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German Rigidity: An Obstacle to the Resolution of the European Crisis

Abstract:
This paper examines the role of Germany in resolving the European Sovereign Debt Crisis. As the largest economy in the EU and the Eurozone, Germany was expected to play a leading role in saving the Economic and Monetary Union (EMU) and the Euro. During the crisis, Germany along with Finland and the Netherlands chose to support austere fiscal discipline as the way to resolve the crisis. For this reason, they convinced the Eurozone countries to invite the International Monetary Fund (IMF) to impose fiscal discipline on countries receiving bailouts. However, such programs led the Southern European countries and Ireland (the periphery) into prolonged recessions. A main reason for this is the unwillingness of Germany and other countries to pledge sufficient and necessary resources to help the countries threatened by the crisis. Furthermore, populist politics along with a complex political and judicial system slows down the decision making process in Germany. These are the central factors preventing Eurozone countries from finding a solution to the European problem. However, there is small hope that Germany will support changes in the Eurozone governing system, provided a formation of a fiscal union is established. The initiative of the European Central Bank (ECB) President Mario Draghi to purchase short-term Eurozone member countries' bonds is another promise, at least for the short-run, to find a solution to the European problem. The ECB's program was approved by the German government, but is opposed by Bundesbank President Jens Weidmann. If the German government prevails, the ECB will be able to purchase short-term bonds from countries that accepted bailouts. The ultimate objective of this program is to reduce Spain's and Italy's interest rates, so they may borrow from the market and avoid bankruptcy. Presently Spain has already decided not to receive a bailout and Italy has not decided yet if it will take the offer. If the ECB conditions on the bailouts are not accepted by any other countries then the ECB must be allowed to freely apply an independent monetary policy. This implies that the ECB should intervene at its own discretion to reverse the crisis and save the Euro.

Keywords: European Sovereign Debt Crisis, Economic and Monetary Union, Fiscal Union, Bundesbank, European Central Bank, Bailout, Austerity, Fiscal Discipline
JEL Classification: F00, F15, F3

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1. Introduction

About five years have passed since the U.S. Subprime Mortgage Crisis began spreading to Europe. EU-Eurozone authorities and EU country leaders have repeatedly failed to reverse the crisis despite the adoption of several programs that wasted hundreds of billions of Euros. The crisis has not yet been resolved because Eurozone leaders have been unable to convince the markets of their unequivocal commitment to the Economic and Monetary Union (EMU) and the irreversibility of the Euro as their permanent currency. The exceptionally slow process of the Eurozone to adopt appropriate policies and introduce governing reforms to the EMU is harmful, as the EMU was launched as an incomplete structure.

2. The ECB's New Initiative and The Bundesbank's Opposition

In London on July 26th, 2012 Mario Draghi, President of the European Central Bank (ECB), announced that he would do "whatever it takes" to preserve the Euro. [3] In a joint statement, French President Francois Hollande and Italian Prime Minister Mario Monti, on July 31, 2012 agreed with the ECB president and reported that they will also do "everything" to protect the Euro.[4] The ECB president's announcement initially had a favorable effect on investors' expectations as was indicated by increasing stock prices around the world and declining interest rates on Spanish and Italian government bonds. Draghi's program received support prior to the announcement from 22 out of 23 ECB Governing Council members. The Council approved the ECB to buy unlimited amounts of short-term bonds from those Eurozone countries that comply with the Eurozone's bailout conditions; i.e., by those countries that signed bailout agreements. The only dissenting vote in the Governing Council being that of the German Central Bank's (Bundesbank) President Jens Weidmann.[5]

It is not a great surprise that the president of the Bundesbank opposes the ECB's plan to purchase bonds of member countries, in the secondary market, that are at financial risk. Mr. Weidmann publicized the disagreement in the press by reminding Draghi that such purchases are beyond the ECB's authority. The EMU and the Euro are now, more than ever, as a result of the crisis and the application of strong contractionary policies, on the edge of a cliff. This is suggested by the increasing number of concerns about the breakup of the EMU and the deteriorating economic conditions in Southern Europe. The breakup of the EMU is in the news on a daily basis. Mr. Weidmann, however, shows no concern that Spain and Italy

[3] "Central Bank chief vows to fight for euro", July 26, 2012 Washington Post.
[4] "Hollande, Monti Stress Commitment to Euro Zone", July 31, 2012 The Wall Street Journal.
[5] "Merkel's man becomes the Becket of the Bundesbank", August 3, 2012 Financial Times.

increasingly face higher interest rates on their sovereign debt and thus are moving closer to bankruptcy as they have increasing difficulty borrowing in the market to refinance their public debt. As the largest economy in the EU and the Eurozone, Germany plays an important role in safeguarding the Euro through difficult times. However, Germany has not only failed to provide such leadership in governing the EMU, but its government was also unable to control some of the politicians who pursued nationalistic and divisive, anti-European stances in order to gain popularity for themselves among taxpayers and voters.

