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Revija *Management* je namenjena managerjem in podjetnikom, raziskovalcem in znanstvenikom, študentom in izobražencem, ki snujejo in uporabljajo znanja o obvladovanju organizacij. Združuje dejavnostne, vedenske in pravne vidike managementa in organizacij. Obravnava dejavnosti organizacij, njihovo urejenost in sredstva, ki jih uporabljajo. Obsega management tehnologij in management ljudi, obravnava delovanje organizacij v različnih okoljih. Zastopa svobodo misli in ustvarjanja, sprejema različnost vrednot, interesov in mnenj. Zavzema se za etičnost odločanja, moralnost in zakonitost delovanja.

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Why Globally GDP, Trade, Profits, Wages, Employment Decrease and Why Poverty Increases?

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The purpose of the paper is to propose a scientific explanation of why GDP, trade, profits, wages and employment have been globally decreasing and why poverty has been globally increasing between the 2nd quarter of 2008 and the 3rd quarter of 2009. I explain these facts in a scientific manner, that is, by deriving the present state of the global economy (crisis) from the principles of the present global economy (predominately organized in a capitalistic manner). I therefore prove that the crisis necessarily follows from the way the present global economy functions. I argue that the reason for the crisis is the fundamental contradiction between the purpose of companies (increasing profits) and necessary ways in which companies try to increase profits, and that the consequences of this fundamental contradiction are triggered by a general lack of credits.

Key words: global economy, GDP growth, profit, credits, poverty

Introduction

The most important economic issue for the leaders of the world's economically most powerful states is how to *restore* economic growth in their economies. USA President Barack Obama's *central* focus is on 'stimulating economic recovery and helping America emerge a stronger and more prosperous nation' (see <http://www.whitehouse.gov/issues/economy>). The *most important* goal of the new German government is to restore economic growth. Angela Merkel: 'Only growth creates trust by people' (Open Report 2009). President of the European Commission José Barroso stated that the *priority* of the EU is to restore economic growth: 'Our short term actions must lay the basis for sustainable and equitable growth in future' (European Commission 2009).

In the paper, I first present a theoretical background on business cycles, second, I present the most important data that show global decrease in GDP, trade, profits, employment, wages, and global increase in poverty between the 2nd quarter of 2008 and the 3rd quarter of 2009, and third, I scientifically explain these data (facts), i. e.

I argue why this has been happening. The purpose of the paper is to propose a correct and valid explanation of why between the 2nd quarter of 2008 and the 3rd quarter of 2009, there was a global decrease in GDP, trade, profits, employment, wages, and global increase in poverty.

Theoretical Background

General increases (conjunctures, booms) and subsequent *general decreases* (crises, depressions, recessions) in production or economic activity (e.g. general increase and subsequent general decrease in growth rates of real gross domestic product) over several months or years are known as business (or economic) cycles. It is generally accepted that these cycles do not follow a mechanical or predictable periodic pattern. The business cycle phenomenon has attracted much attention among economic theoreticians and the wider public at least since the middle of the 19th century (e.g. Karl Marx, Clement Juglar).

Business cycles are a *fact* and what interests us as scientists is the question of *why* business cycles (especially crises) occur. We therefore search for a *correct and valid explanation* of business cycles. Since the middle of the 19th century, there have appeared many theories on the supposed reasons for business cycles. In the orthodox economic theory, economists have been divided into two camps: some argue that causes for crises are exogenous to the market economy (e.g. State, regulation, trade unions, monopolies, technology shocks),¹ while others (mainly Keynesians) argue that causes are endogenous (e.g. underconsumption, paradox of thrift, distribution of income between profits and wages). Beside the orthodox economics, there is a long tradition of several heterodox economic theories that have proposed various explanations of business cycles. To name only a few, Karl Marx (1890) stated that alternation of prosperities and crises is like a natural law and blind necessity of capitalism. Marxist economists think that an economy based on production of commodities to be sold on the market is intrinsically prone to crises. Joseph Schumpeter stated that cycles are the essence of capitalism and that from this it follows that depressions are inevitable and even beneficial phases of its development (McCraw 2006, 234). In the Austrian school of economics, Ludwig von Mises (1996) argued that crises are a necessary result of attempts to lower the gross market rate of interest by means of credit expansion. Friedrich Hayek (1933, 140) said that changes in the volume of money, which is always recurring, cause misdirection of production and therefore crises. Murray

Rothbard (2000) argued that cycles are generated by monetary intervention in the free market, specifically bank credit expansion to business.

These serious and comprehensive theoretical strugglings to understand the essence of business cycles have always been accompanied by many public attempts to explain these cycles, especially the negative part of them, i. e. crises, depressions, since this part of the cycle is most harmfully experienced by the majority of people (general increase in poverty). I propose to say that the essence of the majority of these public attempts at explaining the crises is *moralization* that posits the greed and irresponsibility of managers and politicians as causes for crises (in the following, it should be clear why this is false).

The Present Economic Crisis: Facts

The most important data that are available to us, show the following state of the present global economy.

In the group of OECD countries, GDP constantly decreased from the 2nd quarter of 2008 to the 1st quarter of 2009. This was the *biggest* fall of GDP growth in OECD, since OECD began collecting and publishing data on GDP in 1960. GDP growth in the 1st quarter of 2009 was -2.2%, while GDP growth in the 2nd quarter of 2009 was 0.0%. In the 1st quarter of 2009, for example, Germany had -3.5% GDP growth, USA had -1.6% GDP growth, Japan had -3.3% GDP growth, the group of economically most powerful states G-7 had -2.2% GDP growth (OECD 2010a). EU-27 group had -4.6% GDP growth in 2009 (Eurostat 2010). GDP growth in developing countries was expected to be less than 2% in 2009 – growth in 2008 was 8% (The World Bank 2009b). In China, for example, real annual GDP growth rate constantly decreased between 2007 (11.4% growth) and 2009 (8.7% growth), while between 1999 and 2007, real annual GDP growth rate was almost constantly increasing in China (<http://www.chinability.com/GDP.htm>). Also in India, for example, GDP quarterly growth rate constantly decreased between January 2008 (9.7% growth) and July 2009 (5.8% growth) (TradingEconomics 2010). Prior to 2008, China and India were among the fastest growing economies in the world.

From December 2008 to August 2009, exports of commodities in OECD decreased – exports growth was negative. In the beginning of 2010, negative exports growth was expected in the biggest OECD countries (OECD 20010d). In developing countries, exports are decreasing. Private capital flows were expected to decrease from 1 tril-

lion USD in 2007 to 530 billion USD in 2009. From the 3rd quarter of 2008 to the 2nd quarter of 2009, foreign direct investments and short-term credits decreased globally. Global trade in 2009 was expected to decrease (for 10%) – for the first time since 1982 (The World Bank 2009b).

From the 2nd quarter of 2008 to the 3rd quarter of 2009, many world's largest companies (in all economic sectors) sold significantly less of their commodities than these companies had planned and expected. In the same period, profits of these companies also decreased significantly (e.g. Daimler AG, BMW, Toyota, Ford, General Motors, Chrysler, Sony, Hitachi, Lm Ericsson AB, Nokia, Royal Bank of Scotland, AIG, UBS AG, Lloyds Banking Group).

For about half of 35 countries, for which data on wages are available, ILO concluded that in the 1st quarter of 2009, real monthly wages in these countries decreased compared to average wages in 2008. For a sample of 53 countries, for which data on wages are available, ILO concluded that growth of real average wages in an average country in this sample decreased from 4.3% in 2007 to 1.4% in 2008 (ILO 2009a). Between 1996 and 2008, labour productivity in OECD *constantly increased* – on average 1.9% annually (OECD 2010c). Among ten G-20 countries, for which data on wages are available, growth of real average wages in an average country in this group decreased from 1% in 2007 to 0.2% in 2008.

From the 1st quarter of 2008 to the 2nd quarter of 2009, unemployment in OECD *constantly increased* – from 5.68% to 8.31% (OECD 2010b). From October 2008 to September 2009, unemployment in EU-27 also *constantly increased* – from 7.3% to 9.2% (Eurostat 2009). The International Labour Office expected a dramatic increase in unemployment: 'In 2009, the proportion of people in vulnerable employment – either contributing family workers or own-account workers who are less likely to benefit from safety nets that guard against loss of incomes during economic hardship – could increase considerably, in the worst case to reach 53% of the employed population' (ILO 2009b).

ILO reported that in 2009, 200 million workers, mostly in developing countries, could be in extreme poverty because of decrease in GDP growth, decrease in profits of companies, decrease in production and decrease in real wages. ILO expected that in 2009, the number of working poor – people who do not earn enough for their families to get more than 2 USD per person per day (poverty limit) – may increase to 1.4 billion (ILO 2009b). The World Bank expects that 'as many as 90 million more people will be living in extreme poverty, on

less than 1.25 USD a day, by the end of 2010' (The World Bank 2009a). Developing countries have recently also experienced food and fuel crises which have caused *millions* of people to be in poverty and hunger – between 130 and 155 million people are in *extreme poverty*, according to the World Bank's estimates. Another *44 million children are malnourished*. Decrease in credits and GDP growth will decrease government revenues and their investments into education, health and gender goals, as well as the infrastructure expenditures needed to increase GDP growth. Each 1% decrease in GDP growth could trap *another 20 million* people in poverty (The World Bank 2009b).

The most important data on the state of the present global economy thus show, that:

- from the 2nd quarter of 2008 to the 3rd quarter of 2009, GDP in OECD significantly and constantly decreased (in developing countries, GDP growth decreased significantly in 2009 compared to 2008),
- in 2009, international trade (exports of commodities, private capital flows and foreign direct investments) globally decreased,
- in 2009, many world's largest companies booked huge or even record sales losses and profit losses,
- from the end of 2007 until 2010, growth of real average wages was constantly decreasing globally,
- the number of working poor is increasing,
- the number of unemployed people has been globally increasing (in OECD constantly from the 1st quarter of 2008 until 2010),
- the number of people, living in (extreme) poverty, has been globally increasing.²

These are *facts* and they are generally known as an *economic crisis*. The purpose in the following is to *explain* these facts, that is, to argue *why* this has been happening, why this economic crisis has occurred.

Explanation of the (Present) Economic Crisis

A starting point of the explanation is a thought by two influential American economic scientists Burns and Mitchell³ (1946) on business cycles: 'He who would understand business cycles must master the workings of an economic system organized largely in a network of free enterprises searching for profit. The problem of how business cycles come about is therefore inseparable from the problem of how a capitalist economy functions.' Since the present global economy is predominately organized in a *capitalistic* manner, I therefore explain, in the following, some *principles* of how capitalism functions

and I *illustrate* (not prove) these principles with some important *concrete examples* (concrete examples do not prove principles/laws, they illustrate them, and it is principles that explain concrete examples). Based upon these principles, I try to derive/prove the *necessity* of crises in capitalism, and I therefore try to show that the present crisis (global decrease in GDP, trade, profits, employment, wages, and global increase in poverty) is a *necessary consequence* of how the present global economy functions. Since this is a *theoretical* paper (explanation of facts), and not an empirical paper (description/interpretation of empirical findings), the following explanation is necessarily *concretely abstract and general*. The 'method' used in the following is thus explaining, proving, deriving.⁴

Principles and Contradictions

In the present global economy, the fundamental and predominating purpose of companies and their state and private owners is to *unconditionally, constantly and limitlessly increase profits, measured in monetary units*, i. e. to make more money out of invested money as much as possible, to increase the market value of investors/owners' investments.⁵ Companies have *other goals* as well – for example, customer satisfaction, care for employees, protection of natural environment, social responsibility. However, all these other goals are *subordinated* (they are *only means*) to the fundamental goal of making profits. For example, the fundamental and predominating purpose of ExxonMobil (today's largest company in the world by market value) in 2003 was to sustain and improve company's profitability, to create long-term, sustainable value and growth for shareholders, and to sustain general economic growth (ExxonMobil 2003). In 2007, ExxonMobil remained committed to growing long-term value for its shareholders (ibid. 2007). In 2009, ExxonMobil continued to focus on long-term growth in shareholder value (ibid. 2009).

Companies increase profits by trying to sell as many of their commodities as possible on the market for the highest price possible, while in producing commodities, companies try to minimize as much as possible all the costs that are necessary for producing commodities (see GegenStandpunkt 1983). Between 1998 and 2008, the average annual GDP growth in the OECD area was 2.3% (OECD 2009). So, during a decade prior to the present economic crisis, companies did actually (between 2004 and 2007 even continuously) increase their value added. Forbes' lists of the world's largest and most successful companies (Forbes 2007) show that between 2003 and 2007, companies were generally making profits. In the pre-crisis period, com-

panies such as ExxonMobil (2007), for example, were successful in reducing their labour and production costs, not in absolute terms, but relative to the total income from sales of their commodities. If companies had not been successful and efficient in cost reduction, then they would not have made (sometimes even record) profits (e.g. Shell, Nestlé, Chevron, ConocoPhillips, Apple).

Companies increase profits by *competing* (enforcing themselves) on the market against other companies, whose purpose is also to increase their profits.⁶ For example, Dell competes on the market against its immediate competitors, such as Hewlett-Packard, Sony, Apple, Acer, Asus, Lenovo, Toshiba, whose fundamental purpose is to make profits.

Companies increase profits by *unconditionally and constantly inventing, developing, producing, and offering/selling new or improved commodities on the market*. Market competition/struggle forces companies into unconditional and constant invention and development of new or improved commodities. New or improved commodities can be a *consequence* of the development and use of new and more productive tools and processes, and vice versa, new or improved commodities can *cause* development and use of new and more productive tools and processes. A company that first starts selling new or much improved commodities on the market, sells these commodities at a higher price than older and lower-quality commodities, and because of the higher price (value added) of new or much improved commodities, this company increases profits. However, when its competitors start selling the same or even more improved commodities as well, then the comparative newness and quality advantage of this company disappears. Market competition then forces companies to increase their productivity still more and thus lower prices of these new or much improved commodities. The result is that companies constantly sell new or much improved commodities (for development of which more and more invested money is necessary) at the same price as commodities that were produced and sold at the previous lower levels of newness, quality and productivity. But this is *in contradiction with* the fundamental purpose of companies – that is, increasing profits. For example, based on a Bureau of Labor Statistics comparison of like products and services between August 1998 and August 2008 (pre-crisis period), there were at least seven groups of commodities (produced by many immediate competitors) that were (and possibly are) comparatively cheaper in 2008 than they were in 1998: phones, electronics, footwear, new vehicles, toys, apparel and watches. Prices of these commodities actually de-

creased (in electronics substantially decreased) between 1998 and 2008, despite continuous innovations and improvements in the quality of these commodities. If the price remains the same and the quality improves, that effectively decreases the price (MacDonald 2008).

Market competition also forces companies into *unconditional and constant development and use of more productive (new) tools and processes*. A company that first starts using more productive tools and processes is the first to start reducing its production costs. Because of reduced production costs, this company then offers and sells its commodities on the market at a lower price than its immediate competitors. This company thereby forces its competitors out of the market. And because of increased sales (increased market share), this company increases profits. However, when its competitors start using the same or even more productive tools and processes as well, then the comparative cost (and consequentially price) advantage of this company disappears and its profits thereby decrease. This market competition constantly causes reduction of prices of commodities that are produced and offered/sold on the market by companies. But this constant forcing to reduce prices of commodities, that are sold by companies, is *in contradiction with* the fundamental purpose of companies – that is, increasing profits. For example, prior to 2008 (pre-crisis period), Exxon Mobil managed to keep cash operating costs at refineries below the industry average. Exxon achieved industry-leading unit cost performance by inventing and using its leading-edge technology. By doing so, Exxon managed to achieve energy and cost efficiencies that offset much of the inflationary pressures and expenses related to operating facility improvements, new process units, and production growth. Exxon reduced costs also by economies of scale that were made possible by new leading-edge technology and greater productivity (ExxonMobil 2007).

Companies increase profits by *unconditionally and constantly investing more and more money* in development and use of more productive means of production, in order to make bigger (or at least the same) profits compared to previous productivity levels. However, each productivity level in companies is only a starting point for achieving the next levels of still greater productivity. Cost and productivity competition between companies thus, on one hand, increases the amount of money that companies invest into increasing productivity, while on the other hand, increasing productivity reduces prices of commodities on the market. But this is *in contradiction with* the fundamental purpose of companies – that is, increasing profits. For example, between 2003 and 2007 (pre-crisis pe-

riod), Exxon Mobil continuously invested more and more money into research and development of new leading-edge and cost-reducing proprietary technology. The company is a recognized industry leader in the application of cost-effective technology for enhanced oil recovery (ExxonMobil 2007).

Companies increase profits by *making labour that is necessary for producing commodities more productive and cheaper* by means of unconditional and constant development and use of more productive (new) tools and processes. By increasing productivity of tools and processes, companies need less and less workers for producing the same amount of commodities, and companies therefore dismiss redundant workers, because tools and processes are more productive. Companies try to motivate those workers that remain and continue working in companies to constantly increase their productivity – to make more and more commodities in the same amount of time, and for the same wage. By constant increasing of productivity of their means of production, companies thus decrease their labour costs (wages) by employing less and less workers and by producing more and more commodities with the same amount of workers. This implies that there is less and less labour included in a commodity unit and that companies save more and more money on the paid labour. By decreasing their labour costs (wages), companies thereby also decrease their production costs. Increasing the productivity of means of production thus decreases labour share in produced commodities, it decreases working time, it decreases wage labour that is delivered in a company. However, this delivered labour is the measure of monetary wealth – this labour is substance of prices and profits. And this implies that unconditional and constant increasing of productivity of means of production unconditionally and constantly reduces the source (wage labour) of commodity prices and consequentially profits. But this is *in contradiction with* the fundamental purpose of companies – that is, increasing profits. For example, between 2001 and 2007, Exxon Mobil constantly decreased the number of workers, despite increasing its production, sales and net income in the same period (ExxonMobil 2007). Between 1996 and 2008 (pre-crisis period), labour productivity in OECD constantly increased – on average 1.9% annually (OECD 2010C).

Companies increase profits by *decreasing labour costs (wages) in relation to monetary value that is produced by workers in companies*. The amount of money that workers receive as a wage for producing commodities in companies is always less than the amount of money that companies receive by selling commodities on the market (mone-

tary value that is being made by wage workers). Workers can therefore never buy all commodities that were produced by workers in companies. The purchasing power of workers is always less than a monetary value of commodities on the market. Workers' wages do not therefore increase profits of companies. And companies increase profits by decreasing labour costs (wages). But this is *in contradiction with* the fundamental purpose of companies – that is, increasing profits. For example, between 1995 and 2007 (pre-crisis period), each additional 1% in the annual GDP per capita growth led to an average of only a 0.75% increase in annual growth of wages. As a result, in almost three-quarters of countries worldwide the labour (wages) share in GDP has decreased. Between 2001 and 2007 inflation was low and the global economy grew at a 4.0% per year, while wages grew by less than 2% per year in half of the world's countries. In Germany and in the USA (developed countries), the difference between highest and lowest wages has increased most rapidly. Based on an analysis of wages around the world in recent years, the ILO reports show that while wage growth was smaller than GDP growth during conjunctures, wage decreases were larger than GDP decreases during recessions. Between 1995 and 2007, for each 1% decrease in GDP per capita, average wages decreased by 1.55%. In recent years, minimum wages around the world have been reactivated to reduce social tensions resulting from increasing income inequalities (ILO 2008).

Companies increase profits by *selling more and more commodities on the market*. However, conditions of selling commodities on the market are not the same as conditions of producing commodities in companies. Conditions of selling commodities on the market are determined (limited) in relation to the relative size of a market for particular commodities and in relation to solvent needs (purchasing power). Conditions of producing commodities in companies, however, are determined (limited) by availability of materials and energy sources and by productivity of tools, processes and labour. Unconditional and constant increasing of productivity of means of production in companies implies that workers in companies produce more and more commodities, whereby companies (based on market analyses) anticipate and expect profitable selling of these commodities on the market. Companies calculate their profits *in advance* – profits are *already calculated in* production of commodities in companies, companies *exactly plan* their future profits. Companies also have *middle-term plans on how future profits will be reinvested*. Companies anticipate and expect an increasing amount of sales, whereby they do not consider the limitations of purchasing power (solvent needs). Com-

panies try to profitably exploit a purchasing power that exists, but companies do this in such a way, as if this purchasing power was unlimited. In their production and selling of commodities, companies always presuppose that there is a purchasing power that can buy more and more commodities that are being offered on the market by companies. However, since companies buy commodities from their suppliers and pay off wages to their workers, companies themselves create purchasing power. And companies create purchasing power by trying to extort the lowest prices of commodities as possible by their suppliers and by paying off the lowest wages as possible to their workers. Companies thereby reduce purchasing power, for which companies always presuppose that it exists on the market in sufficient (unlimited) quantity, and upon which their profits depend. But this companies' reduction of purchasing power is *in contradiction with* the fundamental purpose of companies – that is increasing profits (see GegenStandpunkt 1983, 1992). For example, in 2007 (just prior to the present crisis), ExxonMobil predicted and anticipated an average 3% continuous annual growth of worldwide economic output between 2005 and 2030. ExxonMobil also predicted and anticipated an average 1.3% continuous annual growth of world energy demand in every economic sector between 2005 and 2030. However, from the 2nd quarter of 2008 to the 3rd quarter of 2009, GDP in OECD significantly and constantly decreased (in developing countries, GDP growth decreased significantly in 2009 compared to 2008), which proved ExxonMobil predictions on continuous worldwide economic growth false, despite the fact that ExxonMobil's projections were a result of an ongoing process that has been conducted for decades – these results (now obviously false) underpinned ExxonMobil's long-term strategies and investment plans. In 2009, ExxonMobil's net income, sales, operating revenue and earnings per common share substantially decreased (ExxonMobil 2009)

So, based upon this analysis we conclude that increasing of companies' profits includes *a contradiction between the fundamental purpose of companies* (increasing profits, measured in monetary units) *and necessary ways, in which companies try to increase profits* (market competition forces companies to operate in this way) – *these ways are necessarily forcing profits to decrease.*

Credits: A Decisive Means of Increasing Companies' Profits

Yet despite the contradiction between the purpose of increasing profits, and ways in which companies try to increase profits, companies still increase profits. Despite competitors on the market and

despite limited purchasing power, companies still increase profits. But how is this possible? Companies increase profits by using *credits* (money, which is not owned by a company, but is only borrowed from banks, states, other companies, other institutions or individuals, or, companies issue new shares, through which they get additional money for investments) as a means of increasing productivity of means of production and labour, as a means of developing new or improved commodities and as a means of increasing the amount of commodities sold. And *at the same time*, credits also function as a means of increasing purchasing power (solvent needs) of companies, workers, states and other institutions. By using credits, companies thus on one hand increase demand for commodities, they increase productivity of means of production and labour still faster, they develop new or improved commodities, and they produce still more commodities. By using credits, buyers of commodities on the other hand also increase demand for commodities – they buy still more commodities. Credits therefore *temporarily increase* companies' profits.

