents (12.5%) were very agree.
- On the twenty first question, 1 respondent (4.2%) were response with less agree, 7 respondents (29.2%) were quite agree, 12 respondents (50%) were agree and 4 respondents (16,7%) were very agree.

The description of Higher Income Variable and Score Calculation: Indicator of the variable is divided into eight (8) indicators of questions, presented as follows in table 2:

Table 2: Response of the respondent on Higher Level of Welfare Variable in Mancani Trash Centre at Palopo (Y)

	- c	Res	ponse lev	el of the	responde	nt						Caoma
Nmbr.	of	1		2		3		4		5		Score
quest.		F	%	F	%	F	%	F	%	F	%	calc.
1		-	-	-	-	3	12,5	8	33,3	13	54.2	106
2		6	25,0	15	62.5	3	12.5	-	-	-	-	45
3		1	4,2	6	25.0	11	45.8	5	20.8	1	4.2	71
4		-	-	6	25.0	16	66.7	2	8.3	-	-	68
5		-	-	4	16.7	6	25.0	12	50.0	2	8.3	84
6		9	37,5	13	54.2	2	8.3	-	-	-	-	41
7		-	-	1	4.2	7	29.2	15	62.5	1	4.2	88
8		-	-	1	4.2	-	-	9	37.5	14	58.3	108
Mean value of the question										76.38		
			d by numb	er of res	pondents							3.18

Source: Post-processed Primary Data, 2014

According to the table above, some responses of the respondents on the variable could be explained then as follows:

- On the first question, 3 respondents (12.5%) were response with agree-enough, 8 respondents (33,3%) were agree and 13 respondents (54,2%) were very agree.
- On the second question, 6 respondents (25%) were response with disagree, 15 respondents (62.5%) were less agree and 3 respondents (12.5%) were quite agree.
- On the third question, 1 respondent (4.2%) were response with disagree, 6 respondents (25%) were less agree, 11 respondents (45.8%) were quite agree, 5 respondents (20.8%) were agree and 1 respondent (4,2%) were very agree.
- On the fourth question, 6 respondents (25%) were response with less agrees, 16 respondents (66.7%) were quite agree and 2 respondents (8.3%) were agree.
- On the fifth question, 4 respondents (16.7%) were response with less agree, 6 respondents (25%) were quite agree, 12 respondents (50%) were agree and 2 respondents (8.3%) were very agree.
- On the sixth question, 9 respondents (37.5%) were response with disagree, 13 respondents (54.2%) were lack agree and 2 respondents (8.3%) were very agree.
- On the seventh question, 1 respondent (4.2%) were response with less agree, 7 respondents (29.2%) were quite agree, 15 respondents (62.5%) were agree and 1 respondent (4.2%) were very agree.
- On the eight questions, 1 respondent (4.2%) were response with less agree, 9 respondents (37.5%) were agree and 14 respondents (58.3%) were very agree.

From those results it could be concluded that the increasing of welfare level among the scavenger in Mancani Trash Centre at Palopo in the Province of South Sulawesi after the introduction of the program was of 3.18 or in third range, middle level.

**Simple Regression:** In order to analyse variables used in the study, simple regression method was applied resulting regression coefficient of X-variable (empowerment program) which have effect on Y-variable (the increasing of welfare level). Based on the analyses using SPSS program, regression of the analyses was resulted as follows:

Table 3: The effect of the program on the increasing level of welfare among the scavenger in Mancani Trash Centre at Palono Coefficients (a)

		Unstand coefficie	lardized ents	Standardized coefficients	T	Sig.
Model		В	Std. Error	Beta	В	Std. Error
	(Constant)	1.175	.460		2.555	.018
	Empowerment					
	Education	.568	.129	.684	4.393	.000
	Health					

a Dependent Variable: The increasing of welfare Source: Post-processed Primary Data, 2014

From the coefficient value in table 4.3 above, the equation of simple regression could be formulized then as follows: Y = 1.175 + 0.568X