3. Will History Repeat Itself?

If the EMU breaks up, this will be the second time within the last 20 years that the Bundesbank would have played a major role in disrupting European monetary integration by ranking perceived German interests above European interests. Many hold the Bundesbank mainly responsible for the 1992-93 exchange rate crisis and the breakup of the European Monetary System (EMS). This was a period during which the Bundesbank was applying contractionary monetary policy thus raising its key monetary policy rate, the REPO[6], in order to suppress rising prices. Expansionary German fiscal policy adopted to facilitate the reunification of the country after the collapse of the Berlin Wall in 1989 was a potential cause of inflation during this period. The Bundesbank's refusal to reduce interest rates or to lend Deutsche Marks to its EMS partners experiencing a severe recession during this period forced most countries to temporarily or permanently abandon the EMS as they were unable to maintain their exchange rates within the Exchange Rate Mechanism (ERM) band of ±2.25%. This, however, happened only after most EMS countries lost billions (in national currency units) and large quantities of their gold reserves to speculators while their governments were trying to defend their currencies.[7]

4. The Joint IMF-EU Bailouts

During the present European financial crisis it was Jens Weidmann's idea to invite the IMF to assist the Eurozone in its recovery from the crisis. The EU together with the IMF imposed austerity programs on all Eurozone countries receiving bailouts. An EU/IMF joint approach to the bailout programs was both inappropriate and catastrophic. First, Eurozone countries are relatively rich and should not have to borrow from the IMF, as such funding should be reserved for Less Developed Countries (LDCs) that cannot easily borrow from the

[6] REPO is the interest rate the ECB charges banks for collateralized loans based on repurchasing agreements of government securities.
[7] Zestos (2006).

markets. Second, Eurozone members could have assisted each other decisively at the beginning of the crisis; this policy would have immediately calmed the markets. Therefore, the EMU would not have been challenged for so long as the crisis would have been much shorter. The third and most important reason that the European Sovereign Debt Crisis is not yet resolved is because the IMF's austerity programs that came along with the bailouts (the notorious conditionality) sank the periphery countries into a prolonged and deep recession. Consequently, the imposed bailout programs not only constitute an insult to the recipient countries, but were also offered at harsh terms that made it impossible for these countries to return to a growth path and attain a sustainable public debt.[8] This obviously was not as important to the German government and its Northern allies. The aim of these countries was to solve the moral hazard problem by making it very painful for all countries that decided to seek bailouts. By doing this they hoped that the difficult terms in the bailout would discourage other countries from seeking additional bailouts. The fact that the periphery countries face increasing unemployment, migration of their workers to other countries, and a rising number of suicides is not apparently crucial for some of the Northern countries' leaders and many citizens, who still insist on the imposition of draconian austerity programs that prolong the recession. Such developments are against the EU treaties that clearly state the objective of the European Community (EC) is harmonious development and expansion in all EC countries (Treaty of Rome, article 2). It is now evident that internal devaluations, i.e., reduction of wages and cost of production, were insufficient to boost economic growth by raising international competiveness.

5. Germany Imposes Legal Conditions on EMU Countries

Bundesbank officials who contributed in the creation of the EMU in the early 1990's made certain that the ECB was created as a replica of the Bundesbank. The ECB according to its charter cannot buy member countries' public debt (cannot monetize national debt). This implies that the ECB is not free to exercise an independent monetary policy. Price stability is the only mandate of the ECB.[9] As a result the ECB cannot apply a full-fledged counter-cyclical monetary policy that all modern central banks pursue, mainly through open market operations, by buying and selling securities or via the adoption of unorthodox new policies such as quantitative easing.

[8] This was the main reason that the bailout recipient countries found it imperative to renegotiate the terms of the bailout agreements.

[9] This is unlike the U.S. Federal Reserve (Fed) which according to its charter has a dual mandate to pursue both price stability and economic growth.