Credits Do Not Resolve the Fundamental Contradiction

Even though credits temporarily increase companies' profits, borrowing money as one of the means of competing against other companies on the market and as the decisive means of increasing companies' profits does not *resolve and eliminate* the fundamental contradiction between the purpose of companies (increasing profits) and ways, in which companies try to increase profits. The reason for the fact that credits do not resolve the fundamental contradiction is that the purpose of institutions (mostly states and banks) and individuals who lend money (and financial institutions all operate under constraints of (international) market competition, just as this happens in the real sector) is *the same* as the fundamental purpose of companies who borrow money – that is, making more money out of invested money as much as possible. The process of lending money to companies is such that by borrowing money, companies temporarily avoid consequences of the fundamental contradiction between increasing companies' profits, and ways, in which companies try to increase profits. But because the purpose of lending money is also to increase profits, it is *necessarily* so that lenders of money in a particular moment claim repayment of principal and interests. And when a general claim for profitable repayment of loans appears (it is impossible to predict when exactly this will actually happen), and when the amount of available and affordable loans starts to decrease generally, it becomes evident that the contradiction between increasing prof-

its and necessary ways in which companies try to increase profits, is *still* in force. Credits are therefore the *decisive* means of increasing companies' profits, while general lack of credits *triggers/executes necessary consequences* of the fundamental contradiction between increasing companies' profits and ways in which companies try to increase profits (see Decker 2002; Dozekal 2009).

Consequences of the Fundamental Contradiction: A Crisis

A consequence of this fundamental contradiction, triggered by a general lack of credits, is that companies have produced and offered on the market *too many* commodities, which cannot be profitably sold. Thus, a consequence of this contradiction is that there is *not enough* purchasing power, which could purchase all commodities on the market and could thereby increase companies' profits. This implies that there remain *unsold* commodities that pile up in stores and warehouses (some of the commodities thereby lose their use value). This further implies that companies' profits really start to generally *decrease* – this does not mean that each and every company books losses (there are and really can be few companies and individuals who actually make profits in the time of general decreasing of profits and trade – just as there are and really can be few companies which go bankrupt in a time of general increasing of profits, in a time of GDP growth). And when companies' profits generally start to decrease, companies then *decrease prices* of their unsold commodities in order to sell them, and therefore to compensate for at least *some* of the costs that were necessary for production and marketing of these commodities. When some commodities then still remain unsold (because of the insufficient purchasing power), companies *never simply give* these commodities to people that might need these commodities, but do not have *enough money to buy* them.

A consequence of decreasing of companies' profits is that companies reduce their production costs *still more* and as fast as possible, which means that they *close down* some of their production facilities, they decrease workers' wages (increase in poverty), they dismiss some workers (increase in poverty) and they lower prices of suppliers' commodities still more. Companies do that in order to *increase profits again*. The fundamental and predominating purpose of companies (increasing profits) is *necessarily always present* – when profits actually increase as well as when profits actually decrease. A consequence of decreasing of companies' profits is also that some companies actually go bankrupt and disappear from the market.

All these necessary consequences of the fundamental contradiction between increasing profits and ways in which companies try to

increase profits, triggered by a general lack of credits, are known as a crisis in capitalism. A crisis means that GDP, trade, profits, wages, employment generally decrease and that poverty generally increases. And why does this happen? The reason for a crisis in capitalism is *not* a general lack of credits, because general lack of credits only executes consequences of the fundamental contradiction between increasing profits and ways in which companies try to increase profits. A reason for crises in capitalism *is* therefore really the fundamental contradiction between increasing profits and ways in which companies try to increase profits. GDP, trade, profits, wages, employment decrease and poverty increases, *because* the principles of making profit in capitalism include this fundamental contradiction. GDP, trade, profits, wages, employment decrease and poverty increases as a consequence of how capitalism functions, a crisis is a necessary consequence of capitalistic principles that are in force.

What Happens after a Crisis?

When enough companies go bankrupt and disappear from the market, when labour prices (wages) and prices of suppliers' commodities are low enough, when enough new credits are available, and when the state (institution that *enforces and provides conditions* for increasing companies' profits for the purpose of achieving GDP growth) with its economic measures sufficiently increases demand for companies' commodities, so when conditions for increasing companies' profits again appear (it is impossible to predict when exactly this will actually happen), then by means of getting new credits companies *start again* investing in new production capabilities, employing additional workers, increasing productivity of their means of production, developing new or improved commodities, increasing the amount of produced commodities, and consequentially increasing sales of their commodities and thereby increasing profits (e. g. this is how Shell plans to restore its profitability), until lending money to companies and buyers *stops again*, when it becomes evident *again* that the fundamental contradiction between increasing profits and ways, in which companies try to increase profits, is *still* in force.

The Present Crisis: An Appearing Form of a Crisis in Capitalism

During 2008, three of the largest us investment banks either went bankrupt (Lehman Brothers) or were sold at fire sale prices to other

banks (Bear Stearns and Merrill Lynch), values of shares on American stock exchanges significantly decreased. Consequentially, values of assets of European banks and values of shares on European stock exchanges also decreased. Values of assets of many investment funds decreased. Decrease in value of assets in the financial sector caused general lack of credits for companies: there was a general collapse in confidence and readiness of investors to further take risky financial investments. Because of the inability of companies as well as buyers of their commodities (other companies, workers, other institutions) to get new loans, consequences of the fundamental contradiction between increasing profits and ways in which companies try to increase profits, broke out. Because there were not enough new credits available, commodities that companies offered on the market remained unsold (e.g. there is abundance of unsold cars in the EU, Toyota stores unsold cars aboard ship). It became evident that companies had produced too many commodities, which could not be profitably sold. A consequence of this was that profits of (world's largest) companies started to decrease significantly (e.g. Daimler AG, BMW, Toyota, Ford, General Motors, Chrysler, Sony, Hitachi, Lm Ericsson AB, Nokia, Royal Bank of Scotland, AIG, UBS AG, Lloyds Banking Group and many other large (and small) companies all booked huge or even record sales decreases and profit losses between October 2008 and August 2009.). Companies reacted to this by rapidly starting to reduce production costs (e.g. one of the crucial measures of how to restore profitability of Shell, General Motors, Chrysler, is rationalization, that is, general cost reduction, where production and labour costs are included) – closing down some of their production facilities (e.g. Sony planned to close 10% of its manufacturing facilities), decreasing wages of workers,⁷ dismissing some workers (e.g. Sony 8.000 workers, Dell 905 workers, thousands of jobs cuts have been announced across all sectors of the UK economy), lowering prices of suppliers' commodities. Some companies simply went bankrupt because of the inability to get new or additional loans. And finally, because of increasingly expensive loans and because of the reduced amount of available loans, production globally decreased, and consequentially international trade and GDP (growth) worldwide also decreased. What happens now is that by means of lending (or simply giving) money to banks and other institutions, states try to increase the amount of money, which is available for lending to companies and to buyers of companies' commodities, in order to *restore conditions* for increasing companies' profits (some states also decrease taxes or increase public demand).

The present crisis has thus shown all the necessary consequences of the fundamental contradiction between the dominating purpose of companies (increasing profits, measured in monetary units) and necessary ways, in which companies try to increase profits. The present crisis has been just one of the appearing forms of a crisis in capitalism and the present crisis has been a necessary consequence of capitalistic principles that are globally predominately in force. Referring to Burns and Mitchell (1946), we can conclude that between October 2008 and the 3rd quarter of 2009 GDP, trade, profits, wages, employment generally decreased and poverty generally increased, because of the way capitalism functions, and the purpose of this paper was to prove this.

Conclusions

The most important data, that are available to us, show that between the 2nd quarter of 2008 and the 3rd quarter of 2009, there was a global decrease in GDP, trade, profits, wages, employment and global increase in poverty. These phenomena combined are known as an economic crisis and this crisis has been just one of the appearing forms of a crisis in capitalism. I tried to scientifically explain facts (data) on the present state of the global economy (predominately organized in a capitalistic manner) by proving that the present economic crisis necessarily follows from the principles/laws of the present global economy (capitalism).⁸ I tried to prove that the reason for profits, trade, wages, employment decrease and poverty increase is the fundamental contradiction between the fundamental and predominating purpose of companies (increasing profits) and ways in which companies try to increase profits (lowering prices of suppliers' commodities, increasing productivity of means of production and labour, reducing labour costs, developing new or improved commodities, increasing the amount of commodities offered/sold on the market, lowering prices of commodities offered on the market). Companies temporarily avoid consequences of this fundamental contradiction by using credits as the decisive means of increasing profits. But when the moment of general claim for repaying principal and interests necessarily appears, it becomes evident that the fundamental contradiction is still in force, and consequences of this fundamental contradiction necessarily appear (crisis).

The contradiction between the fundamental purpose of companies (increasing profits) and ways, in which companies try to increase profits, is in the present global economy *necessarily and always present*. Companies cannot increase their profits other than by unconditionally and constantly increasing productivity of their

means of production and labour, by increasing the amount of commodities, offered on the market, by lowering prices of commodities, offered on the market, by constantly developing new or improved commodities, by reducing labour costs (wages) and by lowering prices of suppliers' commodities (suppliers themselves do exactly the same as companies to which they sell their commodities). Market competition/struggle constantly forces companies to do that. And finally, market competition forces companies to recognise that their fundamental purpose is increasing profits, because only by (potentially) increasing profits can companies get credits, by means of which they constantly increase productivity of their means of production and labour (and develop new or improved commodities), through which they compete against their competitors on the market, and which ensures them survival on the market.⁹ The real state of the present global economy is that there are *too many* sources of wealth (means of production and commodities) and too many *people* (from the viewpoint of companies) *at the same time*. The present global society suffers because there are, not not enough, but too many sources of wealth and commodities, measured against the *purpose* of private owners of these 'too many' – and that is, to profitably use these forms of wealth.

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Notes

1. For a detailed critique of how economist Joseph Stiglitz, OECD economists and IMF economists attempted to explain the last financial/economic crisis when it broke out, see Štrukelj (2010).
2. Although there are many different (empirical) definitions of poverty (the most known is The World Bank definition), I propose to explain poverty as an exclusion from the existing sources of wealth (means of production) in a particular society.
3. Burns and Mitchell were directors of the National Bureau of Economic Research (NBER), which is the largest economic research organization in the United States. Sixteen of the thirty-one American winners of the Nobel Prize in Economics have been NBER associates. The NBER first organized a system of national accounts in 1930, which was the beginning of the official measurement of GDP and other related indices of economic activity.
4. For a detailed critique of predominating 'mathematization' methodology in economics, see Štrukelj (2011).

5. In the present global economy, there are also some institutions (e.g. NGOs, voluntary associations, charities, state administrations), whose purpose is not to increase profits. However, the existence and functioning of these institutions *depend* on how well companies (both in the financial and in the real sector) increase profits and how well GDP therefore grows in a particular state or group of states. For non-profit institutions, as well as for profit institutions, money is the decisive means of operating, since a great majority of people today live in a money-profit economy.
6. Market competition is based on *private property of means of production and commodities*. This private property is *enforced and protected by the state through law*. States also engage themselves in *global competition* against each other. GDP growth and competitiveness are fundamental and predominating purposes of states, upon which the (quality of) lives of all their citizens *depend*.
7. Based on IMF growth figures, ILO predicted that the global growth in real wages would be maximally 1.1% in 2009, compared to 1.7% in 2008, but wages of millions of workers were expected to *decrease in many countries*, including major economies, in 2009. Globally, wage growth in industrialized countries was expected to decrease, from 0.8% in 2008 to -0.5% in 2009. This followed a decade in which GDP in these countries was increasing *much more than wages*. ILO Director-General Juan Somavia expects *difficult times* for wage-earners. Slow or negative GDP growth, combined with highly volatile food and energy prices, will *erode the real wages* of many workers, particularly the low-wage and poorer households. The middle classes will *also* be seriously affected. Tensions and conflicts are likely to *intensify* over wages (ILO 2008). In 2009, a 10% decrease in remittances was expected – a *big number* in countries that rely heavily upon them. Such decrease in remittances could mean *significant hardships* for, particularly, the poor people, and also for the governments that depend on the foreign currency that comes in (The World Bank 2009a).
8. Due to the officially prescribed limits for this paper, I provide only a summary explanation of an economic crisis. However, all arguments in the paper can be further developed and proven, and also more variously illustrated. Also, there are many convincing and well proven explanations of recent financial crises, of credit, of money, of poverty, of competition, and of capitalism in general, which are not present here, yet they are in different ways connected to the explanation, proposed in this paper. All things considered, this paper should serve as an introductory scientific analysis of crises in capitalism.

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Determinants of Profitability of Food Industry in India: A Size-Wise Analysis

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Profitability is the profit earning capacity, which is a crucial factor in contributing to the survival of firms. This paper is a maiden attempt at estimating the impact of size on profitability, considering the 'size' as the control variable. For this purpose, the selected firms are classified into three size categories as 'small,' 'medium,' and 'large' based on the sales turnover. The results show that volatility and growth are the major predictors in determining profitability in case of small size firms while growth is important in determining the profitability of medium size firms. Capital intensity has a significant positive coefficient with the profitability of large size firms. The overall result shows that the larger the size of the firm, the more the investment in long lived assets has helped to increase the profitability of the firm unlike the trend in cases of small size and medium size firms.

Key words: profitability, growth, volatility, capital intensity, return on investment

Introduction

Profitability (P) is the profit earning capacity, which is a crucial factor in contributing to the survival of firms. The perpetual existence of the firm depends on the profit earning capacity of the firm, which is also considered to be the main factor in influencing the reputation of the firm. The borrowing capacity of the firm is also determined by P . Thus, it is considered to be the main factor in determining the capital structure (CS) of the firm. P consists of two words profit and ability. It is necessary to differentiate between *profit* and *profitability* at this juncture. *Profit*, from the accounting point of view, is arrived at by deducting from total revenue of an enterprise all amount expended in earning that income, whereas *profitability* can be measured as profit shown as a percentage of sales known as profit margin. It can also be measured as return on investment (ROI) or return on asset (ROA). This study, in particular, uses ROA for determining P because sufficient *return on investment in asset* is essential for encouraging and motivating a growing industry like the food industry, as it is in the growing phase in India.

Literature Review

P is a crucial factor to judge the perpetual of a firm. A brief review of the past research works of experts in the field will help us to understand the importance of the present study. P is considered to be an important factor in determining the capital structure (CS) of the firm. Different views prevail with regard to the relation between P and CS . *Static trade off theory* works only to a certain extent. But *pecking order theory* recognizes both asymmetric information and costs of financial distress. The works on asymmetric information also give production roughly in line with pecking order theory. The managers, hence, follow the general rule 'issue safe securities before risky ones' (Myers 1984). The corporate managers are more likely to follow a financing hierarchy than to maintain a target debt–equity ratio (Pinegar and Wilbricht 1989), which supports the pecking order theory. The regression result shows a negative relation between CS and P under *market value* and *book value* bases for both us as well as Japanese manufacturing firms, although there are no significant country differences in CS between us and Japanese manufacturing firms after controlling the characteristics such as growth, P , risk, size (SIZ) and industry classification (Kester 1986).

Another dimension of perception is that the managers tend to avoid secured debt financing as it may increase the level of monitoring and may reduce their level of perquisites, which evidenced that the *growth rates* ($GROW$) are negatively related to *long-term debt* (LTD). The pecking order theory, which assumes that firms give more preference to retained earnings when deciding about financing a project, is also acceptable (Titman and Wessels 1988). A higher firm-specific predicted cost of capital (CoC) lowers capital intensity ($CAPINS$). Predicted $CAPINS$ increase LTD in the firm's CS and predicted P decreases it. Increased debt financing raises the firm's systematic risk (Harris 1994). P is inversely related to debt, while firm SIZ as well as $CAPINS$ are insignificantly inversely related to debt. However, the growth rate ($GROW$) is correlated positively with debt (Barton and Gordon 1988). P is associated positively with inside ownership and family portions of inside ownership. Performance determines ownership structure but not vice versa (Chang 2003). Raghuram and Zingales (1995), Barton and Gordon (1988) in their analysis strongly supported the hypothesis that P is inversely related to debt. The data collected in US and European countries showed that the more profitable the firm, the lower the debt ratio, regardless of how the debt ratio is defined, which is consistent with the *Pecking-Order Hypothesis* (Booth et al. 2001). Optimum CS en-

hances the P and the value of the firm. The results of a study on SMEs in India showed that they relied more on their own funds and comparatively less on borrowed funds (Dogra and Gupta 2009). Therefore, it is advisable that more profitable firms should hold less debt since higher profit generates more internal funds (Bevan and Danbolt 2002). Further, there are different perceptions about the impact of $CAPINS$ and SIZ on P . Hutchinson and Hunter's study (1998) showed that P did not affect the CS of small firms. $CAPINS$ can affect P because cut-throat competition might eliminate all future profits, depressing each firm's net security level (Ghemawat and Caves 1986); their study proved that profits decline with $CAPINS$. Thomsen and Pedersen (2000) found that compared to other owner identities, financial investor ownership is found to be associated with higher shareholder value and P but lower sales growth. $CAPINS$ imposes a greater degree of risk because assets are frozen in long lived forms that may not be easy to sell. Hence, difference in $CAPINS$ may be associated with difference in P (Bettis 1981). Fluctuation in the profit earned by firms makes debt capital costlier. Consistent profit earning capacity is also looked into as a determinant of P . Moreover, the competitive market creates much of such risk. In more competitive markets where price cut outs were sought for, P gets reduced due to the higher cost of debt, thereby the chances of financial distress and bankruptcy also increase (Pandey 2002). With reference to size of profit, more profitable firms tend to issue more debt, as debt capital may be available at a cheaper rate. The negative relation between P and LEV ratios arises from firm's preference for internal funds over external funds and the availability of internal funds (Chen and Zhao 2004).

Methodology, Objectives and Hypotheses

POPULATION AND SOURCES OF DATA

The study is based on secondary data of food products manufacturing firms, as on 30th January 2010 as shown in table 1, which are collected from Centre for Monitoring Indian Economy Prowess (CMIE) package.

SIGNIFICANCE OF FOOD INDUSTRY IN INDIA

India is the world's second largest producer of food next to China, and has the potential of being the biggest with the food and agricultural sector. The total food production in India is likely to double in the next ten years, and there is an opportunity for large investments in food and food processing technologies, skills and equip-

ment, especially in areas of canning, dairy and food processing, specialty processing, packaging, frozen food/refrigeration and thermo processing. The turnover of the food industry is expected to reach \$258 billion by fiscal year 2015 and \$318 billion by fiscal year 2020 from the current level of \$181 billion. Although India is one of the world's major food producers, it accounts for less than 1.5 per cent of international food trade. This may be due to lack of proper infrastructure facilities in India. Foreign direct investment (FDI) in agriculture has increased six-fold, rising from \$96.4 million in 2004 to \$656 million in 2008. Moreover, India is becoming the eastern hub of the food industry. Not only does it have leading production of various materials like milk, fruits and vegetables, grains and animal products but the food processing sector is also growing at a rapid rate to cater to the domestic needs and the export market. The Indian food industry is growing at over nine per cent per annum. The size of the food industry is as large as Rs. 4 lakh crore and has been growing fast. It is one-fifth of the US food industry, which is \$550 billion (Rs. 22 lakh crore). These facts indicate a wider scope for development of the food industry in India. Therefore, analyzing the relation between capital structure (*CS*) and *P* of food products manufacturing firms becomes significant.