### Where:

a = 1.175, which means of this value indicate the increasing level of welfare only if the factor of program (X) itself was ignored

b = 0.568, which means if this value is about to be added by 1 point then the increasing level of welfare will be higher as of 0.568

The regression results in table 3 above showed that factor of empowerment (X) positively impacts on the increasing level of welfare (Y). Next, in order to figure out the relationship between the program and the increasing level of welfare, we can count it down using Correlation and Determination Coefficients. Based on the analysis results using SPSS program, the analysis results were obtained as follows:

**Table 4: Correlation and Determination Coefficients** 

			Adjusted	Std. Error of the
Model	R	R-Square	R-Square	Estimate
1	.648(a)	.467	.443	.22472

a Predictors: (Constant), empowerment in education, BLM and health

Source: Post-processed Primary Data, 2014

Results of the analysis in the table 4.4 above shows R-value = 0.684 reflecting that there is a positive and significant relationship between the program and the increasing level of welfare. From these results, double determination coefficient value ( $R^2$ ) was 0.467 which means X-variable contributed to the increasing level of welfare as of 46.7%. Meanwhile, 53.3% of the rest were influenced by other factors.

The examination on the results of regression analysis: In order to test the hypothesis resulted, t-test was used to know significance level of regression coefficient of independent variable and to make sure whether independent variable (the program itself) in the equation have significant effect on dependent variable (the increasing level of welfare). The test was performed by comparing the value of  $t_{table}$  and  $t_{count}$ . If the former is lower, then the alternative hypothesis stated that such independent variable have effects on dependent one, unacceptable.

### Hypothetical test:

In the statistical hypothesis, stated as follows:

 $H_0 = t_{count} \le t_{table}$ , means that there is no effect of the program on the increasing level of welfare

 $H_1$  =  $t_{count} > t_{table}$ , means that there is positive effect of the program on the increasing level of welfare

Based on the analysis results using SPSS program, the analysis results were obtained as follows. The value of  $t_{count}$  according to table 16 was 2.555. Meanwhile, the value in distribution 5-table was 2.052. Then,  $t_{count}$  (2.555) >  $t_{table}$  (2.052). It means that the program (X) has positive effect on the increasing level of welfare. It strengthens by significance level of 0.018 < 0.05, which means that the program (X) has significant effect on the increasing level of welfare. Then, it could be concluded that  $H_1$  acceptable.

#### 5. Conclusion

Based on the discussion of the study outlined above, then in this section, the writer would like to formulize some conclusions of the results obtained:

- From the equation of Simple Linear Regression where Y = 1.175 + 0.568X was a positive value showing that the program was succeed in the increasing level of welfare among the scavenger at Mancani Trash Centre in Palopo.
- That the program gives contribution of 46.7% on the increasing level of welfare obtained from the coefficient value of determination of 0.467 multiplied with 100% while the rest (53.3%) was influenced by other factors. It shows that the program give middle effect on the increasing level of welfare.
- Based on both analysis and evaluation performed, it concluded that the program should be done continuously and actively involving the scavenger itself in order to make it have positive and significant effect on the increasing level of welfare in the future.
- Based on both analysis and evaluation performed, it concluded that the program should be studied well since the obtained results were in middle level.

b Dependent variable: the increasing level of welfare

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### **Application of Accounting Information Systems for Individual Performance**

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Abstract: This study aims: To determine the effect of the application of accounting information system of individual performance in the regional work units. By testing the validity discriminate PLS associated with the principle that the gauges (manifest variables) distinct constructs should not be correlated with the height, the information technology that is implemented in the organization should be able to provide benefits to the individual and organizational performance and provide comfort for the wearer. Information technology can benefit the individual and organizational performance is an information technology that can be applied easily. The way to test the validity of discriminates with reflexive indicators by comparing the square root of AVE for each construct with the correlation between the constructs in the model. Good discriminate validity was shown on the square root of AVE for each construct is greater than the correlation between the constructs in the model Fornell and Larcker and results of SIA1 to SIA8 otherwise well. Limitations of research is conducted still b M any factors in the implementation of other information systems that could affect the company's performance, but not used and researched in this study. Future studies are expected to incorporate these factors to be studied, for example, the level of consumer confidence, the level of competence, ease of use of information systems, the benefits of the system information.