Furthermore, the Stability and Growth Pact (SGP) imposed on EMU members by Germany in 1997 restrained fiscal policy of the EMU member countries, by restricting their public deficits and debts in relation to GDP to be held below 3 and 60 percent respectively. This implies that Eurozone countries were left almost defenseless against recessions as they surrendered both their discretionary monetary and fiscal policies, in addition to their exchange rate polices. Analysts of the 2007-2009 U.S. Subprime Mortgage Crisis are convinced that the Fed played a very important role in the relatively fast recovery of the U.S. Economy. Similarly the U.S. Treasury, by applying expansionary fiscal policy, helped the U.S. recover quickly from the recession. The U.S. Treasury, during and after the Subprime Mortgage Crisis, has generated the largest deficits in U.S. history. However, the SGP was repeatedly violated by EMU countries as they tried to fight the recessions starting in 2003 and particularly in 2008 when the U.S. Subprime Mortgage Crisis spread to Europe. This is how the European Sovereign Debt Crisis began developing as countries increased spending to fight the recession. It is important to remember that when small Eurozone countries violated the SGP, they were forced by the EU Commission to comply with the EMU fiscal rules. But when large countries such as Germany, France, and Italy violated the Pact, they initially decided to freeze the mechanics of the SGP, and eventually revised the Pact according to their preferences.[10]

When Greece received its second bailout, the German government adamantly insisted that the Greek bailout (and all future bailouts) would have to include a haircut of the private sector; i.e., to the bond owners of Greek debt. This requirement is known as the Private Sector Involvement (PSI) program and it has played a detrimental role in deepening and spreading the crisis in the Eurozone. The PSI requirement frustrated bond owners who refused to invest in Greece, and kept their distance from other Eurozone countries' bonds. Thus the PSI is at least partially responsible for spreading and prolonging the crisis via contagion.[11] Investors nowadays prefer emerging economies instead, even if capital inflows in a few of these countries are subject to taxation. Such policy was adopted by a few countries to prevent currency appreciation that would depress their exports. Bailouts to Eurozone countries were asymmetric in the treatment of private and official creditors. Thus the official sector, which includes the ECB and National Central banks, are protected and are not subject to haircuts. This is another reason why private investors typically avoid the Eurozone periphery countries, thus prolonging the crisis.

[10] Zestos(2006), De Grauwe, P. (2000).
[11] Zestos and Rizova *Ekathimerini* (January 9, 2012).

It is obvious that the EU/IMF bailout programs created disincentives to private bond owners to invest in the sovereign debt of financially distressed Eurozone countries. The crisis, as a result, spread via contagion and thus deepened in the Eurozone threatening the entire European continent and the world economy. An additional factor prolonging the crisis has been the inability of the EU country leaders to find commonly acceptable solutions and end their perpetual bickering. Although they announced several programs that were presented as solutions to the crisis, it turned out that every one of them provided too little or was introduced too late. Thus each proposed program ended up causing frustration and disappointment. All these programs were unsuccessful because Eurozone country leaders refused to make the necessary and sufficient financial commitment to combat the crisis. Such an approach was exactly the opposite of the expansionary German fiscal policy that was correctly launched in 1989 to support the reunification of the country. This is indicated by the way EU leaders formed the two rescue funds that were designed to help the Eurozone countries at financial risk.

6. Two Rescue Funds: The EFSF and ESM

Two rescue funds (firewalls) were created to prevent the crisis from spreading. Both of them were intended to be used in various ways to assist Eurozone countries in financial distress and pull them out of the recession. The European Financial Stability Facility (EFSF) was created as a Special Purpose Vehicle (SPV) chartered in Luxembourg, but this fund received no capital contributions from Eurozone countries. The SPV was devised and first introduced to allow banks to place part of their assets in very profitable but risky investments without exposing the rest of the bank's capital. Similarly the EMU countries are responsible and guarantee the bond holders up to the maximum limit of the fund and therefore no additional funding from national treasuries of Eurozone countries will be necessary and requested. The total amount of the lending capital in this fund is 440 billion Euros, and the entire amount was borrowed in the market. The EFSF is a temporary fund designed for the 2010-2013 period. It has already loaned funds to Portugal and Ireland and is still operational.[12]

The second rescue fund is the European Stability Mechanism (ESM); this is a permanent fund with a maximum lending capital of 500 billion Euros, which will be in operation in 2013.[13] The ESM started with a capital of 80 billion Euros committed by the Eurozone countries while the rest will be borrowed and guaranteed by the AAA credit rating

[12] See http://www.efsf.europa.eu/attachments/ faq_en.pdf Pages 15-18.
[13] *Ibid* Pages 24-27.