CATEGORIES OF SIZES OF FIRMS

The study concentrates on three categories of the food industry viz., tea, dairy and vegetable oil firms. According to the National Sample Survey Organization (NSSO) on household consumer expenditure for 2007–8 (July–June), milk accounts for 14.9 per cent of the average rural family's spending on food and the figure stands higher at 18.3 per cent for urban India. NSSO's consumption data is based on a comprehensive survey covering a sample of 31,673 rural and 18,624 urban households, spread over the entire country. India has also emerged to be the world's leader in tea production, consumption and export. India's tea production alone accounts for 31% of global production. It is, perhaps, the only industry where India has retained its leadership over the last 150 years. India is also the largest oilseeds and vegetable oil producing country in the world, but equally it is the biggest consumer of vegetable oil too.

OBJECTIVES AND HYPOTHESES DEVELOPMENT

- To analyze the factors which influence the profitability of firms of the food industry in India.

- To analyze the impact of size of firms in terms of turnover on profitability of the food industry in India.
- To study the factors influencing profitability after controlling for size and to compare with the impact of the factors on the overall profitability of the firms of the food industry in India.

The following hypotheses have been developed to achieve the stated objectives:

- H₁ *Liquidity (LIQ) affects both the firm's P as well as operating risk (Papaioannou, Travlos and Nickolas 1994), hence it becomes important to study the relation between LIQ ratio and P, which leads to developing the hypothesis as:*
- H₀¹ *Liquidity of a firm does not have a significant influence on profitability of the firm.*
- H₂ *Capital intensity (CAPINS) imposes a greater degree of risk because assets are frozen in long lived forms that may not be easy to sell; hence difference in CAPINS may be associated with difference in P (Bettis 1981). CAPINS can affect P because, in uncontestable markets, it offers the opportunity to make binding commitments of resources; thereby it does so by tilting the cost structure of production from ongoing towards sunk cost: firms that compete in CAPINS industries typically have to shoulder large, unrecoverable outlays of capital in advance of production decisions. CAPINS can affect P because cut-throat competition might eliminate all future profits depressing each firm's net security level, thus P declines with capital intensity (Ghemawat and Caves 1986). Based on this inference the following hypothesis is developed:*
- H₀² *Capital intensity of a firm does not have a significant influence on profitability of the firm.*
- H₃ *Fluctuation in the profit earned by firms makes debt capital costlier. Consistent profit earning capacity is also looked into as a determinant of P, therefore a competitive market creates much of such risk. In more competitive markets where price cut outs were sought for, P gets reduced due to higher cost of debt, thereby the chances of financial distress and bankruptcy also increase (Pandey 2002). Hence volatility (VOL) in earning should be studied when considering consistent profit earning capacity; hence, based on this inference, the following hypothesis is developed:*

- H₀³ *Firm's volatility does not have a significant influence on profitability.*
- H₄ *More profitable firms tend to issue more debt, as debt capital may be available at a cheaper rate. The negative relations between P and LEV ratios arise from firm's preference for internal funds over external funds and the availability of internal funds (Chen and Zhao 2004). Therefore, it is recommendable that more profitable firms should hold less debt since higher profit generates more internal funds (Bevan and Dabnolt 2002). However, growing firms may have greater fund requirements to grab new opportunities, which may exceed their retained earnings, therefore they act according to the pecking order and choose debt rather than equity (Um 2001). Hence, to study the relationship between growth (GROW) and P the following hypothesis is developed:*
- H₀⁴ *Growth of a firm does not have a significant influence on profitability.*
- H₅ *Small enterprises are characterized by variability in profits and growth. Increase in P along with increase in SIZ may help them to grow at a faster rate. Hence, to study the impact of SIZ on P the following hypothesis is developed.*
- H₀⁵ *Firm's size does not have a significant influence on the profitability.*

SAMPLING DESIGN AND TECHNIQUE

The category-wise strength of food product manufacturing firms in India is given in table 1. The multi-stage random sampling technique is used by adopting the following stages:

- *Stage 1:* The study covers food products manufacturing firms only; firms of beverages and tobacco are not included for the simple reason that they account for a lesser proportion (10%) over total firms in the food industry. Hence, the population considered for the study is 1572 food products manufacturing firms.
- *Stage 2:* Out of 1572 food products manufacturing firms, 1314 firms are found to have details of incorporated year as on 30th January, 2010, hence 1314 firms are considered for further stage.
- *Stage 3:* Among the 1314 firms, 309 firms are found to have the BSE listing flag and 62 firms are found to have the NSE listing flag. The NSE listed firms (62), being less in number are ignored,

TABLE 1 Food product manufacturing firms in india: Category-wise strength

Category	Number of Firms	Total
<i>Food Products</i>		
Dairy products		72
Tea		213
Sugar		150
Vegetable oils & product		350
Coffee		21
<i>Other products</i>		
Cocoa products & confectionery	12	
Bakery products	37	
Processed/packaged foods	167	
Starches	14	
Marine food	102	
Poultry & meat products	42	
Floriculture	62	
Milling products	78	
Other agricultural products	252	766
Sub total		1572
<i>Beverages & Tobacco</i>		
Tobacco products		35
Beer & alcohol		140
Sub total		175
Total food product manufacturing firms in India		1747

Source: CMIE, 30 January 2010.

and therefore, BSE listed firms (309) are taken into account for the further stage.

- *Stage 4:* Out of the 309 BSE listed firms, 99 firms only are found to have been continuously listed, based on BSE trading dates availability over the period of study, which are considered for the further stage.
- *Stage 5:* Out of 99 firms, 87 firms only have complete data for the period of study. Considering the complete data availability, 87 firms are considered for the further stage. Out of 87 firms, 52 firms only of three categories i. e., 9 firms from *tea sector*, 11 firms from *dairy sector*, and 32 firms from the *vegetable oil sector* of the food industry constitute the ultimate sample size, ignoring 37 firms of different categories with a negligible number in each category of firms. Hence the final sample size constitutes 52 firms only.

PERIOD OF THE STUDY

The required data have been collected for a period of 10 years on year-on-year basis ranging from 1998–9 to 2008–9, which are subject to limitations such as continuous listing for 10 years and availability of data for the period under study.

Research Methods Used

Descriptive statistics such as mean and standard deviation are extensively used to neutralize the fluctuations in the value of independent and dependent variables. Correlation co-efficient is also extensively used to determine the one-to-one relationship between selected variables. Multiple regressions are also used to determine the various significant variables that influence the P of a firm. Factor analysis is also used to determine the factors influencing P .

REGRESSION EQUATION

The regression equation is formulated for the purpose of finding the factors determining P . The term P has been defined (as the average rate of return on assets) by Lowe, Jordan and Taylor (1994).

DEPENDENT VARIABLE

The dependent variable is P , computed using the ROA ratio. P has been considered as $ROA = \text{Ratio of } (\text{EBIT} + \text{depreciation charges}) \text{ to fixed assets}$ (Roden and Lewellen 1995).

INDEPENDENT VARIABLES

- Liquidity (LIQ)
- Capital-Intensity ($CAPINS$)
- Size of the Firm (SIZ)
- Growth in Total Assets ($GROW$)
- Volatility (VOL)

RATIOS OF INDEPENDENT VARIABLES

- LIQ = The average ratio of cash and marketable securities to Total Assets
- $CAPINS$ = Total Assets to Sales
- SIZ = Logarithm of Sales over Years
- $GROW$ = Compounded annual growth rate of Total Asset
- VOL = Standard deviation of Earnings before Interest, Taxes and Depreciation ($EBITD$) divided by Total Assets.

CONTROL VARIABLES

The chosen sample firms are further grouped into three categories based on the size measured based on the quantum of sales. The firms with a sales turnover up to Rs.100 crore are grouped as '*small sized firms*,' the firms with a sales turnover of > Rs.100 crore but < Rs.500 crore are grouped as '*medium sized firms*,' and firms with a turnover of > Rs.500 crore are grouped as '*large sized firms*.' The industry average of sales turnover for the study period of 10 years is considered for categorization of firms into three sub groups as stated.

$$P = \alpha + \beta_1 LIQ + \beta_2 CAPINS + \beta_3 SIZ + \beta_4 GROW + \beta_5 VOL + \varepsilon. \quad (1)$$

Industry Analysis and Discussion

OVERALL CORRELATION AND REGRESSION ANALYSIS

Overall descriptive statistics reveals that *CAPINS* has a higher mean value and its deviation is also higher. This shows that the food industry probably doesn't block a fixed amount of capital in the form of long lived assets. Their investment in fixed assets keeps on changing over the period of study thereby leading to a higher standard deviation when compared to other variables. The deviation from mean values for *P*, *LIQ*, *SIZ*, *GROW* and *VOL*, however, remains less than one, indicating that the other variables are fluctuating less than that of the *CAPINS*. The overall correlation matrix of the independent variables shows that the correlation between *SIZ* and *P* (0.426) is highly significant (at 1% level). The *SIZ* therefore significantly influences *P*, and the positive correlation represents that *P* increases with *SIZ*. There is a significant positive correlation between *GROW* and *P* (0.351) at 5% level, which indicates that as the firm grows the *P* increases. *CAPINS* shows a negative correlation with *P* as pointed out by Ghemawat and Caves (1986). They suggested that *CAPINS* can affect *P* because cut-throat competition might eliminate all future profits, depressing each firm's net security level. *LIQ* and *VOL* show a positive correlation with *P*, which is, however, insignificant.

The results of multiple regressions on the dependent variable – *P* are shown in table 2. The multiple regression result shows that *SIZ* has a significant positive coefficient (0.136) with *P*, highlighting the significance of the impact of *SIZ* on *P*. *VOL* shows a significant positive coefficient with *P* (1.067 at 5% level), which does not match with the results of the study of Pandey (2002), who pointed out that fluctuation in the profit earned might increase the cost of capital, thereby reducing *P*. But this holds good for a well established industry, which has lesser challenges. The food industry, being a growing

TABLE 2 Multiple regressions on dependent variable – profitability

Variables	Un-standardized coefficients beta value
(Constant)	-.068 (.574)
<i>LIQ</i>	-.229 (.765)
<i>CAPINS</i>	.001 (.551)
<i>SIZ</i>	.136 (.021*)
<i>GROW</i>	.585 (.138)
<i>VOL</i>	1.067 (.027*)
R^2	.288
Adjusted R^2	.211
<i>F</i> -statistics	3.728

TABLE 3 Factor analysis on overall food industry on profitability

Factor	Eigen value	Variable convergence	Factor loadings
Factor 1	2.246	Size	.787
		Profitability	.745
		Capital intensity	-.662
		Growth	.574
Factor 2	1.262	Volatility	-.807
		Liquidity	.622

industry needs to take risks to earn more profit; hence the industry shows an abnormal positive relation between *VOL* and *P*. The adjusted R^2 also shows that the model is 21% fit; the *F* statistics is, however, highly significant (at 1% level).

Factor analysis (*FA*) is performed to test the factors significantly determining the *P* of the food industry and the results are shown in table 3. The *FA* shows that (variables are grouped into two factors) there is a high rate of interrelation between them. Factor 1, which constitutes *SIZ*, *P*, *CAPINS*, and *GROW* indicates a high level of correlation between them, while *VOL* and *LIQ* which are grouped as factor 2 also show a high degree of interrelation.

IMPACT OF SIZE OF FIRMS ON PROFITABILITY

Table 4 shows an overview of the trend of *P* of three size categories of firms of the food industry in India. The *P* has shown a sharp rise during the last four years of the study period, and a fall in the year 2008–9, however, the *large size firms* show a higher *P*. Though *P* has decreased in the last year of the study period for *large size firms* the *CS* has, however, increased.

The descriptive statistics for *small size*, *medium size* and *large size*

Determinants of Profitability of Food Industry in India

TABLE 4 Size-wise trends of profitability of food industry in India during 2000–9

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
(1)	0.167	0.17	0.21	0.21	0.207	0.18	0.245	0.410	0.819	0.529
(2)	0.247	0.23	0.20	0.29	0.376	0.24	0.252	0.268	0.399	0.277
(3)	0.276	0.30	0.26	0.29	0.330	0.30	0.467	0.447	0.482	0.426

Row headings are as follows: (1) small size firms, (2) medium size firms, (3) large size firms. Source: CMIE, 30 January 2010.

TABLE 5 Multiple regressions on dependent variable – profitability (for small size firms)

Variables	Un-standardized coefficients beta value	
	Model 1	Model 2†
(Constant)	.031 (.791)	.027 (.705)
LIQ	-.106 (.922)	-.096 (.926)
CAPINS	7.663e ⁻⁶ (.995)	3.268e ⁻⁵ (.972)
SIZ	-.003 (.966)	–
GROW	2.302 (.031*)	2.279 (.010**)
VOL	1.764 (.001**)	1.760 (.000**)
R ²	.620	.620
Adjusted R ²	.484	.519
F-statistics	4.567*	6.115**

Notes: The figures in parentheses are *p* values. ** Significant at 0.01 level.

* Significant at 0.05 level. † After removing predictor variable SIZ.

firms indicate that CAPINS has higher mean and standard deviations in all the three (*small size, medium size and large size firms*) categories of firms, indicating that there is a wide deviation among the firms in the investment in fixed assets.

Analysis of Small Size Firms

The correlation matrix for *small size firms* shows that VOL is highly significantly positively correlated with *P* (0.611) at 1% level. This shows that the *small size firms* have to face more challenges to earn additional profit and thus VOL increases with *P* while CAPINS and LIQ show a negative correlation with *P*, GROW and SIZ show a positive correlation with *P*.

Step-wise regression is applied to study the impact of selected variables on *P* of Small Size Firms of Food Industry and the results are shown in table 5. Multiple regressions for *small size firms* are carried out in two models, *model 1* and *model 2*. *Model 1* shows that GROW has a significant positive coefficient (2.302) with *P* (at 5% level), and VOL has also a highly significant positive coefficient

TABLE 6 Factor analysis for small size firms of food industry on profitability

Factor	Eigen value	Variable convergence	Factor loadings
Factor 1	2.168	Size	.892
		Growth	.772
		Capital intensity	-.722
Factor 2	1.563	Volatility	.936
		Profitability	.834
Factor 3	1.058	Liquidity	.926

(1.764). The variable, *SIZ* has been removed in *model 2* to better understand the impact of the variables on *P*. *GROW* and *VOL* have highly significant positive coefficients (2.279 and 1.76 respectively) with *P* (at 1% level). The adjusted R^2 value shows that it influences to the extent of 48.4% (adjusted R^2) on *P* in *model1*, which is fit ($F = 4.567$ at 5% level). However in *model 2*, the impact increases to the extent of 51.9% (adjusted R^2), which also reveals a good fit ($F = 6.115$ at 5% level) thereby leads to infer that the regression model is a good fit after removing the variable *SIZ* from the equation.

FA is performed to study the factor significantly determining the *P* of small size firms of the food industry and the results are shown in table 6. The *FA* for *small size firms* reveals that the selected variables have been grouped into three factors. The variables *SIZ*, *GROW*, and *CAPINS* constitute *factor 1*, variables *VOL* and *P* constitute *factor 2*, while variable *LIQ* forms *factor 3*.

Analysis of Medium Size Firms

The correlation matrix of *medium size firms* shows that *GROW* has a significant positive correlation (0.427) with *P* (at 5% level), while *CAPINS*, *SIZ*, and *VOL* show an insignificant negative correlation with *P*, *LIQ* has also an insignificant positive correlation with *P*. Step-wise regression is applied to study the impact of selected variables on *P* of Medium Size Firms and the results are shown in table 7. Multiple regressions for *medium size firms* are carried out in two models, *model 1* and *model 2*. *Model 1* of regression analysis indicates that *SIZ* has a significant negative coefficient with *P* (at 5% level), on the other hand, *model 2*, which has been formed after removing the impact of *LIQ* and *CAPINS* on *P* shows that *GROW* has a significant positive coefficient with *P* (at 5% level). However, *model 1* has a significant impact (higher R^2 and adjusted R^2 values) than that of *model 2*, which fact shows that *model 1* fits better than that of *model 2* on the whole.

TABLE 7 Multiple regressions on dependent variable – profitability (for medium size firms)

Variables	Un-standardized coefficients beta value	
	Model 1	Model 2†
(Constant)	1.483 (.021)	1.133 (.050)
LIQ	1.285 (.320)	–
CAPINS	–.062 (.247)	–
SIZ	–.542 (.039*)	–.391 (.100)
GROW	.746 (.056)	.763 (.050*)
VOL	–1.400 (.127)	–1.118 (.211)
R ²	.405	.311
Adjusted R ²	.219	.196
F-statistics	2.177	2.706

Notes: The figures in parentheses are *p* values. ** Significant at 0.01 level.
* Significant at 0.05 level. † After removing predictor variable LIQ & CAPINS.

TABLE 8 Factor analysis for medium size firms of food industry on profitability

Factor	Eigen value	Variable convergence	Factor loadings
Factor 1	1.643	Profitability	.866
		Growth	.800
Factor 2	1.464	Volatility	–.925
		Size	.705
Factor 3	1.065	Capital intensity	–.807
		Liquidity	.599

FA is performed to study the factors significantly determining the *P* of Medium Size Firms of the Food Industry and the results are shown in table 8. The factor analysis for *medium size firms* reveals that there exists a higher level of interrelation among the selected variables.

Analysis of Large Size Firms

The correlation matrix for *large size firms* shows a significant positive correlation between CAPINS and *P* (at 5% level) while there exists a negative relation between CAPINS and *P* in the case of *small* and *medium size firms*. The overall result also shows a negative correlation between CAPINS and *P*, which leads to infer that the larger the size of the firm, the more the investment in long lived assets has helped to increase the *P* of the firm, unlike the trends in *small size* and *medium size firms* where there exists a negative relation between *P* and CAPINS. Ghemawat and Caves (1986) have pointed out that CAPINS can affect *P* because cut-throat competition might

TABLE 9 Multiple regressions on dependent variable – profitability (for large size firms)

Variables	Un-standardized coefficients beta value	
	Model 1	Model 2†
(Constant)	-.131 (.914)	.360 (.425)
LIQ	-1.416 (.370)	-1.594 (.255)
CAPINS	.486 (.068)	.463 (.045*)
SIZ	.140 (.665)	-
GROW	.205 (.835)	.086 (.919)
VOL	3.695 (.518)	3.317 (.515)
R ²	.771	.759
Adjusted R ²	.486	.566
F-statistics	2.701	3.937

Notes: The figures in parentheses are *p* values. ** Significant at 0.01 level.

* Significant at 0.05 level. † After removing predictor variable *SIZ*.

eliminate all future profits depressing each firm’s net security level, thereby leading the decrease in *P* to decline with *CAPINS*. Perhaps, such high competition does not prevail among *large size firms*, as the food industry is presently a growing industry. Increased *CAPINS* leads to increased risk by blocking huge capital in the form of fixed assets thereby reducing *P* only if there is a cut-throat competition.

Step-wise regression is applied to study the impact of selected variables on *P* of Large Size Firms of the Food Industry and the results are shown in table 9. Multiple regressions for *large size firms* are carried out in two models viz *model 1* and *model 2*. The regression result for *large size firms* shows that *CAPINS* has a significant positive coefficient (0.463) with *P* (at 5% level) after removing the impact of *SIZ* on *P* from the ordinary least square (OLS) regression model. The adjusted *R*² value is also higher in *model 2*, showing that this (regression) equation fits better. *GROW* and *VOL* have a positive coefficient with *P*, and *LIQ* has a negative coefficient with *P* in the case of *large size firms*.

FA is performed to study the factors significantly determining the *P* of Large Size Firms of the Food Industry and the results are shown in table 10. The *FA* of *large size firms* shows that there is a high interrelation among these variables.

Findings and Concluding Remarks

The size wise analysis of the Indian food industry has brought to light some interesting facts of the industry. The overall result shows that there is a significant positive correlation between *GROW* and *P*

TABLE 10 Factor analysis for large size firms of food industry on profitability

Factor	Eigen value	Variable convergence	Factor loadings
Factor 1	2.452	Capital intensity	.934
		Profitability	.911
		Liquidity	-.560
Factor 2	1.399	Volatility	.818
		Growth	-.585
		Size	.551

(0.351 at 5% level), indicating that as the firm grows the P increases. However, $CAPINS$ shows a negative correlation with P as pointed out by Ghemawat and Caves (1986). Thus, H_0^4 is rejected. The correlation between SIZ and P (0.426) is highly significant at 1% level, throwing light on the significant impact of SIZ in determining P of the Indian food industry. Thus, H_0^5 is also rejected as SIZ has a significant impact on the relationship of variables in determining P of the food industry in India. The size-wise analysis of the firms also supports the rejection of the hypothesis. VOL also shows a significant positive coefficient with P (1.067 at 5% level), which does not match with the outcome of the study of Pandey (2002), who pointed out that fluctuation in the profit earned might increase the cost of capital, thus reducing P . However, the statement holds good for a well established industry, which probably has less challenges. The food industry, being a growing industry in India needs to take risk to earn higher profit. Thus, the industry shows an abnormal positive relation between VOL and P , which leads to rejecting the H_0^3 .