**Keywords:** Accounting Information Systems, Competence, Tegnology, Leisure

#### 1. Introduction

One result of the development of information technology is widely used by the organization to carry out its operational activities is the information system. Laudon and Laudon (2005) in Tri (2008) defines information systems as a set of components that are interconnected, which collect (or retrieve), process, store, and distribute information to support decision making and control in an organization. Along with advances in computer technology and information today, accounting information system has been developed into the accounting information system berbasisis computer. Computerized Accounting Information System enables financial statement users can see at any time the financial statements more quickly and accurately. Presentation of financial and non-financial can be done more easily with the support package of accounting information systems program which now a day's more and more variations and can be obtained easily in the market. Application of the Information Systems Unit (SKPD) Palopo will affect the performance of individuals, either directly or indirectly. Application of the Information Systems Unit (SKPD) Palopo can have a positive impact or a negative impact on Individual Performance in Work Units (SKPD) Palopo it. Performance is the result of employee performance both in quantity and quality (Tjokroaminoto, 2007 in Tri, 2008). Individual performance can be seen from the results of the individual work achieved in carrying out the task assigned to him on the basis of skills, experience, and skills that be used by individuals in completing a job. Related research on accounting information systems has been carried out and had mixed results as research conducted by Tri (2008), indicates that the application of accounting information system has a positive and significant impact on the performance of individuals in Malang City Government. This shows that the better the applicable accounting information systems within an organization, hence increasing the performance of individuals within the organization. And provision Amalia (2011) stated that Based on the regression data processed it can be seen that the users of accounting information systems (AIS user involvement, support of top management, and the formalization of development SIA) has a significant influence on the performance of the SIA. However, different results shown by Hand (2007) states that the interest in the use of SI (System Information) not significant effect on use information System.

### 2. Literature Review

Theory of Reasoned Action (TRA) is a theory that is associated with the attitude and behavior of individuals in carrying out the activities. Someone will take advantage of SI on the grounds that such a system would produce benefits for themselves. Sheppard et al. (1988) in Hand (2007) states that the TRA was used to predict the behavior in many ways. TRA perform the phases of human behavior. In the early stages, the behavior (behavior) is assumed to be determined by the intention (intention). In the next phase, the intention can be described in terms of attitudes toward behavior (attitudes toward the behavior) and subjective norm (subjective norms) in the form of beliefs about the consequences of doing the behavior of expectations of the relevant normative. So overall a person's behavior can be explained by considering the trust, because trust someone to represent the information they have about themselves and the world around it (Jogiyanto, 2007 in Dwi-Iranto, 2012). The system is a group of elements that are closely related to each other that function together to achieve certain goals. Usually made to handle something repeatedly or regularly occur. System as an entity that contains parts - parts that affect each other, which is coordinated to achieve one or more general purpose. Brown, Dennis & Venkatesh (2010), Brown, (2011) and Morris, Hall, Davis, Davis & Walton (2003) in Wulandari (2006) states that the system is a group of components that are connected and work together to achieve goals to receive input and produce output in a process of organized information, accept that describes an event - real events and can be used as a tool for making a decision (Kusnandar, 2007). Accounting information system consists of five components, namely: People who operate the system and carry out a variety of functions, procedures, both manual and automated involved in collecting, processing and storing data on the activities of the organization Data about the organization's business processes, software used to process data organization, information technology infrastructure, including computers, peripherals (peripheral device) and equipment for network communication. According to Simamora (2004), performance assessment is the process used by the organization to evaluate the implementation of the work of individual employees. Andhika (2007) in Mangkunagara (2002) stated that "assessment of employees is a systematic evaluation of the work of employees and potential can be developed, the assessment is the process of assessment or determination of value, quality, or the status of some of the objects people or something". Mangkuprawira (2002) and Wulandari (2006) mention some of the benefits of performance appraisal.