Eurozone countries (if any remain by that time). In order for the ESM to become functional it had to be approved by all Eurozone countries' governments, often their parliaments, and in the case of Germany, by its Constitutional Court located in Karlsruhe.[14] This was the last obstacle of the ESM before it becomes effective. The German Constitutional Court met in July 2012 after a case was brought to it by more than 37,000 German citizens and a left winged (Die Linke) political party to decide on the legality of the ESM because it shifts fiscal powers from the German Parliament (Bundestag) to Brussels.[15] After a preliminary hearing in July the court decided to postpone its decision on both the legality of the ESM and the Fiscal Compact Treaty agreed by the EU leaders until September 12th, 2012. This delay frustrated both markets and people who were hoping for a fast recovery from the crisis. On September 12th, 2012 the German Constitutional Court dismissed the case of the citizens and the Die Linke party to block the ESM and the Fiscal Compact Treaty. The news came as a great relief to financial markets, many Europeans, and to Chancellor Merkel, as one of the impediments to the European solution was surpassed. Eurozone finance ministers on October 8th, 2012 during the Eurogroup meeting launched the 500 billion Euro ESM fund. The ESM received AAA rating by the Fitch credit rating agency. As soon as the single bank Eurozone supervisor is established the ESM will begin direct recapitalization of financially distressed banks. The ESM also inherited approximately 200 billion Euros from the EFSF. Thus it has a total of 620 billion Euros in guarantees and 80 billion Euros in cash contributions from Eurozone countries.[16]

German citizens are rightfully justified in questioning and challenging those decisions approved by their democratically elected parliament. This right was gained a long time ago in 1933 when a lawfully elected party terminated the Bundestag and abolished the democratic regime of the Weimar Republic replacing it with tyranny. The recent petition of the German citizens to the Constitutional Court was based on the perception that the ESM transfers financial power from the elected Bundestag to Brussels. This is what a few Germans like to refer to as "taxation without representation," an expression borrowed from the American Revolution.

The Constitutional Court dismissed the case because the majority of the ESM Board's decisions have to be approved by unanimity. Consequently, each Eurozone country can veto any of these ESM Board decisions. A few other decisions are made by qualified majority voting (QMV), requiring 80 percent of the casted votes for an approval of such decisions.

[14] This is also the usual procedure of the approval of EU treaties.
[15] "Germany's judgment day", Financial Times, August 7, 2012.
[16] "ESM officially launched, assigned AAA rating by Fitch" FXstreet.com (Barcelona) October 8, 2012.

The Eurozone member countries' votes are weighted and assigned according to the contribution of each country to the ESM's initial capital. Because Germany's share to the initial capital of the ESM is 27 percent, this implies that Germany can veto any decision of the ESM Board. As a result no evidence of transfer of power was found by the court.[17] This legal process in Germany postponed the decision to launch the ESM and the Fiscal Compact Treaty by a few months. This has deepened the crisis in the periphery and especially in Spain.

7. German Tightness

Germany has previously frustrated many EU country leaders, heads of international organizations such as the IMF, and the Organization of Economic Cooperation and Development (OECD), for refusing to increase the lending power of the ESM. It was initially hoped that the Eurozone countries would double the lending power of the ESM to one trillion Euros. EMU countries first decided to settle for 750 billion Euros, but in the end the German government persuaded Eurozone leaders to keep the ESM lending limit to 500 billion Euros. This lack of commitment by Germany induced U.S. and Canada not to contribute to another fund that was launched about the same time by the IMF to also assist Eurozone countries at risk. Justifiably, Canada and the U.S. responded that the Eurozone consists of rich countries that have the ability to help themselves. As a result, the IMF fund was created by contributions from emerging economies, such as Brazil, China, and India, which means the poorer countries were helping the richer ones to resolve the crisis and prevent it from spreading. Germany, along with its Northern allies, insists that they are against liberal lending policies to bailout the periphery countries because they are concerned that these countries will relax fiscal discipline. The slow process to approve the ESM and the Fiscal Compact Treaty is a major reason for the EU's inability to resolve the crisis. This is particularly evident in Germany which unlike other Eurozone countries faces stricter legal impediments in its political decision making process, which, for historical reasons, is more complex than in other Eurozone countries.