The specific size-wise analysis reveals that the *small size firms* have to face more challenges to earn additional profit and thus VOL increases significantly with P . Therefore, H_0^3 is rejected in the case of *small size firms*. Thus, the industry shows an abnormal positive relation between VOL and P . The correlation matrix for *small size firms* also shows that VOL is significantly positively correlated with P (0.611 at 1% level). This shows that *small size firms* have to face more challenges to earn additional profit and thus VOL increases with P . Multiple regression analysis of *small size firms* shows that $GROW$ as well as VOL have a significant/highly significant positive coefficient with P . When SIZ is removed from the regression equation, $GROW$ as well as VOL has a significant positive coefficient with P , significant at 1% level and VOL has a positive coefficient with P . Therefore, H_0^3 and H_0^4 are rejected in the case of *small size firms*.

The correlation matrix for *medium size firms* shows that $GROW$

has a significant positive correlation with P . *Model 1* of regression analysis indicates that SIZ has a significant negative coefficient with P , whereas *model 2* of regression analysis shows that $GROW$ has a significant positive coefficient with P , thereby H_0^5 is rejected in case of *medium size firms*.

The correlation matrix for *large size firms* shows a significant positive correlation between $CAPINS$ and P . Therefore, H_0^2 is rejected in the case of *large size firms*, however there exists a negative relation between $CAPINS$ and P in case of *small* as well as *medium size firms*. The overall result also corroborates a negative correlation between $CAPINS$ and P , which fact reveals that the larger the size of the firm, the more the investment in the long lived assets has helped to increase the P of the firm, unlike the trends in *small size* as well as in *medium size firms* where there exists a negative relation between P and $CAPINS$. The increased $CAPINS$ leads to increase in risk by blocking huge capital in the form of fixed assets thereby reducing P only if there is a cut-throat competition as stated by Ghemawat and Caves (1986). The regression result for *large size firms* shows that $CAPINS$ has a significant positive coefficient with P after removing the impact of SIZ from the regression model. The adjusted R^2 value is also higher in *model 2* when compared with that of *model 1*, showing that the equation fits better.

Thus different hypotheses are rejected at different size categories, indicating that size decides the extent to which of the other predictor variables are related with P . H_0^1 , which assumes that LIQ has no significant impact on P of the firms in the food industry in India, is accepted in all the categories irrespective of size of the firms. The overall results also commend the same.

Limitations and Scope for Further Studies

- Analysis of the study is based on financing data collected from CMIE Prowess Package; hence the quality of the study depends purely upon the accuracy, reliability and quality of secondary data.
- The analysis could not be extended to a larger period due to the problem of resources/ data availability.
- The sample firms chosen for the study are restricted to the small in number due to limitations such as lack of continuous listing, non-availability of data pertaining to those firms in the data source-Prowess Package.

The study has been restricted to a few categories of the food indus-

try only. Hence, studies could well be undertaken in other categories e.g., sugar, coffee, and other products of the food industry as well as in other industries too. A comparative study across industries can also be made.

P is studied by use of ratio of ROA . For further studies, the other profitability ratios can also be considered. Other than the predictor variables used in this study, age, exports, reliance on debt, employee productivity and managerial efficiency may also be used as predictor variables.

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Barriers to E-Customs in an Emerging Economy: The Case of Iran

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E-government is in fashion because of a lot of benefits which it can forgive to every society. One of the sub-systems of E-government is E-customs. So far, a lot of countries around the world have adopted E-customs in their own countries. One of the very latest countries in this area is Iran. The results of this study show that for the implementation of E-customs there are several barriers which should be removed as early as possible in the very near future.

Key words: automated system for customs data, customs effectiveness, Iran

Introduction

In the 21st century, organizations are facing a wide variety of challenges including the trend of globalization, increase of technological changes and revolutions, customer-oriented policies and conditions. Thus, it is a necessity for managers to be ready for managing changes in dynamic environments and also organizations should exercise the required efforts to improve their works towards the changes and modify their affairs. Otherwise, their survival is threatened. The shift of societies towards the information society has had deep effects on numerous economical, social and cultural aspects of human life (Dibrell and Miller 2002). Two forces, i. e. globalization and high technology together with the new challenge of customer-oriented conditions, have forced organizations to pay special attention to their surrounding environment while respecting internal rules and disciplines, which caused to E-commerce. E-commerce accelerates the global commercial trend by removing the boundaries facing international trade (Molla, Taylor and Licker 2006). It benefits from economic advantages such as market expansion, reduction of product source prices, promotion of productivity, reduction of transaction costs and inflation, lowering uncertainty, sharing market information, and aiding in distribution channel efficiency and plays a vital role in endogenous economic growth (Abbasi 2007). The numerous advantages of e-commerce have led not only to developed but

also developing countries as a means towards competition in internal and international areas. At the early stage of e-commerce diffusion both public and private companies play key roles in creating conducive conditions and encouraging and making the spread of e-commerce more energetic and effective (Molla, Taylor and Licker 2006). Therefore, the development of e-commerce requires a series of essential activities in technical infrastructure, legal and regulatory issues, awareness, training and education, private sector protection, and government supports to provide conditions for economic players such as consumers and businesses to play a key role in the application of e-commerce. Cost savings and increased business process efficiencies are other considerable potential impacts of e-commerce which have been recognized by the main industry players. The distribution processes of regulated products are notoriously complex when dependent upon a predominantly paper based system (Littler and Hudson 2004).

In the light of these changes and revolutions, the traditional methods for doing works in organizations are gradually diminishing and mechanized methods are substituting them.

In this aspect, International organizations such as United Nations, conference on Trade and Development, World Trade Organization, World Customs Organizations, etc. have tried to achieve their goals by mechanizing customs through planning, formulating and implementing new plans (Farzin and Teimoori Nezhad 2010).

The automated SYstem for CUstoms DAta (ASYCUDA) and its sub-programs is one of the programs suggested to be implemented by countries especially developing ones. It is obvious that if requirements and necessary facilities and resources in order to implement this system are cared for, this system would be more efficient.

ASYCUDA: An Introduction

ASYCUDA system is a computerized customs management system, and regarding the broadness of customs formalities, it covers all customs procedures such as imports and exports, transit, etc.

This system acts towards providing services to customers and operates in UNIX, DOS and Relational Data Base Management (RDBMS). This software also includes a series of open models that can be adjusted according to the special needs of countries using this system.

ASYCUDA software has been designed by UNCTAD in Geneva following the request for help from West African economic society countries in 1981, in preparing and arranging commercial statistics and in order to create a common and uniform language in international trading, the UNCTAD organization created this system with

their aid and suggested it to them. The customs authorities of the Islamic republic of Iran, along with the trend towards better implementation of customs rules and regulations and considering the existing policies in global trade and the World Customs Organization (WCO) relating to simplifying customs formalities and procedures, are considering the use of computerized systems. This is also being done in order to remove problems and bottle necks related with manual methods and in order enhance activities speed and provide timely statistics required by managers in decision making, create capacities and potentials in customs and finally to satisfy the clients.

In this research, in addition to evaluation of the existing competencies of the country, also a general look is taken at the systems being used in developing countries most important of them is ASYCUDA. This system by now used in 70 countries all over the world, has drawn the attention of Iranian customs experts and authorities.

In this regard, Iranian customs authorities contacted with UNCTAD and gathered some relatively systematic information on ASYCUDA capabilities and also studied the administrative contexts of implementation of the above-mentioned system. Briefly and at last, in 1996 a contract was made between Iranian customs and the UNDP agent in Tehran included technical aspects, implementation programs and joint investments towards pilot implementation of ASYCUDA. Following this event, after conducting follow-up studies, the implementation headquarters of the ASYCUDA project was established with direct responsibility of the plan and program vice president (as the national director of the project) in the Iranian customs.

The ASYCUDA project is being implemented in 3 phases described in the following (Voldan 2003).

Phase 1

The first phase, contract of the project approval of state management and planning organization, ministry of foreign affairs and Iranian customs with the aim of initiating and applying ASYCUDA for a pilot customs.

The period of this plan had been estimated as 18 months; it is worth noting that UNDP introduced UNCTAD as the executive consultant of the project through a separate letter of understanding.

Iranian customs drew attention to the project purpose by forming national work groups – and without the presence of resident experts' procedures in Mehrabad commercial customs – in 1997 by taking such measures as:

- Refining and simplifying current procedures;

- Translating the whole system into Persian;
- Converting Christian dates into solar Hegria;
- Designing new customs declaration forms; and
- Adapting the manual operational cycle to the suggested method in ASYCUDA system.

This initiation is considered as a great step towards the main purpose of customs, which is decreasing the bureaucracy governing this organization, optimizing and improving clearance procedures and moving towards a paper-less trade.

Phase 2

According to the achievements of phase 1, Iranian customs considered pursuing contract making in relation to phase 2 for active customs of the country, and with approval from the management and planning organization, ministry of foreign affairs and UNDP, succeeded in making a contract for phase 2 in May, 1999.

The aim of this document was to initiate and exploit from the ASYCUDA system in 8 active customs of the country, i. e. west of Tehran, Bandar Abbas (Shahid Rajayee customs), Bandar Abbas (Shahid Bahonar customs), Shahriar of Tehran, Mashhad, Bushehr and Bandar Emam.

The period considered for completion of this phase was 18 months. Iranian customs experts, exploiting from the experience obtained in phase 1, started a wide range of activities in order to achieve project goals and at last succeeded in equipping over 20 customs with the ASYCUDA system, frequently recognized by various countries, UNCTAD and UNDP. One of the significant reasons for realization of the above-said success was the great support from customs chief managers towards implementation of this plan, and in all of the circulars, presentations and instructions, implementation of this plan has been noted as one of the customs priorities and necessities.

It worth saying that the cost of implementation of this plan in the Philippines, Hungary customs were respectively over 10 million USD, about 5 million USD and about 8 million USD and in other countries customs it was similar to these customs but in Iran considering the absence of foreign experts and efforts of national CD-workers it was done with the least cost.

Phase 3

Iranian customs along with state policies towards developing E-commerce and E-government and also according to the recommen-

dations of world customs organization has considered exploiting new Information Technologies in this information era. Iranian customs regarding the visits of respectable president to operational sites of ASYCUDA in customs Mehrabad and also the recognitions and encouragements associated with this plan, decided to follow the third and final phase of ASYCUDA plan. In this regard, after a 6-month study conducted together with agents from management and planning organization, ministry of foreign affairs, the customs and UNCTAD, the contract for phase 3 was made between Iranian customs and UNDP in Aug, 2002.

Results predicted for implementation of phase 3:

- Using Internet platform for remote declaration of goods;
- Providing services on a 24-hour basis and on all days of the week by the customs;
- Decreasing country's customs traffic;
- Using tools for intelligent and intangible control with the aid of secret indices in the declaration path selection system;
- Decreasing paper documents in the customs setting;
- Possibility of electronic data exchange with other business organizations;
- Familiarity of employees with the new culture of information technology.

One of the subjects in this category is electronic signature. It is the data attached to a message so that the message receiver becomes aware of the source identity and makes sure of the accuracy and integrity of the message, which should indicate the unique sender and also whether the message is manipulated or not.

ASYCUDA Structure in Iran

The main core of the ASYCUDA project in Iran consists of the ASYCUDA project director, ASYCUDA secretariat, technical team and custom team.

Members of ASYCUDA technical and customs team are some of the computer and customs specialists and each team is headed by a manager who, in cooperation with other managers and under the supervision of national ASYCUDA project director, have set up this system in the country's customs and support it.

It is necessary to note that Iran is the only country which has succeeded in setting up the ASYCUDA system by domestic forces without the presence of resident experts of UNCTAD in the country in as short a time as possible and at a low cost.

Preliminary Measures for Implementing ASYCUDA

1. *Examination and suitable preparations.* The first stage of the preliminary measures for implementing the ASYCUDA system, is to explore existing resources and equipment in the target customs, identifying possible shortages, secondary equipment and tools and also creating a suitable space for installation of hardware devices such as data entry division, computer room in an administrative building which can include sequential stages of customs clearance according to the ASYCUDA method. This examination and study is done by 2 experts dispatched from ASYCUDA's computer and customs teams to the target customs (Salehi, Alipour, and Yahyavi 2010).
2. *Network cabling.* After preliminary study, the cabling computer network of customs office is done. Cabling is conducted by contracting with valid computer companies' within the country. Of course, these companies conduct cabling and testing operations according to maps prepared by computer and customs team's experts in the previous stage.
3. *Installation of and providing training on software devices.* Having sent software devices and energy storing batteries to the customs office, the ASYCUDA computer team begins installing and operating them, as well as providing, required training on networked computers and the main computer (server) to the computer supervisor and other staff involved with ASYCUDA system.

Characteristics and Capabilities of the ASYCUDA System

As mentioned earlier, the customs of the Islamic Republic of Iran, in the course of formulating a systematic plan in order to modify customs formalities of the traditional system in cooperation with 'UNDP' and 'UNCTAD,' decided to further facilitate customs formalities relating to releasing of goods as much as possible by creating and promoting a customs operational computer system. In order to achieve the above-said goal, exploiting the ASYCUDA system was considered by Iranian customs. This system has certain qualities and advantages compared to traditional methods, as follows:

1. *Supporting all customs procedures and clearance methods.* According to the broadness of the system, clearance formalities and all customs procedures and methods such as imports and exports, transit, etc. can be supported, thus reducing the possibility of making mistakes.

2. *Controlling transit of goods at their sources and destinations through computers.* Using this system, information on transited goods is collected at the source customs and sent to the destination customs for inspection and control via telecommunication lines. In this way, transit of goods is done in the shortest time, permits are provided, and finally saving in time and costs results from this process.
3. *Using the international Single form.* The single administrative Document is a declaration form that can accept all goods declaration procedures by indicating the code specific to each procedure. This results in using a single form for different customs declarations. The SAD declaration was created by the European Union Council on 1 January 1988 in order to standardize customs procedures.
4. *Printing declarations and all reports.* In this system all affairs (except for measures that should be taken by individuals and need decision making such as assessment) including tariff determination of declaration, all reports, receipts and journals are printed by printers, and also assigning numbers and assessment numbers is done by computers.
5. *Using international codes.* In global trade and international relations, there are some codes and abbreviations are known to and to all countries such as Hs codes, country codes, currency codes, etc. have been defined in this system and are easily accessible.
6. *Using local codes.* Except for international codes, there are other codes known at national level and are locally applied such as bank codes, customs codes, business card codes and individuals specifications all of them are also definable for the system and leads to identifying individuals and can be reported with high speed and accuracy.
7. *Possibility of coding permits and keeping them up-to-date.* Presence of different permits regarding their numbers, importance and validity period results in problems for customs which using this system, after coding permits through Tariff are printed in customs declaration and owner of goods or the commission worker are required to provide that permit(s). In addition, possible changes in permits can be updated easily and by this procedure, the latest information can always be available.
8. *Possibility of remote declaration using E-mail and telecommunication equipment.* The presence of a computer and a connection line makes it possible for the commission worker to declare

his/her goods to the customs in the shortest time possible and then take measures for its clearance which this procedure avoid physical reference of commission workers to customs office.

9. *Possibility of paying customs duties through electronic banking system.* Using the ASYCUDA system capabilities, after calculation of customs duties of declaration, in the case that there is an electronic connection with banks, calculated funds are automatically deducted from the bank account of the goods owner and deposited to the bank account of the customs. In this way, referring of owner of goods to the bank and exchanging the related fund are eliminated from goods releasing process.
10. *Elimination of traditional statistical and financial offices.* According to the fact that the system automatically determines all operational numbers such as entry numbers, evolution numbers and receipt numbers and keeps them separate lists, in effect traditional statistical and financial offices are no longer exist and in this way there offices are eliminated from the customs operational cycle.
11. *Customs income accounting and automatic receipt issuance.* In this system all received amounts are carefully calculated and receipts are automatically printed by computers and there is no need to write or calculate and other affairs about accounts by individuals. In addition, reports of financial affairs performed during a day or shift can be received at the end of the official time or shift.
12. *Possibility of using credit accounts and prepayments in the accounting plan.* Commission workers can take a measure to perform their customs affairs by depositing an amount in the customs banking accounts as guarantee and creating credit. In this case, in declaration of goods, respective amounts are automatically taken from their accounts and deducted from it.
13. *Possibility of converting information in the declarations existing in the system into EDI codes and enabling electronic exchange of information.* Along with other electronic data exchange with other organizations, ASYCUDA system uses UN/EDIFACT standards (Salehi, Alipour, and Yahyavi 2010).
14. *Possibility of using the declaration path selection method on the basis of existing information in the system (red, blue, yellow and green channels).* ASYCUDA, in addition to accelerating of clearance operations such the newest concepts applied in advanced customs of the worlds and information technologies such as se-

lection of declaration path automatically, using that and creating red, yellow and green paths for customs declaration, their processing is done rapidly. Selection of declaration path is fully automatic and is performed using secret indices defined and approved by special committees in the customs.

15. *Possibility of having all information on and measures taken in relation to the declaration.* In this system in each stage that the customs experts or president want to obtain information about the quality of doing works, they can observe the measures taken via computer screen. For example they can see one declaration being evaluated is in which stage and what is its state.
16. *Controlling goods values.* Using this system, goods values also can be controlled. This is done by assigning 8-digit tariff codes, defining goods with related name and value in the computer and keeping them as a record which after encountering with an item with the same name and tariff code, the value of item is controlled by system and with the related definitions.
17. *Providing correct and timely statistics to various statistical units.* All activities done in one customs can become available statistically and carefully and by this information, in addition to statistics as various tables statistics relating to the number of declarations or financialized declarations, etc. also can be prepared.
18. *Calculation of customs.* Via computer with maximal required accuracy and speed.
19. *Providing various types of statistical, economic, commercial, and customs reports in as short a time as possible.*
20. *Possibility of determining assessors through the system and dividing declarations between them.*
21. *Possibility of creating a systemic relationship with commission workers, banks, insurance companies and transportation institutions and preparing a ground for creating a Trade point and accessing to paperless trade.*
22. *Eliminating redundant work stations.*
23. *Possibility of creating suitable facilities for importers and exporters.*

Review of Literature

Considering the subject of the present study, some investigations in this regard have been done by researchers, some more related with the present subject are presented below:

Schmidt (2000) a large-scale study to assess e-business value in small, medium and large companies across the US and Europe was conducted. Results showed that to maximize benefits, a company should invest in and commit resources to all eight drivers; system integration; customer orientation of IT; supplier orientation to IT, informational (quality, supply continuity and relationship management) and transactional; internal orientation to IT; customer-related processes; supplier-related processes; customer e-business readiness; and supplier e-business readiness (Barua et al. 2000). Another research about e-business and e-commerce in developing countries showed that lack of awareness and understanding of the value of e-business, lack of ICT knowledge and skills, financial costs, insufficient infrastructures and security are the main barriers to increased uptake of information technology and e-commerce (Andam 2003).

The revolution in information technology has exploded into the new knowledge economy, and new information technologies are changing the ground rules for information flow in societies. The importance of using new technologies to provide information access is of great significance in the global economy (Thomson 2005). In other words, information technology is the focal point of electronics, data processing and telecommunication. This convergence has two aspects:

1. The elimination of distances through providing linkage among separate computers in the world-wide web.
2. The computerization of systems and telecommunication which results in new capacities to transfer sounds and images.

This mutual convergence has provided human beings with a new tool to collect, store, process, organize, transfer, and represent information. The computer has facilitated the collection, processing and transfer of information and therefore has resulted in cost reduction, productivity, quality, and efficiency improvement in all industries (Samuelson and Varian, 2002). Information technology has numerous applications ranging from tax collection to bank organization, from oil excavation to creating energy systems, from document management to the analysis of complex scientific problems etc (Seresht, Fayyazi, and Simar Asl 2008).

A study was carried out by Ayati (2007) under the title of efficiency of ASYCUDA in the customs of Iran from customs staff and commission workers point of view; this is a field research performed by many staff, managers and commission workers of west Tehran and Mehrabad customs, and in order to gather information, in addition to

laboratory resources, a kind of questionnaire was also used. Findings of this research showed that from the staff view point, the ASYCUDA system had only been effective above the medium level in relation to increase in easiness and volume indices, and has been effective under the medium level in relation to increase in services and job skills and decrease in violations, also it has been effective under the medium level in relation to indices for increase of speed, easiness, customs services and decrease in costs and customs violation from the staff point of view (Salehi, Alipour, and Yahyavi 2010).

Another study was done by Gholami (2002) which this research was also of surveying type has been performed across all employees and clients of West Tehran Customs. In this research such indices as accuracy, speed, and facilitation of customs formalities have been considered. The results of this research from the staff and commission worker point of view show that implementing the goods releasing path selection method has been effective above the medium level in relation to increasing satisfaction of commission worker and the rate at which customs formalities are performed and has been effective a little above the medium level on decreasing customs costs and capital sleep. Implementation of the goods releasing path selection method has increased staff satisfaction under the medium level and has been along with present rules and regulations under the medium level.

Increasing complexity of cultural, political, economic and social relations of organizations and also managing them towards achieving their aims has made using information very necessary. Managers in order to perform their managing tasks the most important part of it is decision making need information. Formation and creation of management information system is possible by exploiting from various sciences (Salehi, Alipour, and Yahyavi 2010).

In another research performed by Samsami (2001) which statistical population of this research included all employees of west Tehran customs has a diploma or a higher degree and the whole population has been studied as the sample.

The research method is a descriptive surveying one.

The results obtained from it are as follows: Mechanized system leads to increase of accuracy, precision, speed, satisfaction, income and finally efficiency in relation to doing works.