### 3. Methodology

Descriptive statistics provide a picture or description of a data seen from the average value (mean), median mode is standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness (skewed distribution), Ghozali (2006: 19), Analysis of *Partial Least Square* (PLS), methods of data analysis used in this study is *Partial Least Square* (*PLS*) is a multivariate analysis technique that is used to project a linear relationship between the variables of observation (Hand et al., 2012). *PLS* goal is to test the theory of the weak and weak data, such as the sample size is small or there is a problem normality of the data, to predict the effect of exogenous variables on endogenous variables, Ghozali and southern (2014: 5). With the structural equation is as follows:

```
\begin{array}{ll} Y=b_1\,b_2\,X+Y_1+z_2\\ Description:\\ Y&= Construct\ Endogenous\ (Perceived\ Usefulness,\ Attitude\ toward\ Behavior\ and\ Behavior\ Interests).\\ X&= Construct\ Exogenous\ (Perceived\ Ease)\\ Z_1-Z_3=Variable\ Residual\\ b_{1\,to}\,b_3= Coefficient\ Line \end{array}
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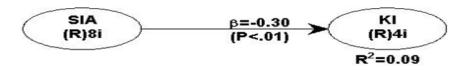
The steps that must be done in the *PLS*, Ghozali and Southern (2014: 74)

### 4. Research Finding: Evaluation Model Measurements (Outer Model) to construct Reflexive

*Outer Model* is a model that connects measurement indicators with latent variables. The model is used to determine the validity and reliability of linking indicators with latent variables. Indicators in this study were reflective as indicators of latent variables affecting the indicator. F or the use 3 way measurement according

Ghozali and Southern (2014: 74), namely: Validities convergent relate to the principle that the gauges (manifest variables) of a construct supposed to be highly correlated. Test the validity of convergent indicators reflexive with WarpPLS 4.0 program can be seen from the loading factor values for each indicator constructs. Rule of thumb commonly used to assess the validity of convergent value loading factor should be more than 0.7 for studies that are confirmatory and loading factor value between from 0.6 to 0.7 for exploratory research that is still acceptable and the value of average variance extracted (AVE) must be greater than 0.5. However, to study the early stages of development scale of measurement, the value of loading factor of 0.5 to 0.6 is considered quite Chin (1998) in Ghozali and Southern (2014: 74). The convergent validity of the test results as follows: Convergent validity of the test results with the parameter value of loading factor that the value of loading factor for each - each indicator has a value above (> 0.50) except for a few indicators that still has a value below 0.50. To construct Accounting Information Systems consisting of eight indicators that SIA1 = 0.947, sia2 = 0.947, SIA3 = 0.595, SIA4 = 0.947, SIA5 = 0.595, SIA6 = 0589, SIA7 = 0.595, SIA8 = 0.947, which of the eight indicators are no indicators that have a value below 0.50 so this indicator is not there in the droop of the model. Then to construct Individual Performance consisting of eight indicators that KI1 = 0931, ki2 = 0892, KI3 = 0.456, KI4 = 0.456, KI5 = 0931, KI6 = 0.474, KI7 = 0.456, KI8 = 0931, which of the eight indicators that there are four indicators that still has a value below 0.50 which is an indicator KI3 = 0.456, KI4 = 0.456, KI6 = 0.474, KI7 = 0.456, so this indicator in the droop of the model. After testing a second phase in which all indicators of the construct in the droop of the model, then obtained a new loading factor values are presented in Table 4.10. Construct that is already above 0.50. It can be concluded that the indicator forming construct Accounting Information Systems, Individual Performance, Average Variance Extracted (AVE) for each - each construct is in Accounting Information Systems = 0624; Individual Performance = 0.930, already has a value above 0.50, meaning that both constructs are categorized valid. Thus for convergent validity test consisting of cross loading the parameter value and Average Variance Extracted (AVE) terkategori valid. Further validity discriminant relate to the principle that the gauge - measuring (manifest variables) distinct constructs should not be correlated with height. How to test the validity of discriminant with reflexive indicators by comparing the square root of AVE for each construct with the correlation between the constructs in the model. The validity of the discriminant which is well demonstrated on the square root of AVE for