8. German Fiscal Discipline, Labor Reforms, and Trade Surpluses

Another major factor that delays the Eurozone recovery from the crisis has to do with the frequently conflicting policy views that were coming (maybe intentionally) from different levels of the German government for more than two and a half years. As a result some politicians confused and scared both citizens and investors. Germany insists the Eurozone

[17] See http://www.european-council.europa.eu/ media 582311/05-tesm2.en12.pdf Pages 11-18.

countries adopt austere fiscal discipline programs, i.e., balanced budgets, privatization programs, wage and pension cuts, and many more. Similar programs were adopted by Germany under the leadership of Chancellor Gerhard Schröeder during the period of 2003-2005. Such austerity programs and labor reforms transformed Germany into one of the most competitive economies in the Eurozone. Chancellor Schröeder and his party, the Social Democratic Party (SPD), however, lost the election as many Germans, affected by the austerity programs, were frustrated and angry. Germany continues to benefit from labor reforms because they helped reduce the production costs. As a result, Germany increased its international competitiveness, enabling the country to generate large long-term trade surpluses which contributed to its strong economic growth.

It is interesting that the Pan-Hellenic Socialist party of George Papandreou in Greece that tried to implement the first bailout program not only lost the elections in May, 2012, but lost a great percentage of its supporters and came out to be third ranking in the Greek parliament. This is exactly what happened to Chancellor Schröeder and the SPD in the German national elections in May 2005 when it fell into third place (for the first time in its history) because it tried to impose labor reforms and austerity measures.

The largest share of German trade surpluses during this period was generated with the Southern European countries. Trade imbalances are closely related to government deficits and public debts. Therefore, resolving the financial crisis requires Eurozone countries to address the issue of trade imbalances. Northern EMU countries have generated long-term trade surpluses since 1999; whereas, periphery countries have accumulated chronic trade deficits. Such trade imbalances have contributed to the European Sovereign Debt Crisis because the periphery Eurozone countries public debt is caused by Northern Eurozone countries' trade surpluses.[18]

Germany persuaded 25 out of 27 EU country leaders to sign the Fiscal Compact Treaty on March 2nd, 2012, as the German government was convinced that fiscal discipline is the solution to the crisis even if this is imposed during a period of prolonged recession. Recently, the German government began to accept that austerity without growth will not be the way to resolve the crisis.[19] Therefore economic growth is now considered a very important and necessary factor to overcome the crisis. European officials and EU country leaders, nonetheless, are rather slow in launching major programs to boost growth.

[18] Such results are supported by econometric Granger causality tests employing time series data on public debt of the periphery countries and trade balances of the Northern Eurozone countries. Zestos (2012)

[19] French president Francois Hollande deserves some credit for his insistence that economic growth is as important as fiscal discipline.

9. German Politics Affect the Future of the Euro

The slow pace of adopting and implementing growth policies and establishing a fiscal and banking union in the EMU is a determining factor in the survival or destruction of the EMU. If destruction occurs, German government leaders and the Bundesbank will likely be remembered as the major contributors to the breakup of the EMU and the unnecessary human suffering that will follow after a severe global recession. The periphery Eurozone countries and especially Greece will receive much criticism for their inability to maintain fiscal discipline. The German government consistently blocked or indefinitely postponed every major proposal to resolve the crisis. The Germans took such positions in order to avoid transforming the EU into a transfer union imposing a continuous outflow of German aid to save the Euro. The German government stated that it will support the issue of Eurobonds only after a fiscal union is established in the EMU.

The Christian Democratic Party (CDU) and particularly its junior partner in government the Free Democratic Party (FDP) are strongly opposing the issuance of Eurobonds. Surprisingly, Chancellor Merkel and her Finance Minister Wolfgang Schaüble did not respond for several days to the ECB's initiative of buying short-term bonds. Even more surprising, but somewhat optimistic, was the fact that Chancellor Merkel's Deputy Spokesman stated that Mr. Draghi's announcement of buying Eurozone's short-term bonds as it was proposed by Mr. Draghi was within the ECB mandate. The news media interpreted this as a policy split between the government and the Bundesbank. This soon was downplayed by government officials. It took almost a month for Chancellor Merkel to announce her support to ECB's initiative to defend the Euro by purchasing short-term government bonds. Chancellor Merkel made her announcement about this during her visit to Canada on August 16th, 2012, at a press conference in Ottawa.

As Germany is the largest and strongest economy in the EU, it will be held responsible for its lack of leadership and for not doing enough to reverse the Euro crisis. Germany, however, will lose more than any other country in the Eurozone. The reason for this is simple: the Euro has allowed Germany to trade freely with the EMU members and amass huge surpluses, thus the loss of the internal market that will follow a possible demise of the Euro will substantially shrink German surpluses. This, however, was not very obvious to German government officials; otherwise, they would have demonstrated less obsession with fiscal discipline. Similarly if the Euro implodes the Bundesbank will be held responsible because it ought to be more concerned about economic growth in the midst of a major crisis in the

Eurozone, instead of sticking to the same tune of price stability and the fear of monetization of national public debts.