Research Done in Other Countries

A research with title: 'Evaluation of a System for Computerizing Customs Procedures and Information for Improving Receipt of Cus-

toms Incomes in Jordan' by a 3-person Evaluating Team (Consultants of UNCTAD and UNDP and a Domestic Consultant from Jordan) performed from August 11th to August 13th 1999.

First phase of the project had started since September 1995 as a pilot project for computerizing 3 projects known as: 'Customs Headquarters in Oman, Prince Alia International Airport and Oman Customs Office' (Salehi, Alipour, and Yahyavi 2010).

At first evaluating, group in Oman customs headquarters and in the project of airport, started the operations since September 1999 according to the plan. According this plan all commission workers submit customs declarations to the customs electronically.

The aim of this study was improvement of the country's economy by enhancing the capacity of government for creating customs income via providing trade society with efficient services.

The effects of the project include 5 immediate and visible purposes as follows:

1. For ensuring collection of customs income and improving efficiency and effectiveness of customs activities through ASYCUDA.
2. For promoting governmental capabilities in facilitating and standardizing dynamic economy and financial policies by providing in time and accurate information.
3. For enhancing applied capabilities of customs offices.
4. For increasing capabilities of customs offices in providing correct information to the traders.
5. For preparing and presenting standard information from ASYCUDA in order to apply in management information on international trade.

Some findings of the evaluating teams are: During the implementation of the project a series of tools were used for facilitating and simplifying information, documents and customs procedures for automatic adjustment in ASYCUDA (Salehi, Alipour, and Yahyavi 2010).

A few examples of these tools are: Smooth customs tariff, single administrative document (SAD), using risk management technique, minimizing the connection between commission worker and customs executive experts.

Success indices various indices representing success of plan and realization of planners' expectations are briefly as follows:

1. Clearance time: On green path, declaration tasks about two hours.
2. Incomes collection: Incomes, in spite of reduction in customs duties remained as before.

3. Business statistics: Business statistics are more complete, up-to-date and accurate.
4. Simplification and enhancement of transparency in: Smooth and single customs tariff, single administrative document, risk management techniques, direct commercial information, separating commission workers from customs staff and considering preferential taxes.
5. Structural capacity: Conveying training and technology and technical knowledge was realized.

Results: Before everything, the policy of supporting high levels and commitment to these types of projects is necessary. Since the system is fully new, this can be realized by customs choosing to appoint efficient and qualified employees for managing ASYCUDA plan, operational posts and project management. Secondly, it is necessary for other ministries associated with international commerce sector to do their best in order to reduce commercial barriers for trade unions. This leads to maximal exploitation of simplified procedures of trading by national economy and this is a part of the ASYCUDA plan.

Third, in such a complex project, full examination before implementation and initiation of the ASYCUDA system should be performed. Fourth, training time and supportive activities should carefully be planned so that the host country can make the best use from resources.

Fifth, in planning projects aimed at fundamental and structural changes in commercial methods of organizations, all efforts should be made in order to understand the intended or unwanted outcomes of these changes. Also all agents who would be affected by the changes should be prepared so that they can implement the project more successfully.

Research Problem

World economic and social revolutions in recent decades have forced countries' customs to acquire necessary readiness for undertaking new responsibilities in addition to revising their traditional state, tasks and roles. Today the mission and tasks of countries' customs are far beyond such tasks as earning incomes, supporting domestic products and industries and enforcing customs rules, and include a wide variety of national and international obligations relating to international transactions and foreign trade.

In recent years, international organizations such as world customs organizations, have always emphasized the creation of trade pos-

sibilities and decrease of customs barriers (whether tariff or non tariff ones). On the other hand exercising border controls in order to prevent contraband and customs violations, supporting customers through preventing entry of dangerous, counterfeit and contaminant items and protecting society's security against structured crimes have been on the top of the task list of the country's customs. Briefly, it can be said that customs deal with the problem by creating trade possibilities and control.

Iranian customs took measures for establishing a mechanized customs information CASYCUDA system in cooperation with UNCTAD (United Nations, Conference on Trade and Development) and UNDP (United Nations Development Program) in order to unify, accelerate and facilitate customs formalities, eliminate redundant bureaucracies and increase the effectiveness and efficiency of customs.

The ASYCUDA System has very high capabilities and incorporates all customs formalities including imports, and one of its subprograms for clearance (releasing of goods from customs house) is the method of clearance path selection or selectivity. Implementing this program implies identifying various risk types in importing goods and classifying them according to the degree of risk (low, middle, high) and defining national regulations and parameters (Salehi, Alipour, and Yahyavi 2010).

Some important points can be considered here: First, ASYCUDA has been prepared out of this country and by foreign experts, thus by identification of deficits and barriers to effective implementation of this system and removing them, it is expected that this system would work more efficiently. Second, ASYCUDA has frequent capabilities, one of which is the capability of remote declaration which its implementation can lead to many results such as decrease of client physically references to customs. But in practice it is observed that customs formalities are still possible by physical referring of clients and by various controls in different bureaus which are against ASYCUDA purposes.

Also, in the process of performing customs formalities, it is observed that there is not enough confidence in this system. The changing path of declarations and various controls supports these comments.

Importance and Necessity of the Study

Customs play an important role in future global economy so that obtaining a greater part of international trade and attending global markets depends on effective performance of customs in the field

of imports and exports and transit. Therefore, customs should be directed to a way that while obtaining governmental income and facilitating trade, also promote transactions with other countries which in turn includes providing facilities to importers so that they can communicate with new commercial environment easily (Salehi, Alipour, and Yahyavi 2010).

Official bureaucracy along with complexity of regulations lead to increase of costs and decrease of speed, accuracy and precision of the stages of realizing goods for customs house and unusually name and symbol of customs recalls this idea that a collection of barriers and limitations under dominance and governance of inflexible and tight rules and regulations is under way and because of some problems, mechanizing clearance methods and modifying and revising rules and regulations are necessary for accurate and immediate responding, facilitating and reducing customs formalities and eliminating redundant official bureaucracies.

E-government is a way before governments in order to use IT (Information Technology) providing necessary facilities for proper access to public services and information, service quality improvement and more opportunities for involvement and participation.

In E-government, by using computers, citizens can connect to intended organizations without physically referring to state organizations and offices and receive their required services without physical presence in a certain place (namely office) and at a certain place (namely official time) on 24-hour basis and on all days of the week which this leads to realization of virtual organizations.

But it should be noted that establishing new systems replacing older ones often done at high costs and by targeting long-term aims. So in order to establishing new systems with proper performance it is necessary to identify the barriers in front of their way (Salehi, Alipour, and Yahyavi 2010).

Removing these barriers leads to more efficient implementation of system and promotion of the organization efficacy.

Research Hypotheses

ASYCUDA system has been enforced since last few years by providing some possibilities in order to mechanize customs and realize paperless trade and it has also specific capabilities have not been practiced yet.

The subject considered here is that customs formalities are still being done with physical presence of goods owners and by performing some paper work which this condition could be due to shortage of

resources and possibilities and weaknesses in current situation. So, in order to implementing this system more efficiently and enhancing the efficacy of customs services and activities compared with current situation, it is necessary to identify the barriers in front of it.

In this research, it is tried to identify effective factors related with enhancement of ASYCUDA efficiency. The hypotheses are as below:

HYPOTHESIS 1 *In compatibility of customs rules and regulations with implementing ASYCUDA system has prevented effectiveness of Tehran's customs activities and services.*

HYPOTHESIS 2 *Lack of required infrastructure in implementing ASYCUDA system has prevented effective services and activities of Tehran's customs.*

HYPOTHESIS 3 *Inadequate familiarity of employees and clients with ASYCUDA system has prevented effectiveness of Tehran's customs services and activities.*

HYPOTHESIS 4 *lack of presenting correct documents and information as inputs to ASYCUDA system has prevented effectiveness of Tehran's customs activities and services.*

Research Methodology

In this research surveying method was used for identifying barriers in front of implementing ASYCUDA effectively in customs. In this research effects of factors derived from 4 independent variables, i. e. customs rules and regulations, necessary infrastructures, adequate familiarity of staff and clients with ASYCUDA system and also providing documents and information (system inputs) were studied on optimal implementation of ASYCUDA system. Also in this research laboratory method was used for gathering research literature and correlation method was used for studying the relationships between variables and testing research hypotheses.

Statistical community of this research consists of employees working in Tehran customs and is related with and familiar with ASYCUDA system in some way.

In this research, field method was used for gathering information. For supplying research literature Internet and library method (documents and records) and in order to gather information on variables, observations and questionnaires were used.

The questionnaire related with this research include a main question with 34 factors for both clients and employees groups. This questionnaire has designed in line with research purposes and considering research variable using five point Likert's scale and the

choices related with those questions rated from 1 to 5. The purpose of this questionnaire is to identify the factors which lead to more successful implementation of the ASYCUDA system and the lack of which is considered as a preventive factor, inhabiting the optimal implementation of the system and increase of its effectiveness.

In this questionnaire, effectiveness is considered as effective implementation of ASYCUDA system, being an integration of speed, accuracy and precision of performing customs formalities. Distribution of the questionnaires was done by physical reference to the customs and via direct distribution.

Questionnaires for the present research are based on previous studies and standardized questionnaires in the same field and considering has been designed considering hypotheses and aims of the research. In order to evaluate the validity, at first a questionnaire including factors affecting on optimal implementation of the ASYCUDA system was distributed among customs expert professionals and also became available to supervisors and advisors and the results obtained by this questionnaires was above the intermediate level and experts opinions related with it was positive.

Results of the Study

In the first step, we address the frequency and frequency percentage of gender in the sample according to the collected data. As it can be seen in table 1, out of 530 participants, 40 were female and 92.50 per cent were male.

As the table 1 shows, the frequency and frequency percentage are indicated for participants which the most ones belong to subjects between 35–44 years old with a frequency of 230 from total 530 and frequency percentage of 43.4% and the least ones belong to subjects between 45 and 54 years old with a frequency of 120 and frequency percentage of 22.6%. Table 1 shows the frequency and frequency percentage of education levels of the subjects which the most ones belong to bachelor's degrees with a frequency of 281 from total 530 and frequency percentage of 52.8% and the least ones belong to diploma degrees with a frequency of 49 and frequency percentage of 9.4%. It should be noted that education level doctorate has a frequency of among the subjects.

Above mentioned table also shows the frequency and frequency percentage of subjects posts which the most ones belong to 12–17 years with a frequency of 151 and a frequency percentage of 28.32% and the least on belong to below 6 years with a frequency of 19 and frequency percentage of 3.79%.

TABLE 1 Descriptive statistic results of the study

Item		Number	Percentage
Gender	Female	40	7.50
	Male	490	92.50
Age	25-34	180	34.00
	35-44	230	43.40
	45-54	120	22.60
Educational Record	Diploma	49	9.40
	Associate Diploma	141	26.40
	BA	281	52.80
	MA	59	11.40
Experience	Below 6 years	19	3.79
	6-11 years	131	24.51
	12-17 years	151	28.32
	18-23 years	100	20.79
	24-30 years	120	22.60
Job position	General Director	9	1.88
	Vice-director	21	3.82
	Technical Expert	271	50.94
	Administrative Expert	79	15.04
	Assessor	150	28.30

Table 1 shows frequencies and frequency percentages of subject's tenures which the most ones belong to technical experts with a frequency of 271 and frequency percentage of 50.94% and the least ones belong to general directors with a frequency of 9 and a frequency percentage of 1.88%.

HYPOTHESIS 1 *In compatibility of customs rules and regulations with implementing ASYCUDA system has prevented effectiveness of Tehran's customs activities and services.*

In order to examine the type and degree of relationships between variables correlation coefficient and analysis of it can be used.

H_0 *In compatibility of the customs rules and regulation with implementing ASYCUDA system has not prevented effectiveness of Tehran's customs activities and services.*

H_1 *In compatibility of the customs rules and regulation with implementing ASYCUDA system has prevented effectiveness of Tehran's customs activities and services.*

Because sig. (significant level) = 0 is below the significant level of 0.05 so H_0 is rejected and H_1 is supported at confidence level of 95% (total = 530, sig. = 0.000, $p = 0.856$, $t = 11.828$).

It means that incompatibility of the customs rules and regulations with implementing ASYCUDA system and effectiveness of customs services and activities are significantly related to each other and $t = z = 11.828$ also confirm this conclusion (t does not fall between $+1.96$ and -1.96 and $H_1: p \neq 0$ is approved).

Pearson correlation coefficient, $p = 0.856$ shows that the strength of the relationship between variables is 86 per cent and because this value is positive they have a direct relationship, i.e. as incompatibility between the customs rules and regulations with implementing ASYCUDA system increases, prevention of effective customs activities and services increases and in fact the customs effectiveness decreases.

Thus presence of appropriate rules and regulations in order to activate the blue path (inspection after clearance), presence of appropriate rules and regulation regarding electronic documents, electronic signature, copy right, electronic payment and presence of appropriate rules regarding violations in 3 clearances paths, presence of uniform and fixed entry duties sources for goods, enacting laws suitable for ASYCUDA system and revising present rules. Related to imports are effective in better implementation of ASYCUDA system and lack of these factors is a barrier in front of the customs effectiveness increase.

HYPOTHESIS 2 Lack of required infrastructure in implementing the ASYCUDA system has prevented effective services and activities of Tehran's customs.

In the following correlation, the coefficient showing the type and degree of relationship between variables is presented.

H_0 *Lack of required infrastructure in implementing thwasYCUDA system has not prevented effective services and activities of Tehran's customs.*

H_2 *Lack of the ASYCUDA system has prevented effective services and activities of Tehran's customs.*

Because Sig = 0.000 which is below the significant level of $\alpha = 0.05$, so H_0 is rejected and H_2 is supported at confidence level of 95% which $T = Z = 14.75$ also confirms this fact (total = 530, sig. = 0.000, $p = 0.900$, $t = 14.75$).

This means that lack of required infrastructure has prevented effectiveness of Tehran's customs activities and services.

$p = 0.900$ shows the strength of the relationship between required infrastructure for implementing ASYCUDA and effectiveness of the customs activities and services being about 90% and the relationship

is direct lack of infrastructure prevents enhancement of the customs effectiveness.

Thus the presence of each of the following factors can contribute to the customs effectiveness and lack of them is considered as a barrier. These factors include: easy access to high-speed Internet and enjoyment of users from specialized Internet services of Informatics companies, presence of complete telecommunication networks between organizations related with trade affairs (such as banks, customs, health care), availability of international credit card and their usage culture, existence of special centers for meetings of traders and related organizations, presence an atmosphere of alignment with organizational changes, creating an atmosphere of trust in using computer systems, presence of complete and dependable communication networks among traders, customs and associated organizations.

HYPOTHESIS 3 Inadequate familiarity of employees and clients with ASYCUDA system has prevented effectiveness of Tehran's customs services and activities.

In order to study the type and degree of the relationship between variables, correlation efficient and analysis of it can be used (total = 530, sig. = 0.000, $p = 0.912$, $t = 15.827$).

HYPOTHESIS 3 Inadequate familiarity of employees and clients with ASYCUDA has prevented effective activities and services of Tehran's customs.

Because Sig = 0.000 which is below the significant level of $\alpha = 0.05$, thus H_0 is strongly rejected and H_3 is supported at confidence level of 95% which $t = z = 15.827$ also confirms this fact (t does not fall between +1.96 and -1.96 and H_3 : $p \neq 0$ is unsupported) i. e. lack of clients with ASYCUDA system prevents effective services and activities of Tehran's customs.

$p = 0.912$ shows the strength of the relationship between the familiarity of employees and clients with ASYCUDA and customs services and activities effectiveness which is 91% in this case the relationship between variables is direct i. e. lack of familiarity of clients and employees with ASYCUDA system prevents increase of the effectiveness of Tehran's customs services and activities.

Thus more familiarity of employees, commission workers and declaration officers with ASYCUDA system and the capabilities of it, availability of more training related to electronic commerce and also electronic documents, more familiarity of clients and employees with Internet and it's capacities and also with English, and French, pro-

viding required training in the field of international conventions, raising awareness of Iranian traders towards scientific comers, more familiarity of employees from information unit with commercial information and document, all can be effective in better implementation of ASYCUDA system and lack of those leads to prevention of enhancing customs effectiveness.

HYPOTHESIS 4 Lack of presenting correct documents and information as inputs to ASYCUDA system has prevented effectiveness of Tehran's customs activities and services.

Correlation coefficient and the related analysis shoeing the type and degree of relationship between variables have provided in the following (total = 530, sig. = 0.000, $p = 0.883$, $t = 13.45$).

H_0 *Not presenting correct information and documents as inputs to ASYCUDA system has not prevented effectiveness of Tehran's customs activities and services.*

Because Sig = 0.000 which is below the significant level of $\alpha = 0.05$, thus H_0 is rejected and H_4 is accepted at confidence level of 95% which $t = z = 13.45$ also confirm this fact (t does not fall between +1.96 and -1.96 and $H_4: p \neq 0$ is accepted).

This means that not presenting correct information and documents as inputs to ASYCUDA system has prevented effectiveness of Tehran's customs activities and services.

Pearson correlation coefficient, $p = 0.883$ shows the strength of the relationship between presenting correct information and documents as inputs to ASYCUDA system and customs effectiveness of services and activities which in this case is about 88 percent. Here there is a direct relationship between not presenting correct documents and information and decrease in customs activities and services effectiveness.

Thus presence of each of the following factors can be effective in raising the effectiveness of the customs and lack of them is considered as a barrier.

These factors include: presence of clear and transparent information on circulars and guidelines, providing valid purchase documents upon declaration, reducing the number of documents required for declaration, up-to-dating information on debt and obligation of Article 14 of customs affairs Act, accessibility to information on domestic and foreign firms goods, presenting complete and correct information on goods upon declaration, complete preparing of declaration draft by declaration officers.

TABLE 2 Prioritizing factors effective in better implementation of ASYCUDA from employees' perspective

(1)	(2)	Variable description
1	Q19	More familiarity of customs employees with ASYCUDA and its capabilities.
2	Q7	Lack of contradictory and multiple circulars and regulations.
3	Q33	Providing correct and complete information on goods upon declaration (in order to better management and risk assessment).
4	Q4	Presence of appropriate rules and regulations relating to violations in 3 paths of declaration (red, yellow, green).
5	Q21	Presence of clear and transparent information on guidelines and circulars.
6	Q20	More familiarity of commission workers and declaration officers with ASYCUDA and its capabilities.
7	Q10	Presence of complete telecommunication networks between organizations related with trade in Iran including banks, customs transportation, and health care.
8	Q22	Presence of more training in relation to electronic commerce.
9	Q28	Providing valid purchase documents upon declaration (such as invoices).
10	Q34	Preparing declaration draft completely and without mistake by declaration officer.
11	Q6	Easy access of users to high-speed Internet.
12	Q9	Enacting appropriate rules related to ASYCUDA and revising present rules related to imports.
13	Q8	Presence of uniform and fixed entry duties sources for goods and without significant changes.
14	Q30	Updating information on debt and obligation of Article of customs affairs Act.
15	Q31	Presence of required training relating to electronic documents.
16	Q11	Presence of appropriate rules and regulations related to electronic payment.
17	Q23	More familiarity of employees and clients with Internet and its capabilities .

Continued on the next page

Prioritizing Effective Factors Using the Friedman Method

Using the Friedman method, prioritizing factors effective in better implementation of ASYCUDA system and in turn enhancement of Tehran's customs effectiveness was performed in table 2.

Table 2 shows the results of the Friedman test on each of the questions in the questionnaire. According to this table question No. 19 is the most important variable in this study and question No. 13 rated as the last question as the least important in this study. The above mentioned table shows the details of every questions contains questionnaire. In prioritizing performed using Friedman's av-

TABLE 2 *Continued from the previous page*

(1)	(2)	Variable description
18	Q2	Presence of rules and regulations related to and suitable for electronic documents.
19	Q17	Presence of complete and reliable networks among traders, international organizations and vendors.
20	Q27	More familiarity of information unit staff with documents and information.
21	Q15	Creating a trust atmosphere towards using computer systems
22	Q25	More familiarity of employees and clients with French and English languages.
23	Q3	Presence of appropriate rules and regulations in relation to electronic signature.
24	Q12	Availability of international credit cards.
25	Q32	Accessibility to information of foreign and domestic firms.
26	Q18	Creation of a culture of using credit cards and comprehensive usage.
27	Q26	Awareness of Iranian traders of scientific commerce.
28	Q29	Reducing documents necessary for declaration
29	Q24	Providing required training about international conventions.
30	Q16	Exploiting specialized internet services of Iran-based informatics companies.
31	Q1	Presence of appropriate rules and regulations in order to run the blue path.
32	Q14	Creation of the culture of alignment with organizational changes.
33	Q5	Presence of appropriate rules and regulations related to copyright.
34	Q13	Presence of special centers as a place for meetings of traders.

NOTES (1) priority, (2) variable.

erage method it was indicated that familiarity of staffs with ASYCUDA system and also providing accurate and complete information upon declaration are considered as factors with high priority and improving them plays a significant role in more effective implementation of ASYCUDA system.