each construct is greater than the correlation between the constructs in the model Fornell and Larcker (1981) in Ghozali and Southern (2014: 74). From the table 4:12 above can be seen that the value of the square root of the AVE to each construct is greater than the value of the correlation between the constructs in the model that each - each worth Accounting Information Systems = 0.790; Individual Performance = 0.964. To measure the reliability of a construct and refeksif indicator can be done in two ways, namely by Cronbach's Alpha and Composite Reliability. Rule of Thumb are typically used to assess reliability Composite Reliability construct a value must be greater than 0.7 for studies that are confirmatory and the value 0, 6 to 0.7 is acceptable for research that is exploratory, however to study the early stages of development scale of measurement, the value of loading factor of 0.5 to 0.6 is considered quite Chin (1998) in Ghozali and Southern (2014: 74) In PLS-SEM using the program WarpPLS 4.0 is more advisable to use a composite reliability. Accounting Information Systems = 0.927; Individual Performance = 0,981, already has a value above from 0.50, meaning that the construct four categorized reliable. Thus, to test convergent validity with the parameter value of loading factor and Average Variance Extracted (AVE), discriminant validity test parameters AVE square roots and Correlation between latent constructs and reliability tests with the parameters Composite Reliability valid and reliable. In assessing the structural or inner model of the model with 4.0 WarpPLS can to see Rule of Thumb The structural model test results or inner structural model of the model in this study can be presented in the following figure:

Figure 1: Results Analysis of Structural Model (Inner Model)



Sumber: Lampiran 4b 2015

From the output of general result of the above can be seen the model has the fit is good, where the value of the P value for the Average Path Coefficient (APC), Average R-squared (ARS) and the Average Adjusted R-Square (Aars) <1 with the value of each ie APC = 0.297, ARS = 0.088, Aars = 0.076. Then the VIF block Average value (AVIF) and Average Full collinearity VIF (AFFIV), which is produced is <3.3, which means that no matter multicoloniarity between indicators and between latent variables and values AFVIF = 1.096. Furthermore, the resulting value GoF is 0.261> 0.25, which means a good fit model. For index Symson's paradox (SPR), the R-squared contribution ratio (RSCR), and the Statistical Suppression Ratio (SSR), each producing the same value is 1, which means there is no problem of causality in the model. Then for *Nonlinear* Bivariate Causality Direction Ratio (NLBCDR) each - each produces the same value is 1, which means there is no problem of causality in the model. 1% probability level indicates the line is already significant. The interpretation explained namely Accounting Information Systems has a direct influence positively and significantly to the Individual Performance with P = 0.001 (<0.05), this coefficient indicates that with the increase in Accounting Information Systems will be followed by improvement of individual performance significantly. To determine the proportion of variance of certain exogenous variables on endogenous variables, can be calculated by using a partial F-test (effect size) in Ghozali and southern (2014: 98). The value of the resulting effect size is: effect size generated to construct Accounting Information Systems to construct individual performance is of 0.0 88> 0.02 is included in the small category. Based on the table above 4:18 obtained Adjusted R-Squared value to construct individual performance that is equal to 0.0 76 which means that the effect of the construct of Accounting Information Systems in explaining construct individual performance is 7.6% and the remaining 92.4% influenced by other constructs beyond this research model.

### 5. Conclusion

From results it concludes that the use of information systems greatly helps to increase the performance of individual employees. Construct individual performance that is equal to 0.0 76 which means that the effect of the construct of Accounting Information Systems in explaining constructs Individual Performance, Future studies are expected to not restrict sampling areas on just one area only, so as to represent the wider population. In addition, the sample should not be confined to the public sector organizations alone, but expanded so as to include organizations in other sectors.

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