The majority of German citizens and a few political leaders believe that a Greek exit from the Eurozone is desirable, feasible, and not as costly as originally believed; they assume that the Eurozone can now better cope with a Greek exit.[20] If Eurozone and EU leaders decide to resolve the crisis by dropping the perceived weaker country instead of helping it, this will give rise to negative expectations of "Who is next?" Such a situation will definitely lead to the breakup of the EMU and the destruction of the Euro as markets will target and begin speculative attacks on Eurozone members' securities on one country after the other. This scenario is possible considering the fact that according to recent polls, the majority of German people are supporting a Greek exit from the Eurozone.

There are, however, some indications that conditions are improving in the Eurozone. Many politicians and EU officials seem to be more optimistic about the future of the Euro. The parliamentary election results in the Netherlands indicated that Dutch voters supported pro-European parties. This along with the decision of the German Constitutional Court seemed to have changed mildly the outlook for the future of the Euro. The visit of Chancellor Merkel to Athens on October 9th, 2012 and positive comments by EU officials on Greek reforms provide some optimism for the survival of the Euro.

10. The Art of Delaying Can Be Fatal

There seems to be no end to the Euro Saga since every positive development often is followed by at least one negative one. Such is the case with the strong message sent by the three finance ministers of Germany, Finland and the Netherlands on September 25th, 2012, in their communiqué after their meeting in Helsinki. It became evident that the three finance ministers had receded from the EU country leaders' agreement during the June 28-29th, 2012, summit to allow the ESM to directly recapitalize troubled banks of financially distressed countries. This program could have saved billions of Euros for the governments of Spain and possibly Ireland and would have substantially reduced their public debt to GDP ratios.

The three finance ministers clarified that the June summit decision does not apply to the "legacy" assets of the financially distressed Eurozone member countries' banks.[21] The ESM is responsible, the finance ministers explained, only "for new problems" that may develop after the Eurozone bank supervisor is put in place. The establishment of the single

[20] Only very recently there seems to be a change in opinion over a Greek exit from the Euro in the Northern European countries.
[21] "Restoring Growth, Forging a Stronger Union", European Commission Publication, August 20, 2012.

Eurozone bank supervisor was expected to be introduced by the end of 2012. Although Germany initially recommended the establishment of the single bank supervisor, it is now delaying this decision for a long time. Peter Spiegel, a *Financial Times* journalist, suspects that the three countries are trying to postpone the bank recapitalization "indefinitely."[22] Such lack of determination to implement programs to save the Euro keeps markets unconvinced that the three Northern Eurozone counties are determined or willing to maintain the Euro as their irreversible currency.

At the June 28-29 summit, the EU leaders agreed to "break the vicious circle between sovereigns and banks." This statement implies that the Sovereign Debt Crisis is now complemented by a banking crisis, thus reversing the recession requires saving (recapitalizing) the troubled banks. However, Germany and its allies seem to be determined to renege on this decision as they already began backsliding (Rückfall) on this issue. [23] This possible policy reversal especially from Germany can be explained because Germany is holding national elections next year. It will be very difficult for Chancellor Merkel to request from the Bundestag further guarantees of new public debt for the periphery countries.[24]

Such difficulty exists because many German politicians for the last two and a half years portrayed assistance to the most affected Eurozone countries by the crisis to be against Germany's interest and tried to gain popularity among voters by being critical of such aid. It is therefore certain that Chancellor Merkel is confronted between two conflicting alternatives, reelection or preventing severe recession in the periphery that leads to social upheaval, possible secession in Spain that leads to a likely breakup of the EMU.

11. German Elections are Crucial

Upcoming national elections in Germany in 2013 do not help because a few German politicians practice populist politics by trying to appeal to the taxpayers (voters) by taking strong positions against additional bailouts. The most common assertion in political speeches is that Greece has to be thrown out of the EMU if it cannot comply with the bailout agreement. Another common claim is that no more bailouts for the periphery countries will be offered. Two of the most notorious politicians are Phillip Rössler, the leader of the Junior Free Democratic Party in the government coalition with the Christian Democratic Union

[22] "Eurozone Deal Over Bank Bailout in Doubt", Financial Times, September 25, 2012.
[23] "Charlemagne: The Other Moral Hazard", The Economist, September 29, 2012.
[24] Germany or any of the other guarantor Eurozone countries have not made any payments from their budgets directly to the periphery Eurozone countries.