Conclusion

In relation to the first hypothesis, the value of the correlation coefficient related to the variables of the first hypothesis stood at 0.0856 and this shows that the statistical population believe that changing the present state and creating and establishing some appropriate rules and regulations can be effective in better implementation of ASYCUDA system and raising the effectiveness of the customs and it is necessary to remove the incompatibility between customs rules and regulation and ASYCUDA system. In fact, in order to optimal use of ASYCUDA system and capabilities of it, it is necessary to provide more

suitable conditions and possibilities related to it. The value of correlation coefficient related to the variables of first hypothesis stood at 0.856 which such a high effect shows this fact that by changing and modifying the present state of customs rules and regulations, ASYCUDA is also implemented more efficiently and finally the customs effectiveness is also increased.

In relation to the second hypothesis, regarding the average value obtained from the answers (3.83), it was demonstrated that by creating necessary infrastructure, ASYCUDA system and its capabilities are better implemented and in the case of not creating appropriate infrastructure it can not be expected that ASYCUDA system is influential in raising the effectiveness.

In relation to third and fourth hypotheses, also similar results were obtained. The high value of average data (above 4) and also high correlation coefficient values and positive of them show this fact that the statistical population above the average level believe that for better implementation of ASYCUDA there is a need for more familiarity of staff and clients with this system and also the more accurate system inputs, results in the more successful process of the system. In fact lack of adequate familiarity of staff and clients with ASYCUDA system and not providing accurate documents and information, have now resulted in raising of system effectiveness and in turn the customs.

In prioritizing performed using Friedman's average method it was indicated that familiarity of staff and clients with ASYCUDA system and also providing accurate and complete information upon declaration are considered as factors with high priority and improving them plays a significant role in more effective implementation of ASYCUDA system. The authors become to conclusion that although Iran has very high capacity in costumes section, the function of Iranian customs should be up-to- dated as early as possible. Regarding this importance, ASYCUDA system should be implemented in very near future. Further, all barriers should be removed by governmental section as well as the private sector.

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Immediate Economic History of Iraq: Effects of the Recent Global Crisis on the Oil Sector of Northern Iraq

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I have analyzed effects of the economic crisis, which began in the USA, on Northern Iraq under three main titles: First, I studied the economic history of Iraq. Second, I analyzed the effects of it in Northern Iraq. Finally, I interviewed entrepreneurs about the effects of crisis on private sectors in this region. I have been in northern Iraq for three years. I have tried to reach original sources, have interviewed people in the government and examined the impact of the crisis on the people and government. It was seen that the country's economy, is mostly based on the oil sectors, *so we especially highlighted oil production and revenue*, which have been affected indirectly from the global crisis.

Key words: economic history, crisis, effects, Iraq

Introduction

Iraq ranks fourth in the world behind Saudi Arabia, Canada, and Iran in the amount of oil reserves. It contains 115 billion barrels of proved oil (Shafiq 2010). It is known that Iraq's economy is dominated by the oil sector, which has achieved about 95 percent of foreign exchange earnings (Bertelsmann Stiftung 2010). In the 1980s financial problems were caused by massive expenditures on the war with Iran that lasted on a span of eight years, where Iraq suffered economic losses of at least tens of billions. In previous years, Iraq was under Baath Party rule from 1968 to 2003; in 1979 Saddam Hussein took control and remained president until 2003 after which he was unseated by the us. Iraq which has a population of 31,234,000 people estimated in 2009, has a number of ethnic minority groups; Kurds, Assyrians, Mandeans, Iraqi Turkmen, and Shabaks. The Kurdistan Regional Government (KRG The name Kurdistan literally means *Land of the Kurds*.) borders Iran to the east, Turkey to the north, Syria to the west and the rest of Iraq to the south.

Its capital is the city of Arbil, which is officially governed by the Kurdistan Regional Government (KRG). The three governorates of Duhok, Arbil and Sulaymania accumulate a territory of around

40,000 square kilometres and a population between 4 and 6.5 million. As a major economic power in Iraq, Kurdistan has the lowest poverty rates and highest standard of living in Iraq, making it the most stable and secure region of Iraq (United Nations Development Programme 2009, 26).

This study mostly includes Kurds – the Kurds' language is Kurdish, that is spoken in Turkey, Iran, Iraq, Syria, and Armenia (Hekimoğlu 2009, 9) which have established their own autonomous region. In this study we analyze the causes of the recent global crisis and its effects on the world economy, especially Iraq and northern Iraq. I have been in Erbil for three years and have observed the effects of the crisis first hand. During the crisis, I had the opportunity to observe the community and private firms in Iraq. Owners of private firms whom I met personally confirmed that Iraq was not affected directly. I interviewed Ramzy, an Iraqi entrepreneur is running his own business, about the private firm's activity during the crisis.

We tried to analyze how Iraq, particularly Northern Iraq was affected under the control of America. I highlighted that the us government managed the American economy as well as the Iraqi economy. The ultimate reality was that the recent global crisis did not directly affect the Iraqi economy whose oil is a dominant sector. Because of the crisis the demand for oil and price of oil decreased in the world, which caused a low income from oil in Iraq. Finally, we can say that Iraq and the regional government were affected indirectly from the recent global crisis. We can also come to this conclusion by looking at table 1.

When I analyze the last three years, I see that the banks of Iraq are underdeveloped and the general focus is on the domestic market. Flowing foreign direct investments (FDI) to Iraq is not efficient enough. Due to the global recession caused by the crisis, the price of oil decreased by 25.8 percent (World Bank 2009, 7). The price of oil was not expected to recover in the immediate future; therefore, the government had to revise the budget during 2009. When we analyze the last thirty years – the war between Iran and Iraq in 1980, the invasion of Kuwait in 1990, and America's interference in Iraq in 2003 – we see that Iraq has been in an unstable economic condition. The international embargo added spice to this already unstable economic situation.

History and Effects of the Crisis on Northern Iraq

Iraq, known as Mesopotamia, is home to some of the oldest civilizations in the world with a cultural history of over 5000 years. The

Ottoman rule ended with World War I, and Iraq came to be administered by the British Empire until the establishment of the Kingdom of Iraq between 1932 and 1958. The Republic of Iraq was established in 1958, and after a decade Iraq was led by the Baath (Arab Socialist Resurrection) party: then, it was controlled by Saddam Hussein from 1979 to 2003.

Currently, Kurdistan is the only legally defined region within Iraq, with its own government. (Iraqi Kurdistan: Duhok, Arbil, and Sulaymaniyah) The relative security and stability of the region has allowed the KRG to sign a number of investment contracts with foreign companies. The first new oil well was drilled in the Kurdistan region by the Norwegian energy company DNO, near Zakho, and had shown the presence of oil. This firm signed a deal in June 2004 with the Kurdistan regional government, a production-sharing agreement covering an area 250 miles north of Baghdad close to the Turkish border.

Followed by two other oil companies are Canada's Western Oil Sands in the Sulaimaniah area (Mortished 2006). The government goes on receiving a portion of the revenue from Iraq's oil exports, and aims to implement unified foreign investment law. The new legislation gave also foreign investors the same rights as Iraqi investors. Such as: Full ownership of the project and some incentives including tax exemptions, foreign companies could freely transfer their profits abroad without paying taxes or customs (Devanjan 2009, 13). The KRG has also planned to build a media city in Arbil and free trade zones near the borders of Turkey and Iran. Due to this the three Northern Governorates' economic situation has improved since March 2003. A foreigner-friendly investment law was also approved by the Kurdistan Assembly in July 2006, which aims at attracting foreign capital to the region. In particular bilateral trade with neighboring Turkey has boomed in recent years. When we analyze annual bilateral trading, there is an estimated income of around five billion dollars as of April, 2007 and a Turkish contractor reportedly secured contracts worth two billion dollars in northern Iraq. A total of 1,200 – mostly Turkish – companies were estimated to be operating, and employing around 14,000 Turkish employees. Many of investments that were made by Turkish companies included hospitals, airport, universities, and housing (United Nations High Commissioner for Refugees 2007, 20). The regional government can levy as well as collect taxes in the region, but export and import duties are the responsibility of the federal authority. The Kurdish regional government's share of natural resources – especially oil – and revenue from the sale of oil products in and outside the country, aid,

foreign loans made by Iraq are in a proportion based on the relation of the region's population to the total population of Iraq (Faleh and Hosham 2006).

There are said to be many causes for the recent global financial crisis. Such as: 'The bursting of the housing bubble – a sharp rise in the equity risk premium and a reappraisal of risk by households.' In my opinion, another reason is the imbalance between consumption and production in the world. In the west, consumption is vast, and in the east production is vast. These have caused the persistence of large global imbalances which was called the greatest financial crisis in the United States and spread to other countries. Developed countries were affected more than developing countries. In most countries' GDP dropped sharply, some huge corporations went into bankruptcy and the unemployment rate increased. It is assumed that the economy saw the lowest level. Here I am going to highlight the effects of crisis on northern Iraq through the history of the country.

Economic History of Iraq

Professor Joseph Stiglitz says that the war is very expensive. He says that the true cost of the Iraq conflict is three trillion dollars (Stiglitz 2008). I agree with him because three has lots of zeroes. This was estimated as one point nine trillion dollars (Nordhaus 2002) in 2002 by William D. Nordhaus. As for the Iraqi side, the cost is also high. History is witness that Iraqi people and this territory have suffered so much. Iraq was with the Ottoman Empire until 1920. Then Iraq was under the control of UK in 1920. The British mandate ended and Iraq became an independent state in 1932. Then the regime was under King Faisal I and II. In 1958 there was a military revolution. Ten years later, the foundations of the regime in Iraq were laid by Baath party in 1968. Conflict broke out between the Kurds and government's military forces in 1974. There was war with Iran during 1980–8. Iraq invaded Kuwait in 1990. This turmoil is going on till today. In the past, Iraq's loss of oil revenues alone almost exceeded 12 billion dollars a year and 10 000 Iraqis died in the Gulf war and at least 200 000 Iraqis died in the 1980–8 war with Iran (Steven, Murphy and Topel 2010). These costs are a tiny part of the whole and costs are going on at an increasing level till today in Iraq.

Abunimah (1999) notes that 'Iraq's total GDP has fallen to just \$5.7 billion, or \$247 per capita, according to estimates by the well-respected Economist Intelligence Unit in The Economist's newly published annual supplement The World in 1999. With an estimated

per capita GDP of only \$247, Iraq, once one of the most developed countries in the Middle East, is now poorer than many countries in sub-saharan Africa.'

Foreign assistance has been an integral component of Iraq's reconstruction efforts since 2003. At a donor's conference in Madrid in October 2003, more than \$33 billion was pledged to assist in the reconstruction of Iraq. In February 2010, the IMF and World Bank approved \$3.6 billion and 250 million of support to Iraq, respectively. The Iraqi Government has worked closely with both institutions since 2003, including the December 2008 completion of an IMF stand-by arrangement, after which Iraq received the balance of the Paris Club's 80 percent debt reduction (US Department of State 2011) with optimistic predictions it could be seen that Iraq would quickly recover from the war by using the country's rich oil reserves reasonably.

Iraq's economy was based almost on agriculture until the 1950s, but after the 1958 revolution economic development became substantial. The new regime advanced a social and economic development program to increase the standard of living and improve living conditions throughout northern Iraq up to 1959, including the following: housing, electricity, water supply, health, town planning and textile industry (Wadie 2006, 287).

By 1980 Iraq had the second largest economy in the Arab world, after Saudi Arabia, and Iraq developed a planned economy which was characterized by heavy dependence on oil exports, and then suffered during the Iran-Iraq War in 1980. Iraq's economic prospects were bright. Oil production had reached a level of 3.5 million barrels per day, and oil revenues were \$21 billion in 1979 and \$27 billion in 1980. This war depleted foreign exchange reserve and devastated its economy with foreign debt of more than \$40 billion. In 1988, oil exports gradually began to increase, with the construction of new pipelines. But after Iraq's invasion of Kuwait the UN embargo began in 1990. Oil production and economic development both declined after the start of the Iraq War, and the economy has continued to experience serious problems, including a huge foreign debt. The country faced a high rate of inflation; continuing political violence; a shortage of replacement parts which hampered the oil sector, outmoded production methods, and outdated technology; a population that has moved away from agriculture; a high rate of unemployment; a seriously deteriorated infrastructure. The UN formed the Oil-for-Food (OFF) program in April 1995. The OFF authorized nations to allow the importation of petroleum from Iraq worth \$1 billion dollars (US) ev-



FIGURE 1 Iraq Crude Oil Exports (adapted from Energy Information Administration 2010)

ery 90 days (TravelDocs 2010). The growth rate of industrial production in major developed and emerging-market economies has been negative since the middle of 2001. World output decreased from 3.8% in 2000 to 1.3% in 2001 (United Nations 2002, 5). Although GDP fell in 2001–2 largely as a result of the global economic slowdown and lower oil prices, per capita food imports increased and medical supplies and health care services improved. Following the initial phase (2003) of the Iraq War, the oil-for-food program was ended, sanctions were lifted, and civil administrators were appointed by the United States.

But year by year international oil prices were increasing. It is possible that was a positive effect but also we should take care of the negative effects of the recent crisis. Iraq needed such kind of ways for export to avoid the effects of crisis. So, Turkey has become one of the convenient ways for oil export. Even today Turkey is the major import partner of Iraq. When you go shopping you can see goods and services from Turkey, there is great confidence in Turkish commodities and firms.

In 2009 the chief export markets were the United States, India, South Korea, Italy, China, Taiwan, Holland, Turkey. In 2009 the main sources of Iraq's imports were Turkey, China, Jordan, Germany, South Korea, Italy, France, India, and the United States (Turkish Embassy of Erbil 2010). The total exports of Iraq dropped to \$37.89 billion in 2009 from the previous year's \$58.81 billion. The total imports of Iraq in 2009 also decreased to \$35.77 billion, as compared to \$37.22 billion in year 2008 (Economywatch 2010). Iraq exported 1.8 million bbl/d of crude oil in 2009. About 1.5 million bbl/d of this came from Iraq's Persian Gulf ports, with the rest exported via the Iraq-Turkey pipeline in the north. The majority of Iraqi oil exports go to refineries in Asia, especially China, India, and South Korea (Energy Information Administration 2010, 5).

Figure 1 shows that most of the oil was exported to Asia, which maybe reduced the negative impact of the crisis, because especially China needed more energy and its economic growth continued as positive even in period of recent crisis.

TABLE 1 Recent economic indicators

Indicator	2006	2007	2008	2009
GDP (us\$bn) (current prices)	45.1	57.0	86.5	65.8
GDP PPP* (us\$bn)	90.5	94.6	105.9	111.3
GDP per capita (us\$)	1,568	1,926	2,845	2,108
GDP per capita PPP (us\$)	3,149	3,198	3,481	3,565
Real GDP growth (% change yoy)	6.2	1.5	9.5	4.2
Current account balance (us\$m)	8,547	7,119	11,049	-16,925
Current account balance (% GDP)	19.0	12.5	12.8	-25.7
Goods exports (% GDP)	66.4	66.5	62.9	51.0
Inflation (% change yoy)	53.2	30.8	2.7	-2.8
Oil export price (us\$ per barrel)	58.3	64.2	91.5	53.6
Oil Production (in mbpd)	1.8	2.1	2.42	2.48

Sources: www.dfat.gov.au/geo/fs/iraq.pdf, www.ioga.com/Special/crudeoil_Hist.htm, Turkish Embassy of Erbil, Iraq (2010). Note: * purchasing power parity.

According to the EIU country report we compare, the % change of GDP year on year between 2008 and 2009 and see that in 2008 Iraqi GDP was at third rank after Qatar and Kuwait, but in 2009 its rank became sixth after Qatar, Lebanon, Syria, Morocco, and Egypt. This can also prove that Iraq was affected by the global crisis more than some other countries.

It is seen that while the direct impact of the global financial crisis on the economy remains limited, the indirect impact through declining oil prices may be significant. Iraq's banking sector is underdeveloped and centered on the domestic market. The level of FDI in the 2008 survey is only 40 percent of that of companies reported being affected by the crisis, and slightly lower than in 2007. This 2009's picture, in the context of the worst global recession is dramatically different.

A large majority of TNCs now believe the global economic downturn and the financial crisis have had a negative impact on their investment plans (United Nations 2009). However, the financial crisis has set off a global recession. Crude oil prices fell 25.8 percent in November 2008. Oil prices are not expected to recover to early 2008 levels in the immediate future. Due to this recent fall in prices, the Government revised the initial 2009 spending budget twice with a lower oil export price (currently \$50). Table 1 demonstrates that, while oil production increased year by year, nominal GDP dropped sharply in 2009. It is clear that this was caused by the decreasing price, but the immediate future shows an optimistic table (World Bank 2009, 7).

Effects of the Recent Financial Crisis on Northern Iraq, Especially Oil

I want to introduce the recent crisis briefly then discuss its affects on Northern Iraq. When the economy faces recession, depression or a financial crisis, national output falls, profits and real incomes decline, an unstable price of goods and services occurs, and unemployment rates jump to uncomfortably high levels. Then the economy reaches a bottom, and recovery begins. This situation can be named as Business Cycles, which are economic fluctuations in total national output, income and employment, generally lasting for a period of two to ten years, marked by widespread expansion in most sectors. Upward and downward movements in national output, inflation level, interest rate, and unemployment rate form the business cycle that characterizes whole market economies (Samuelson and Nordhaus 2001, 477). In order to give the right political advice, economists should know the causes of boom and crisis. If a boom or crisis is the result of spending or price shock, GNP will be away from its potential. In this situation, the government should interfere with the economy to speed the return to its potential. So, the government uses monetary and fiscal policies to solve the economic problem as demand shocks (Hall and Taylor 1991, 204–16). The recent crisis erupted in August of 2007, and then the Fed began flooding financial markets with liquidity. The us economy in the early 1930s was more heavily bank based than today, but the current crisis has been a crisis not just for banks but for insurance companies, for hedge funds, and for the security markets themselves (Eilchengreen 2008). The Great Depression of 1929 is related to the current Financial Crisis in that they both originated in the us and have damaged the world economy at a frightful scale. For example; the financial crisis, which has taken a heavy toll on the us in just a few months was five trillion dollars (FinancialCrisis2009.org 2009). According to The Institute of International Finance, the report issued in January of 2009, forecast that net private capital flows to 28 Capital Flows to Emerging Market Economies would drop sharply to \$165 billion in 2009 from \$466 billion in 2008 (Erdilek 2009).

The recent global financial crisis affected the world at different levels. Although Iraq is not the center of financial crisis, Iraq was affected due to low oil prices. In fact, to have rich oil reserves is a good opportunity for countries. But now that the collapse in the world's economy has caused oil prices to drop, what does the future hold for Iraq? It is known that Iraq's economy depends on oil rev-

venues on a large scale; we can say that oil clearly lies at the heart of the country's economy. Indeed, median estimates hold that oil accounts for more than 80 percent of its revenues. Iraq now faces several challenges spawned by the global recession. Iraqi deputy prime minister Barham Saleh said that the economic crisis 'has had a serious impact' on Iraq's economy, with 'plummeting oil prices' forcing the country 'to constrain our government spending.' The impact on Iraq's economy means that there will be an impact on Northern Iraq or the Kurdistan region. Because of the oil boom, the economy had a surplus of \$35 billion from 2008 but Iraq's 2009 budget was slashed about 25 percent by government. It went down from 80 billion to about \$60 billion. However, these budgetary shortfalls will likely directly impact Iraq's ability to maintain security and salaries. America has economic woes, but the us will provide additional aid to cover Iraq's budgetary shortfalls, though it is also unlikely that the us will decrease substantially its current commitments to Iraq. According to Daveed and Joshua (2009) 'The New York Times reported in February that wages ate up 35 percent of Iraq's budget. Many Iraqi lawmakers now fear that the government has gone too far in cutting critical spending. The electricity ministry, for example, has had its capital expenditure budget chopped by over 80 percent, from 6.4 billion down to \$1.1 billion.' Iraqi Central Bank Consultant, Dr. Mazhar Mohammad Salih, said (Iraq Directory 2009): 'Iraq received a grant from the IMF worth one point eight billion dollars to support liquidity, achieve development and come out of the recession caused by the global financial crisis. Dr. Salih appreciated this step, which he described as "distinctive," and the grant to push the Iraqi economy forward and enable it to overcome the recession which may affect the Iraqi economy due to the global financial crisis.' Oil-producing countries got burned by the financial crisis, by investing in the West, and they're looking to use their capital in the region instead. Iraqi officials hope that foreign direct investment can make up for the revenue shortfalls caused by declining oil prices. The 'Invest Iraq 2009' conference in London earlier this year reportedly attracted more than 200 companies, including heavy hitters like General Electric and Vodafone. Iraq has also opened its oil fields to bids from multinational firms for the first time since 1973, when its oil industry was nationalized. As one British Petroleum spokesman told the *Financial Times*, 'we could see ourselves back in Iraq by the end of the year barring any unforeseen delays' (Daveed and Joshua 2009). As Baghdad steps up oil production, Kurds have been awarding contracts to overseas companies since 2002. Today, Canada's Addax Petroleum

(acquired by China Petrochemical), Norway's DNO International, and Turkey's Genel Enerji International have contracts for the Taq Taq and Tawke fields in Kurdistan. According to the Kurds, these foreign investors could produce 200,000 barrels a day by the end of 2010 – about ten percent of Iraq's current output. It was 100,000 barrels daily in 2009 (Holland 2010). Iraq's Prime Minister Nouri al-Maliki on third January said in a statement to the press; 'The revenue will be part of the national revenue that is distributed equally to all Iraqis.'