(CDU) who also holds posts as Vice Chancellor and Minister of the Economy and Horst Seehofer, the leader of the Bavarian Christian Social Union party.

A hope for a long-term European solution is promised by the opposition Social Democratic party of Germany (SPD) which on August 7th, 2012, through its national chairman Sigmar Gabriel, announced that it supports ECB President Draghi's policy of buying short-term government bonds provided countries apply first to EFSF/ ESM for assistance. Mr. Gabriel proposed that a long-run solution to the Euro crisis can come through a change in the German constitution approved in a referendum. Such a constitutional change will permit jointly guaranteed Eurobonds (mutualization of Eurozone debt) and simultaneously the creation of a fiscal union.[25]

The outcome of the German elections in 2013 may be crucial not only for Germany but possibly for the entire European project. Political analysts in Germany agree that the newly emerged leader of the SPD Peer Steinbrück is the most serious and capable candidate to challenge Chancellor Merkel. Mr. Steinbrück was the finance minister in Chancellor Merkel's first term coalition government with the SPD. Mr. Steinbrück is a strong critic of Chancellor Merkel's slow approach in resolving the crisis and a fierce critic of the excessive austerity measures imposed on the periphery countries that prolong the severe recession. He is also a critic of greedy behavior of banks during the financial crisis thus Mr. Steinbrück is a big supporter of financial regulation to promote financial stability. Mr. Steinbrück also supports issuance of "some type of Eurobonds" i.e., the mutualization of national public debts and giving extension to Greece to repay its public debt. Although he trails Chancellor Merkel presently by a large percentage of 10 percent, once his party announces and popularize their party agenda there is a possibility that the gap may close. This is possible considering that he is a greater supporter of growth and job creation than austerity. As a result it is highly likely for him to find many supporters at home and allies among the EU leaders, particularly in France, Spain, Italy and other European countries. Mr. Steinbrück's philosophy for a new Europe that is more concerned with the well-being of its people rather than with efficiency and fierce business competition may now be more appealing in Germany and abroad.

If the SPD is successful in the German elections and is able to form a government even with coalition with the Green Party this may open a new perspective for the EMU and the survival of the Euro. Such an election (assuming the Euro survives until next year) will enable the two largest countries in the Eurozone, Germany and France, to promote strong growth policies in the Eurozone. Under these circumstances the European project of

[25] "Germany's SPD backs fiscal union", August 7th, Financial Times 2012.

monetary, fiscal and banking union will be successful and a division of Europe between North and South will be prevented.

12. Concluding Comments

The EMU was launched in 1999 as an incomplete program that introduced a common currency, the Euro. The EMU took away from the member states, the exchange rate, fiscal, and monetary policies. It was predicted by the early authors of the Optimum Currency Area (OCA) that the Euro would become a victim during the first major asymmetric shock of the EMU. The U.S. Subprime Mortgage Crisis constituted the first asymmetric shock because it affected two groups of EMU countries differently. The Northern Eurozone countries weathered the recession better than the Southern Eurozone countries and Ireland.

The crisis nonetheless has spread quickly to many Eurozone countries and has deepened by the day. Eurozone leaders and countries are slow in adopting necessary policies and governing reforms to save the Euro. Distrust and unwillingness to accept that the Euro as their irreversible currency makes recovery from the crisis more and more expensive because markets are "pricing the convertibility risks" that countries will exit the Eurozone.[26]

A complex political and judicial system, along with German populist politics that were allowed to thrive within and outside the governing coalition made the job of Chancellor Merkel of saving the Euro very difficult. The Chancellor, however, never took a strong stand against such type of behavior that destabilizes European unity.

Maybe now is the time for the Eurozone countries to either move forward and save the Euro or end the EMU project altogether, in the least disorderly way. If they choose to move forward then they should do it with determination because markets have no tolerance for anything less than a full commitment. Eurozone countries will be able to recover from the crisis by complementing the monetary union with a fiscal and a banking union, i.e., full economic integration. The banking union should provide for jointly guaranteed bank deposits by the Eurozone. As for the austerity programs and the punishment of the fiscal violators, those already took their toll in both Greece and Spain. A neo-nazi party, in a recent poll ranked third during the last national elections in Greece and received seven percent of the popular vote. This constitutes an embarrassment to the country that introduced democracy to the world. Spain presently faces a social upheaval and a secessionist movement in Catalonia, its most economically vital province. Most Germans ought to know from their own historical

[26] "Weidmann isolated as ECB plan approved" Financial Times September 7 2012.

experience what economic sanctions and imposed austerity have brought to their own country in the early 1930's.