The anticipated revenue that the Federal Government will receive from the oil production of the Kurdistan Region in the forthcoming five years from 2010 to 2014 will be: \$2.75 billion (2010), \$8.23 billion (2011), \$12.45 billion (2012), \$18.27 billion (2013), and \$25.62 billion (2014). This shows that the Federal Government (Ministry of Finance) will receive in total about \$67 billion as net revenue from the oil produced by companies contracted in the Region in the coming five years (Hawrami 2010). This issue illustrates that oil revenue coming from the Kurdistan Region will expand the economic development of Iraq in general, and it will increase the prosperity of all the Iraqi people. But if the price of oil or demand for oil decreases in the world market as a result of the crisis, that will affect Iraq as a whole especially the Kurdistan region. The Arab world would cope with rapidly rising food and raw material prices that threatened their economies and social stability by using a high price of oil during the first half of 2008. However, the effects of the financial crisis and expectations of much lower global growth caused a collapse in oil prices. Arab oil exporters experienced deterioration in their terms of trade, and declining surpluses on their balance of payments. The OPEC basket price of oil sharply fell by 70 percent from a peak of just over 130 per barrel to under \$40 per barrel. In September 2008, with the collapse of Lehman Brothers and the turmoil on Wall Street, stock markets all over the world were affected, including those in the Middle East. In April 2009, oil prices stabilized at about \$50 per barrel, despite falling demand for the international economy. The main reason for this was that oil had become a source of value for those who lost confidence in the us dollar. According to the us government's Energy Information Agency, oil income for Arab members of OPEC continued to fall from 678 billion in 2008 to \$268 billion in 2009. Iraq's export revenues are forecast to decline from 59 billion to 23 \$billion. This is the clear direct impact on the economies of the larger oil producers. On the other hand, everyone experienced a rise in food prices as well as increases in other costs.

This situation is not a manner of dying for these regions, because, according to IMF in 2009 economic growth in the Middle East will be two point five percent compared to six percent in 2008. As we mentioned before, Iraq's and the Regional Government's economy is dominated by the petroleum sector, which has traditionally provided about 95 percent of foreign exchange earnings (Rivlin 2009). They are not significant exporters of non-oil products, so they are less exposed to the contraction of world trade. If we pay attention to what Prime Minister Barham Salih said (Bahram 2010), that: 'The Kurdistan Region has been a success, and can be an economic example for development throughout Iraq. We are therefore committed to sustained contact between our governorate officials and governorates throughout Iraq. I would also like to say that a strong Kurdistan Region translates into a stronger Iraq, a stronger Baghdad, a stronger Basra. I am Kurdish, but I am also Iraqi. And as part of Iraq, the KRG hopes you will benefit from our experience, especially in promoting investment.' Than this tells us that the Kurdistan region (Fayad 2008) has a positive economic situation and wants to share that with other parts of Iraq. In this situation FDI shows its importance as well as the neighborliness of Turkey: of about 1,200 foreign companies working in Kurdistan, the greatest number – some 620 – were from Turkey (Kimbali and Shamal 2010). In the ongoing global financial crisis, according to data from the Turkish Statistics Institute, Turkey's exports to seven neighboring countries decreased, except for Iraq and Syria, from 2008 to 2009 (*Todays Zaman* 2010a). Exports to Iraq saw a rise of 30.9 percent, increasing from 3.91 billion in 2008 to 5.12 billion dollars in 2009 (*Todays Zaman* 2010b). According to the Board of Investors of the Kurdistan Regional Government non-oil investment in the Kurdistan Region of Iraq totaled more than \$12 billion over the last three years. Overall, about 70 percent of foreign investment in the Kurdistan Region comes from neighboring Turkey.

When I searched such kinds of firms in Iraq, it was seen that the tradition of the people in Iraq is very suitable for family business as well. Although most of them are first and second generation family business owners, there are businesses that are 100 years old. The number of family businesses is increasing after Saddam's time. Most of the businesses are in construction, computer network technology and telecommunication, engineering, health care, crude oil and energy, food and security. I have interviewed an Iraqi entrepreneur who runs a business in Erbil and I included it at the end of this paper. According to the interview entrepreneurs are hopeful for their and the

region's future. They have planned to enlarge and to step forward. If this security goes on at this level, the number of such kinds of local business will increase.

Example Firm in Iraq

We observed that there are some crucial macroeconomic problems in Iraq except northern Iraq. Such as; high level inflation, violence, shortage of substitution goods, old fashion production methods, no attention to agriculture sector, high level of unemployment, insufficiency of infrastructure and, no experience of the private sector. People used to avoid staying and investing in Iraq due to the bad conditions. But this is changing slowly.

In this search I saw that density of the private sector has been generally in Selahaddin, Ramadi, Suleymaniye, Kut, Hilla, and Bakuba. However, it is less in Bagdat, Basra, Kerkuk, Nasariye. In my opinion, the reason for this was security. These companies' activities were constructions, informatics, telecommunication, trade, engineering, and health sector. They attracted us because most of them were family businesses. We contacted at least 20 companies in south and central Iraq by visiting or sending e-mail. What about northern Iraq? This region is entirely different from the other parts of Iraq. We talked face to face with maybe hundreds of entrepreneurs who were emphasizing 'security' as well. Maybe the infrastructure is not sufficient, but security was enough to invest or run the business. KRG also imposed some laws to attract the private sector and especially foreign direct investment. There are more than a thousand private firms in Northern Iraq, and most of them came from Turkey. Trade between Iraq and Turkey was about 7 billion dollars in 2010 and there are lots of new agreements between them. In addition, the Turkish government aims at 20 billion dollars of trade volume in 2013 according to the Turkish Embassy in Erbil in Iraq (2010). I have been in Erbil for three years and visited some cities, talked face to face about entrepreneurs' business activity. Most of them especially in Northern Iraq are optimistic about the future; they have plans to improve their business. I saw that most entrepreneurs' stories were almost identical. As an example, I present the story of Ramzy below to indicate common sense of others.

Ramzy Tajirian aged 31, is an Iraqi entrepreneur who studied business and management in the USA and wants to come back to run the family business. The whole family was compelled to close business and migrate to the USA in 1991. But now Ramzy

has come back and runs the business in Iraq (<http://homepage.mac.com/weblink/Iraq/P10-Economy.htm>). As we mentioned before there is security in Northern Iraq, whose economy is based mainly on income from oil, agriculture and tourism. Investment especially foreign direct investment has been attracted to this region due to the secure and good economic conditions. The Kurdistan Region is the commercial gateway to doing business in all of Iraq, due to the safety and prosperity of the region. According to law no. 21 of 1997 (Mudaris 2010, 4), which was amended in 2003, foreigners can own 100 percent of a business, can work in multiple sectors, and can employ foreign workers. These facilities are the part of the whole. As we compare per capita income from 2007 (\$2300) (Abdullah 2007, 19) to 2010 (\$4500) (Mudaris 2010, 1), we see the development rate in this region. According to the ministry of trade, 700 foreign companies were active in Kurdistan in 2007 (Abdullah 2007, 14). It is said that this figure reached 1200 foreign companies in 2010.

For this study I interviewed also Mr. Muhamed İsmail Seyan whose words I shall quote. Hawkary company started in 1992 but officially completed its foundation in 1997 in the Kurdistan region. When we listen to him we could see the hard conditions in Iraq as well as the changes in Northern Iraq from his point of view. Mr. Muhammed Ismail said that: 'I'm in trade life since when I was young boy. When I was at middle school I would wake up at five am and sell bread till eight am until going to school, after school, I would work at a restaurant. When I was at high school, I had a restaurant. At the end of 1980, I had three restaurants. During these years Erbil was under a bilateral embargo which was applied by the UN and Central government of Iraq. I was not satisfied with the performance of the restaurant because of the embargo. So I couldn't earn well enough. In 1991, I started as food wholesaler and rented a warehouse.'

As time passed, Muhammed had good luck and his company brand got popular. He was increasing his experience and envisaged running a pharmacy. I observed that he would follow technology properly and improve himself. Muhammed informed me that most of the commodities which were imported, were illegal due to the embargo. Most of the goods were imported from Turkey through Dohuk, but the prices of goods were not stable. Muhammed said that he was doing arbitrage as well. Furthermore, he was selling more expensive goods to his friends who

claimed he was not good at doing business. Now, Muhammed is a successful business man who runs a medicine distribution chain with a labor force of 230 employees and distributes medicine throughout Iraq. He plans his business and has already a five year plan. He has already set up a second new firm to educate and train young family members. The new firm is named as Mustawfy Co. that is a chain of markets. Now he has nine markets in different cities. And the turnover is over \$50 million.

Conclusion

In fact, the reason why Iraq's economic condition has been so bad is that Iraq's economy was/is based on the oil sector. When we look carefully at table 1 year-by-year, production of oil increases between 2006 and 2009 years as we accept the crisis period, however, export of Iraq decreases at that time. Oil production increases but export decreases because of the low demand. This induces low revenue of oil export. In addition, the oil export price increased in 2008 but decreased sharply in 2009. At the start of the recent global crisis in 2007, the oil export price as well as oil production increased, but real GDP growth decreased sharply as compared to the previous year. This can be proof of the negative effect of the global crisis on the Iraqi economy. When we compare the Iraqi economy with other Middle East countries we see that Iraq was affected more than others. Therefore, the Kurdish regional Government was influenced by the crisis too, because of being part of Iraq (Kurdish regional government's income comes from Iraq in a proportion based on the relation of the region's population to the total population of Iraq). If Iraq's income decreases this induces low income to that region. However, Iraqi oil was exported mostly to Asian countries. Especially China needed energy in the period of crisis. So, this might have reduced the severity of the crisis on Iraq. Now I want to present my observations and my suggestions: (1) Regional government saw the importance of FDI, and then imposed some statute to attract FDI to that region. (2) Northern Iraq's people are optimistic about the future as compared to other parts of Iraq. It was concluded that the stability of the Kurdistan region has allowed it to achieve a higher level of development than other regions in Iraq. Most private sectors of countries such as Turkey, have companies that are doing lots of investment work in this region. The standard of living for people in the Kurdistan region is higher than in the other parts of Iraq. It was seen that Northern Iraq saw the benefit of FDI, so government gave the same rights to foreign investors. (3) If the government can cope with attracting

FDI to this region, this new legislation can ensure new international airports, shopping malls, governmental buildings. Therefore, the regional government won't be dependent on one source, which is oil. (4) The Iraqi government as well as KRG must produce a different kind of product. I mean they must pay attention to other sectors too. Such as: agriculture, industry, baby industry, manufacturing, raising livestock, etc. to avoid being dependent on one sector – oil. (5) The Iraqi government should export oil to different markets by using a new pipeline. I mean even in this crisis we face, some countries have not been affected and need energy like China. (6) If Iraq makes cooperation with the neighboring country Turkey, it can benefit from the experience of Turkey, which has no oil and gas but its economy is going forward.

We came to the conclusion that the crisis affected the demand for oil in the world, so the price of oil decreased which caused a low income from oil in Iraq. Finally we can say that Iraq and the regional government were affected indirectly by the recent global crisis.

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Development of Disclosure and Transparency as Legal Methods for the Supervision of Public Companies in the Republic of Slovenia

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As a rule, public companies in the Republic of Slovenia use a two-tier system of corporate governance. The supervisory boards of such companies should execute the supervisory function by informing and disclosing to the shareholders the data regarding envisaged policies of corporate governance. The principle of disclosure and transparency in general, and in the field of remuneration, is used in the Republic of Slovenia as a systemic legal method and tool, which enables better decision making processes, supervision and control of public companies in the country.

Key words: corporate governance, supervisory board, corporate governance statement, disclosure, transparency remuneration, Companies Act, Corporate Governance Code, joint-stock company

Introduction

In the Republic of Slovenia (RS), companies may choose a two-tier management system by appointing a management board and a supervisory board or a one-tier management system by appointing a board of directors (ZGD-1 2006). As a rule, public companies (PC) use a two-tier system of corporate governance. The RS has been putting in order corporate governance of public companies by implementing the Regulations and Directives of the European Union (EU), as well as its Recommendations and other acts of soft law (Djokić 2008). As regards the field of disclosure and transparency, the RS complied with all the amendments of EU regulations regarding company law, accountancy, financial reporting and revision. Slovenia thus amended its basic company law, namely the Companies Act from the year 2006 (2006) by recently adopting two acts amending ZGD-1 (2006), with the novels ZGD-1B (2008) and ZGD-1C (2009) and consolidated three novels in the text of Companies Act – ZGD-1-UPB3 (2009).

In addition to the EU regulations, the RS implemented the recommendations of the EU. Among the recommendations that were taken

into account in the field of company law, was the 'Recommendation for the Role of Non-Executive or Supervisory Directors of Listed Companies and for the Committees of the (Supervisory) Board of 2005' (Commission of the European Communities 2005), especially in the drawing-up of the 2007 Slovenian Management Code for Publicly Traded Companies ('Kodeks upravljanja javnih delniških družb' 2007). This paper particularly shows the following development in the RS, in the field of disclosure and transparency of PC.

The RS regularly implements the legal sources of the EU (Directives, Regulations, and Recommendations), which is valid also in the field of disclosure, transparency and remunerations of management bodies. The RS uses different legal techniques to enforce the principles of disclosure and transparency of the corporate information of public companies (deviations from the code should legally be explained). The use of the combined legal techniques showed significant progress in 2008. Annual reports of listed companies in the RS illustrated substantial development of disclosure in the field of remunerations. Public companies have been revealing more and more information in their annual reports, which increases the transparency of their results and the activities of the business operations of public companies.

This article shows how management of public corporations could be further or better controlled via disclosure and transparency. This fact could influence the content of the management reports to the supervisors and shareholders, as it could become more precise and substantial. Management remunerations could become more determined and it is anticipated that they will depend more on the results of the operations of public companies, rather than on the managers themselves, as has been the case so far. If the remunerations of managers are structured in accordance with a remuneration policy which was accepted by the general assemblies of public companies in advance, these could bring positive effects to the corporate governance policy of a specific company.

Corporate governance in PC in RS is becoming more transparent and recognized also by stakeholders (creditors, loan providers, suppliers, employees) and the public. Such an example could also serve other companies, namely closed joint stock companies in RS, which prevail in the economy. High expectations are focused on the supervisors who play a key role in the enforcement of effective governance in practice. Better supervision of a public corporation could progressively establish favourable conditions for the enforcement of a model of socially responsible corporations.

Development of the Principle of Disclosure and Transparency as a Legal Method in the Period 2007–2010 in Regulation and Practice

The execution of the supervisory function within a corporation is of key importance, particularly in those areas where there is a possibility of a conflict of interest between different management bodies or when shareholders do not have the opportunity to directly participate in decision-making. Such circumstances particularly arise: (a) upon the appointment of directors; (b) in the remuneration of directors; (c) in the auditing of corporations (Commission of the European Communities 2005).

‘Comply or Explain’ Principle in the cg Code and its Consequences

The Slovenian corporate governance code for *PC* from the year 2007 (*Kodeks upravljanja javnih delniških družb* 2007) has been applicable to the public joint stock companies (*PC*) who have their shares listed on the regulated market in Slovenia. According to the preamble to the *cg* Code, the purpose of this code has been to define in more detail the governance and management principles of *PC*, whose shares are listed on the Slovene regulated market. However, the practice recommended in the *cg* Code can also be applied by other companies, so as to contribute to a transparent and intelligible governance system in Slovenia.

The *cg* Code leans heavily on the principle ‘Comply or Explain’ in all the above areas of potential conflicts of interest. The key element of this principle is disclosure. According to the *cg* Code, the purpose of publicly disclosing a company’s declaration of compliance with the Code has been in informing its shareholders, potential investors and other interest groups of the company’s system of corporate governance and the related corporate governance risks. In light of the above, the objective of the Code was to urge companies to provide sufficient information on their corporate governance practices (*Kodeks upravljanja javnih delniških družb* 2007)

The ‘Comply or Explain’ principle allows companies to deviate from the Code’s recommendations (except for provisions referring to temporary legislation). Therefore not all the *cg* Code recommendations are binding for companies. The preamble of the *cg* Code gives a detailed outline of the Code’s chapters and provisions, pointing out those that refer to the relevant legislation regulating corporate governance of joint stock companies and contain the word ‘must.’ Com-

panies are therefore required to observe the legislation and may not deviate from it. The Code's provisions containing the word 'should' are recommendations and are not legally binding. Companies must disclose any deviations from such provisions once a year in their declaration on compliance with the Code, inform investors of any deviations from such provisions and give the appropriate reasons for them. Provisions expressed with the words 'it is recommended that / it may be done thus' outline future development of corporate governance in the company and disclosure of non-compliance is not required ('Kodeks upravljanja javnih delniških družb' 2007).

When trying to establish whether public companies in RS followed the CG Code provisions, we compared individual Code provisions with the results of the Research of the Association of Supervisory Board Members of the RS (ASBM) (Združenje članov nadzornih svetov 2007a) in the area of remunerations of the supervisory board, and some results of this research were compared with the data on public joint-stock companies from the first stock-exchange listing for 2008, as indicated in the annual reports for the year 2007, published on the websites of the Ljubljana Stock Exchange (<http://seonet.ljse.si>).

According to the data in the ASBM research (Združenje članov nadzornih svetov 2007a), the remuneration structure of the management bodies of public joint-stock companies is not being disclosed to the shareholders and the situation is even worse in the area of disclosure of data which would ensure the shareholders a constant oversight of the severance grants paid out to management bodies and their relationship to the actual remuneration policy of joint-stock companies or the envisaged remuneration structure. As regards the remuneration of management bodies, the ASBM research was neither able to identify the criteria that individual joint-stock companies deem the most important, nor establish whether individual companies formulate short-term and long-term emolument policies at all, or in what manner (Združenje članov nadzornih svetov 2007a, 27). We therefore tried to deliver practical results of the newly regulated disclosure principle in the area which is deemed to be problematic owing to conflicts of interest, and where a shareholder was unable to supervise.

The CG Code ('Kodeks upravljanja javnih delniških družb' 2007) stipulated that the amount, and the method of determining the amount, of individual payments, reimbursements and other benefits of supervisory board members be set by a resolution of the general meeting or by the Articles of Association. The Code recommends that the criteria for payments to supervisory board members,

which are set out and adopted by a relevant professional organization, should also be taken into account *mutatis mutandis*.

The ASBM Recommendations for the Membership, Work and Remuneration of Members of Supervisory and Management Boards 2007 indicate more definite policies with regard to the structure of the overall remuneration of members of supervisory boards and their committees (Združenje članov nadzornih svetov 2007b).

The ASBM Recommendations on Remuneration (Združenje članov nadzornih svetov 2007b) encourage the general meetings of joint-stock companies to adopt a resolution to determine the remuneration, reimbursement of costs and benefits of members of supervisory or management boards. Under Point 5.11. thereof, the general meeting of a joint-stock company may, by means of a resolution, authorize the supervisory board to autonomously determine the remuneration of individual members of committees, payable from the budget of the supervisory board.

As for the structure of the overall remuneration, the recommendations also extend to more detailed definitions of individual categories of the overall remuneration which consists, under point 5.14. thereof, of: (a) remuneration for the performance of duties; (b) meeting fees and (c) reimbursement of costs and benefits for the performance of duties. The ASBM Recommendations on Remuneration (Združenje članov nadzornih svetov 2007b) also provide more detailed explanations of the indicated remuneration categories.

When reviewing the annual reports of public joint-stock companies from the first stock-exchange listing for 2008, one can establish that the structure of the remuneration of the supervisory board is more transparent, considering that the annual reports for 2007 disclose the remuneration of supervisory board members by remuneration structure and break it down into the following categories: monthly allowance for the performance of duties, meeting fees, fixed and variable components of remuneration, participation in profit sharing, and option emolument. The reports are deficient in that they disclose individual remuneration structures for the entire supervisory board and not by individual members, or they disclose the overall remuneration by individual supervisory board members without breaking its structure down in greater detail, while the reports of certain companies fail to identify more specifically the remuneration of the supervisory board, for example the companies Gorenje (Gorenje 2008), Petrol (Petrol 2008), and the Luka Koper (Luka Koper 2008).

These comparisons demonstrate that the application of the disclo-

sure principle has gradually improved between 2005 and 2008, by providing more precise data to the shareholders and/or investors in the field of remunerations. The CG Code ('Kodeks upravljanja javnih delniških družb' 2007) spoke about the application and structure of the remunerations, and public companies have become increasingly aware of additional disclosure that should be applied, and they also use it in the certain frame. If this situation is compared to the situation in 2005–2006, progress can be seen. However, in the year 2007, no Slovenian law or code had yet spoken about the general corporate governance policy (CG policy), which normally includes the remuneration policy as a very important part of the CG policy.

As we see further, the principle of disclosure was even more present in the Slovenian regulation and practice in the following year.

Corporate Governance Statement by Law in 2008 and its Consequences

Following the regulations and good practice of the EU, the RS introduced the institute of corporate governance statement. A corporate governance statement is an additional instrument of control in the provision of information to shareholders, stakeholders and the public, particularly in relation to issues posing risks from the point of view of conflicts of interest between the management bodies of public joint-stock companies (Djokic 2009).

Article 70 of ZGD-1-UPB3 (2009) states that the business report of a company must set out a fair presentation of the development and results of the company's operations and its financial position, including a description of the essential risks and uncertainties the company is exposed to.

In accordance with Paragraph 5 of Article 70 ZGD-1-UPB3 (2009), companies whose securities are traded on the regulated market include a corporate government statement as a special part of their business reports. A company may issue its corporate governance statement as a separate report, together with the annual report of the company. As a minimum, this quotes sections of the corporate governance code and includes information on: (a) the use of the corporate governance code; the way of using the rule of 'Comply or Explain' with regard to the particular code; and reasons for not applying the exact parts of the code; and (b) the basic characteristics of the internal control and risk management systems in connection with accounting report system procedures etc. It also includes information on: (a) significant direct and indirect ownership of the company's se-

curities, in the sense of achieving a qualified stake as stipulated by the act regulating acquisitions; (b) each holder of securities carrying special control rights; (c) all restrictions related to voting rights, in particular: restrictions of voting rights to a certain stake or number of votes, deadlines for exercising voting rights, agreements in which, on the basis of the company's co-operation, the financial rights arising from securities are separated from the rights arising from the ownership of such securities; (d) the company's rules on the appointment or replacement of members of management or supervisory bodies, and changes to the articles of association; (e) authorisations of members of the management, especially authorisations for issuing or purchasing their own shares; (f) the operation of the company general assembly and its major competences; (g) the structure and operation of the management and supervisory bodies and their committees (ZGD-1-UPB3 2009, Par. 5 of Article 70).

I understand the corporate governance statement as an obligatory instrument of disclosure about the attitude of the public stock company towards the corporate governance system in the company. The material information should be revealed to the shareholders. The decision to 'disclose or not to disclose' is no longer questionable. In the framework of Article 70 of ZGD-1-UPB3 it is mandatory for public joint stock companies to report on the content of corporate governance issues included in the corporate governance statement.

The corporate governance statement is therefore also an instrument for the control of shareholders, stakeholders and the public, particularly relating to issues posing risks from the point of view of conflicts of interest between the management bodies of public joint-stock companies. Pursuant to Article 60a ZGD-1B (2008), members of the supervisory board of a joint-stock company are obliged to ensure the drawing-up and publication of the corporate governance statement in compliance with the law. Members of the management and supervisory bodies of the company are obliged to jointly assure that the annual report with all its parts, together with the corporate governance statement, is drawn up and issued in accordance with ZGD-1-UPB3 2009 and Slovenian Accounting Standards or International Financial Reporting Standards.

It will take additional years to be able to check whether companies have improved their corporate governance practices and not merely published some data in their statements on corporate governance and annual reports. The answer to such a question will indeed depend on the ability of companies to precisely measure and anticipate their risk areas and the level of risk they can manage, which is

the objective of corporate governance rules. However, examination of the annual reports of joint-stock companies that entered the first stock exchange listing for 2009 showed additional improvement in disclosing data on the remuneration of supervisory board members, considering that the reports, as a rule, disclose them by structure and by individual members (Intereuropa 2009). The 'Comply or Explain' principle, according to the code, was also used in 2008 by public companies that were entered on the standard Stock Exchange listing. For additional information, consult annual reports of the companies Aerodrom, Terme Čatež, and Etol (see <http://seonet.ljse.si>).

Another proof that public companies disclosed the basic governance information to the public is the accession to the preparation of the new corporate governance code signed in 2009.

CG Code 2009 Relies on the Corporate Governance Statement and Recommends the Disclosure of the Corporate Governance Policy

On 8 December 2009, a new CG code was enforced ('Kodeks upravljanja javnih delniških družb' 2009) using a different approach to the CG issues of the 2007 CG Code. The same signatories of the Code, namely the Ljubljana Stock Exchange Inc., the Association of Supervisory Board Members, and the Managers' Association of Slovenia, stress that there is no need for the new code to still contain binding statutory provisions regulating the governance of listed companies. Since the Code initially took effect in the year 2004, the companies as well as the public have become increasingly familiar with the provisions of the previous Code which were phrased with the modal 'must' (shall, is obliged to, shall not, etc), and that listed companies are obliged to abide by, under the law. The signatories also agree that provisions representing the statutory minimum of corporate governance are summarised on the basis of Article 70 (5) of ZGD-1 (2006) in the description of the governance system they use. This is why all provisions of the amended Code are in the nature of recommendations which are not legally binding. Since they represent the basis of a sound corporate governance system however, companies must disclose any deviations from these provisions in their CG Statement on an annual basis so as to inform investors of any deviations from the Code and reasons for them. All such deviations must also be disclosed by non-public joint stock companies which base their CG Statement on this Code. The purpose of the new CG Code is to define the governance and management principles of companies listed on the Slovenian regulated market. The recommended prac-

tices can also be applied by other companies in order to contribute to a transparent and understandable governance system in Slovenia, which promotes both domestic and foreign investor confidence into the Slovene corporate governance system, as well as the confidence of employees and the general public ('Kodeks upravljanja javnih delniških družb' 2009, 2).

According to the Point 8 (1) of the CG Code ('Kodeks upravljanja javnih delniških družb' 2009), the supervisory board monitors the company throughout the financial year, takes an active part in drawing up corporate governance policy and in establishing the corporate governance system, carefully evaluates the work of the management board, and performs other tasks pursuant to the law, company regulations and the Code.

Corporate Governance Policy (CG Policy) is, according to the CG Code ('Kodeks upravljanja javnih delniških družb' 2009), the framework of corporate governance as drawn up by the supervisory board and the management board, wherein they commit to and publicly disclose how they will supervise and run the company. The CG Policy consists of:

- a description of all the prime governance guidelines, taking into account the company's set objectives, values and social responsibility;
- an indication as to which CG code the company abides by;
- an outline of the company's groups of stakeholders, its communication strategy and cooperation with individual groups of stakeholders (creditors, controlled undertakings, suppliers, customers, employees, the media, analysts, state bodies, the local and wider community);
- the procedure of informing controlled undertakings and shareholders of the group's strategy and corporate governance standards;
- the policy of transactions between the company and related companies, including their members of the management and supervisory boards;
- the commitment that the supervisory board will set up a system of detecting conflicts of interest and independence in members of the supervisory/management board, and measures to be applied in case of circumstances that have a material effect on their status in relation to the company;
- the supervisory board's commitment to assess its efficiency;

- an intent to set up supervisory board committees, if needed, and an outline of their tasks;
- a clear system of division of responsibilities and powers among members of managerial and supervisory bodies;
- rules governing the relationship between the company (including related companies) and members of its management/supervisory board, who are not subject to statutory provisions on conflicts of interests;
- a definition of the company's communication strategy, including high quality standards for drawing up, and the disclosure of, accounting, and financial and non-financial information;
- the protection of the interests of the company's employees, which are achieved by defining the manner, content and standards of their work as well as by ensuring an adequate level of ethical conduct in the company, including the prevention of discrimination.

The CG Policy in Chapter 20 of the CG Code ('Kodeks upravljanja javnih delniških družb' 2009) also defines the company's corporate communication strategy which dictates high quality standards with respect to the drawing up and preparation of accounting, and financial and non-financial information. In the framework of this transparency principle, there are several recommended disclosures. For example, Point 22.7 of the Code (2009) on remunerations stipulates: the company discloses the gross and net remuneration of each member of the management board and of the supervisory board. Such a disclosure is clear and comprehensible to an average investor, and includes, aside from statutorily-imposed content:

- an explanation of how the choice of performance criteria contributes to the company's long-term interests;
- an explanation of the methods applied to determine whether the performance criteria have been met;
- precise information on the deferment periods with regard to variable components of remuneration;
- information about the policy regarding termination payments, including the criteria conditioning termination payments and the amounts of termination payments;
- information with regard to vesting periods for share-based remuneration;
- information about the policy regarding the retention of shares after vesting;

- information on the composition of peer groups in companies that have been studied with respect to their remuneration policies in the course of setting up a remuneration;
- policy in the company concerned.

On the above basis it could be expected that corporate information contained in annual reports and web pages of public companies for 2010 will be more thorough, exact and substantial than it was before. As an example, you may consult the annual reports of the company Sava (2011). This leads us to the next finding: adherence by Slovenian companies to corporate governance principles is increasing. In my view, this is the result of the determination of the legislator to regulate the statements of corporate governance, as explained above. This institute forced public companies to reveal their attitude to corporate governance conflicts of interest issues and other corporate information more precisely. Subsequently, they study the provisions of the CG Codes and explain why they do not comply with a particular recommendation.

Conclusions about the Supervision Power

The article shows that the RS recently combined two legal techniques for creating and developing good corporate governance practices. Both use the principle of disclosure and transparency as a method of regulation. Such use of the principle of disclosure reveals to the shareholders and public much more information about the specific public company governance policy than before. It could be seen and judged also as a tool of the supervisory boards for their execution of power, which could ensure better supervision of PC.

The frequency of disclosure, and the transparency of the data on corporate governance and potential conflicts of interest in this field from 2005 to 2010, are increasing in the annual reports of Slovenian public joint-stock companies. This indicates that the practice in the RS follows the legislation's demands and has been developing in harmony with the regulations of the ZGD-1-UPB3 2009 and the provisions of the CG Codes. The use of techniques of obligatory disclosure of non-compliance with the Code provisions seems to be more efficient than previous regulation techniques without such obligation. Regardless of the fact that no sanctions have been imposed by the Slovenian authorities and that the effectiveness of the CG Code is not being measured systematically in Slovenia, progress can be seen by following the corporate information offered to the public and shareholders.

The Major Question Is: Could We Be Satisfied?

Analysis of the content of corporate governance information indicates that information included in the CG Policy annual reports insufficiently serves the purposes and goals which can be ensured and provided by the principles of disclosure and transparency of corporate information and seen, in particular, in the: reduction or elimination of conflicts of interest between the management bodies of a corporation; concretization of the elements of remuneration and stimulations to the management with a view to improving the operation of an individual corporation, its financial performance and business excellence; the establishment of appropriate supervision mechanisms for a concrete corporation and competent execution of the supervisory function and best balance of supervision costs.

A corporate governance statement is understood to be an additional instrument of control in the provision of information to shareholders, stakeholders and the public, particularly relating to issues posing risks from the viewpoint of conflicts of interest between the management bodies of public joint-stock companies.

It is therefore important that, the corporate government statement is also recognised in practice as an important instrument of corporate governance. The declaration of corporate governance under Article 70 of the ZGD-1-UPB3 2009 is not merely an administrative document which must accompany an annual report of a public joint stock company. Its content and the accurate disclosure of the data contained therein can constitute the basis for decision-making at the general meetings of joint-stock companies and for the supervision and control of the corporation. The CG Code ('Kodeks upravljanja javnih delniških družb' 2009) outlines the content of the information to be disclosed and the way it should be provided.

Disclosed and transparent policies of public (and other) companies in the RS are particularly important and relevant because of the corporate governance system transformation and the lack of tradition in this field. In a country where close personal and business connections are obvious to everybody, the use of the disclosure and transparency principle could encourage corporate governance to be more professional and effective.

In this aspect I find the role of the supervision board even more important in the future development of corporate governance in the RS. The execution of the supervisory function within a corporation is of key importance, particularly in those areas where it is believed that there exists the possibility of a conflict of interest between dif-

ferent management bodies or when shareholders do not have the possibility of direct decision-making.

The supervisory board can direct and dictate the disclosure of data and influence the transparency of corporate operations and decision-making by shareholders. The supervisory board plays a key role in supervising the drawing-up and publication of corporate strategic documents and annual reports on corporate operations and in the drawing-up of proposals for decision-making by the general meetings of joint-stock companies. By virtue of such a role and powers, the supervisory board also participates in preparation of the statement of corporate governance, the CG Policy, and the remuneration policy as a part of it. The supervisory board is a body whose actions can introduce and enforce a balance between the interests of managers and those of corporation owners, subject to the efficient existence and functioning of a corporation.

I understand, and consider the balancing of the interests of a joint-stock company as a corporation, as the central issue of contemporary economy and society in general. Although the means of balancing can be different, they all require a responsible engagement by individuals, and the credibility of their conduct and work in the performance of their functions.

The supervisory board is a body which can fulfil the social responsibility of a corporation or possibly serve the shareholders or the management. We will be able to monitor, analyse and evaluate future development if the companies use the disclosure and transparency principle.

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Abstracts in Slovene

Zakaj se BDP, trgovina, dobički, plače in zaposlenost globalno zmanjšujejo in zakaj se stopnja revščine globalno povečuje?

Peter Štrukelj

Namen članka je predstaviti znanstveno razlago, zakaj so se med 2. četrtletjem leta 2008 in 3. četrtletjem leta 2009 BDP, trgovina, dobički, plače, zaposlenost globalno zmanjševali in zakaj se je revščina globalno povečevala. Ta dejstva znanstveno razložimo, kar pomeni, da sedanje stanje globalnega gospodarstva (krizo) izpeljemo iz principov sedanjega globalnega gospodarstva, ki je prevladujoče organizirano na kapitalističen način. Pokažemo, da kriza nujno sledi iz tega, kako sedanje globalno gospodarstvo deluje. In na koncu utemeljimo, da je razlog za krizo temeljno nasprotje med namenom podjetij (večanje dobičkov) in nujnimi načini, kako podjetja poskušajo povečevati dobičke, ter da posledice tega temeljnega nasprotja sproži splošno pomanjkanje posojil.

Ključne besede: globalno gospodarstvo, rast BDP, dobiček, posojila, revščina

Management 7 (2): 91–110

Mera dobičkonosnosti živilske industrije v Indiji: analiza po velikosti podjetij

Ramachandran Azhagaiah in Raju Deepa

Dobičkonosnost je zmožnost ustvarjanja dobička, ta pa je ključni dejavnik, ki odloča o preživetju podjetij. Članek obravnava vpliv velikosti podjetja na dobičkonosnost, pri čemer je velikost kontrolna spremenljivka. V ta namen so bila podjetja razvrščena v tri skupine glede na svoj promet: majhna, srednje velika in velika. Izsledki kažejo, da sta stopnja nihajnosti in rasti najpomembnejša kazalnika pri določanju dobičkonosnosti majhnih podjetij, stopnja rasti pa pomembno vpliva na dobičkonosnost srednje velikih podjetij. Kapitalska intenzivnost ima značilno pozitiven koeficient z dobičkonosnostjo velikih podjetij. Rezultati raziskave kažejo, da so pri večjih podjetjih dolgoročne naložbe prispevale k večji dobičkonosnosti, pri majhnih in srednje velikih podjetjih pa ni bilo tako.

Ključne besede: dobičkonosnost, rast, nihajnost, kapitalska intenzivnost, donosnost naložb

Management 7 (2): 111–128

Ovire za uvajanje e-carinjenja blaga v gospodarstvu v vzponu: primer Irana

Mahdi Salehi

E-uprava postaja zaradi številnih ugodnosti, ki jih ponuja družbi, vedno bolj priljubljena. Eden od podsistemov e-uprave je tudi e-carinjenje, ki so ga uvedle že mnoge države po vsem svetu. Ena od zadnjih je bil Iran. Rezultati raziskave o uvedbi tega sistema v Iranu so pokazali, da je treba za učinkovito uvedbo tega sistema v bližnji prihodnosti čim prej odpraviti vrsto preprek.

Ključne besede: e-carinjenje, učinkovitost carinjenja, Iran
Management 7 (2): 129–153

Sodobna iraška ekonomska zgodovina: vplivi zadnje globalne krize na naftno industrijo v severnem Iraku

Ahmet Dinç

V članku so analizirani vplivi gospodarske krize, ki se je začela v ZDA, na severni Irak. Prvi del obravnava ekonomsko zgodovino Iraka, drugi njene vplive na severni Irak, v tretjem pa so prikazani intervjuji s podjetniki o posledicah krize na zasebni sektor v tej regiji. Avtor je v severnem Iraku preživel tri leta, poskušal je dobiti čim več neposrednih virov, intervjuval je vladne uradnike in proučeval vpliv krize na prebivalstvo. Ker je naftna industrija najpomembnejši del iraškega gospodarstva, članek obravnava predvsem vpliv globalne krize na to gospodarsko panogo.

Ključne besede: ekonomska zgodovina, gospodarska kriza, posledice krize, Irak
Management 7 (2): 155–171

Razvoj razkritja in preglednosti kot pravne metode za nadzor javnih družb v Republiki Sloveniji

Danila Djokić

Javne družbe v Republiki Sloveniji praviloma uporabljajo dvotirni sistem korporacijskega upravljanja. Nadzorni sveti morajo izvrševati nadzorno funkcijo z informiranjem delničarjev in razkrivanjem podatkov, ki zadevajo predvidene politike upravljanja takšnih družb. V Republiki Sloveniji se na splošno in v zvezi s prejemki organov upravljanja javnih družb uporablja načelo razkritja in preglednosti kot sistemska pravna metoda in orodje, ki zagotavlja boljši proces odločanja, nadzora in obvladovanja javnih družb v državi.

Ključne besede: korporacijsko upravljanje, nadzorni svet, izjava o korporacijskem upravljanju, razkritje, preglednost, zakon o gospodarskih družbah, kodeks korporacijskega upravljanja, delniška družba
Management 7 (2): 173–186

Jezikovna pravilnost in slog. Pričakuje se, da so rokopisi jezikovno neoporečni in slovnično ustrezni. Uredništvo ima pravico, da zavrne prispevke, ki ne ustrezajo merilom knjižne slovenščine.

Slog naj bo preprost, vrednostno nevtralen in razumljiv. Pregledna členjenost besedila na posamezne sestavine (poglavja, podpoglavja) naj sledi sistematičnemu miselnemu toku. Tema prispevka naj bo predstavljena zgoščeno, jasno in nazorno, ubeseditvev naj bo natančna, izražanje jedrnatno in gospodarno. Zaželeno je raba slovenskih različic strokovnih terminov namesto tujk. Logične domneve naj bodo utemeljene, sklepi dokazani. Razpravna oblika je praviloma prva oseba množine.

Oblika članka. Rokopisi za objavo v reviji morajo biti oblikovno urejeni. Besedilo naj bo oblikovano za tiskanje na papirju formata A4, pisava naj bo Times New Roman velikosti 12 pt, vsi robovi naj bodo široki 2,5 cm, razmak med vrsticami pa 1,5.

Na prvi strani rokopisa naj bodo navedeni samo naslov članka (v krepki pisavi) ter ime in priimek avtorja (oz. avtorjev), akademski ali/in strokovni naziv, institucija in elektronski naslov avtorja oz. avtorjev. Za potrebe vpisa v Cobiss se navede tudi letnica rojstva (v članku ne bo objavljena). Na drugi strani naj bodo povzetka v slovenščini in angleščini (vsak po največ 100 besed) in ključne besede v slovenščini in angleščini (3–5).

Naslovi poglavij in podpoglavij naj bodo oštevilčeni (1, 2, 2.1 itn.) in napisani z malimi črkami v krepki pisavi, poudarki v besedilu naj bodo v ležeči pisavi. Daljši navedki so ločeni od drugega besedila, izpusti pa označeni z oglatim oklepajem.

Opombe pod črto se ne uporabljajo, končne opombe pa naj bodo pred seznamom literature. Preglednice in risbe se vstavijo v besedilo, toda v članku naj ne bo preglednic ali risb, ki bi bile v celoti povzete po že objavljenih delih.

Bibliografski sklici in seznam uporabljene literature. Pri navajanju bibliografskih sklicev med besedilom se zapišejo samo priimek avtorja oz. avtorjev, letnica izida dela in številka strani oz. obseg strani, npr. (Gomezelj Omerzel, Biloslavo in Trnavčević 2010, 14–15). Vsakemu bibliografskemu sklicu v besedilu naj ustreza navedba dela

v seznamu literature, v njem pa naj ne bodo navedena dela, na katera se avtor v besedilu ne sklicuje.

Pri oblikovanju seznama literature se ravnajte po *The Chicago Manual of Style* (University of Chicago Press 2010; glejte tudi http://www.chicagomanualofstyle.org/tools_citationguide.html), vendar navajajte samo začetnice imen in upoštevajte slovenska pravopisna pravila:

- Anderson Analytics. 2007. »Brands and Countries.« <http://www.andersonanalytics.com/reports/BrandAndCountries.pdf>
- Catana, S. W. 2003. »Vital Approach to Transition: Slovene Multiple Case Study.« *Managing Global Transitions* 1 (1): 29–48.
- Gomezelj Omerzel, D., R. Biloslavo in A. Trnavčević. 2010. *Management znanja v visokošolskih zavodih*. Koper: Fakulteta za management.
- Kim, J., S. J. Lee, and G. Marschke. 2005. »The Influence of University Research on Industrial Innovation.« NBER Working Paper Series 11447, National Bureau of Economic Research, Cambridge, MA.
- Mumby, D., in R. Clair. 1998. »Organizational Discourse.« *V Discourse as Social Interaction*, ur. T. A. van Dijk, 181–205. London: Sage.
- University of Chicago Press. 2010. *The Chicago Manual of Style*. 16. izd. Chicago in London: University of Chicago Press.

Oddaja članka. Članek se pripravi v programu ms Word ali L^AT_EX, shrani v datoteko, katere ime naj bo priimek prvega avtorja (npr. Novak.doc), in se pošlje na elektronski naslov mng@fm-kp.si.

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