The ECB newly announced program of Mario Draghi may be a first step in the right direction, and it can be successful for the recovery from the crisis if it is widely supported. If, however, Eurozone countries do not seek bailouts and EU leaders are serious about saving the Euro, they must delegate full authority to the ECB to independently apply monetary policy. Thus Eurozone leaders need to remove all imposed conditions on their central bank. If such a compromise is not made one can easily visualize a possible split of the Eurozone with one of the two ECBs relocating westward to Paris.

13. References

Birnbaum, Michael, and Brad Plumer. "Central Bank Chief Vows to Fight for Euro." *Washington Post*., 26 July 2012. Web. 16 Aug. 2012. <http://www.washingtonpost.com/world/central-bank-chief-vows-to-fight-for-euro/2012/07/26/gJQAceBFCX_story.html>.

De Grauwe, P. (2000). *Economics of Monetary Union*. 4th ed. New York: Oxford Publishing Press.

"From the U.S. Subprime Mortgage Crisis to the European Sovereign Debt Crisis", Zestos (2012) a paper presented at IABE 2012 Venice Summer Conference Program Ca' Foscari University of Venice, Venice, Italy June 8-10, 2012.

Horobin, William. "Hollande, Monti Stress Commitment to Euro Zone." *Wall Street Journal*. 31 July 2012. Web. 16 Aug. 2012. <http://online.wsj.com/article/SB10000872396390444860104577560874214311052.html>.

Peel, Quentin. "Merkel's Man Becomes the Becket of the Bundesbank." *Financial Times*. , 3 Aug. 2012. Web. 16 Aug. 2012. <http://www.ft.com/cms/s/0/4064a24a-dd67-11e1-8fdc-00144feab49a.html>.

Peel, Quentin. "Germany's Judgment Day." *Financial Times*.., 7 Aug. 2012. Web. 17 Aug. 2012. <http://www.ft.com/cms/s/0/78df7420-dfa5-11e1-9bb7-00144feab49a.html>.

Zestos, George K., and Tatiana P. Rizova. "US Subprime Mortgage Crisis and the European Sovereign Debt: Why the European Sovereign Debt Crisis Has Not Been Resolved Yet." *The State of the Union(s): The Eurozone Crisis, Comparative Regional Integration, and the EU Model*. Thomson-Shore, 2012. 69-83. Print.

Zestos, George K. *European Monetary Integration: The Euro*. Mason, OH: Thomson/South-Western, 2006. Print.

Exploring Population Trends Along A Coastal-Inland Gradient: A Case Study in Latium (Central Italy)

Abstract:

In this article population trends for a 140 years period (1871-2011) were analysed at municipal level in Latium, central Italy. We used a multivariate approach including principal components and cluster analyses in order to analyze the formation and consolidation of a coastal-inland gradient in population density. Results pointed out the importance of internal migrations along both elevation (mountain areas versus lowlands) and urban-rural gradients (Rome versus countryside) creating a socioeconomic gap among lowland, intensified agricultural zones and inland mountain areas. Differences in population density are further increasing nowadays due to peri-urbanization and littoralization processes. This study highlights the importance of exploratory analysis in spatial population dynamics.

Keywords: Demographic dynamics, long-term trends, multidimensional analysis, Latium, Italy.

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1. Introduction

Global and local economic processes are driving forces for changes in societies and landscapes (Herrmann & Hutchinson 2005). Since early 1990s, a period during which natural environments and ecological problems have been of great interest throughout the world, the role of population growth has alarmed politicians and scientists (Glenn et al. 1998). Human pressure has intensified enormously during the last fifty years. Population movements lead to a discrepancy between economic carrying capacity and demographic density in both developed and developing regions. The carrying capacity of a region can be considered as the capability of an economy to sustain a certain population (Knerr 1998, Goria 2000). From an ecological point of view, the term carrying capacity denominates the maximum number of persons able to live in a certain region on the basis of the resources necessary for life while maintaining their living standards and their quality of life in the long term (Blaikie & Brookfield 1987). Therefore, the carrying capacity of a region is determined by its available physical capital, as well as the human resources, the technologies used in the region, the institutional arrangements, the cultural aspects, and the possibilities to exchange goods and services with the outside (Goria 2000).

Where population density grows, societies tend to increase carrying capacity too (Cuffaro 2001). If not, people might react by emigration. Such movements could contribute to a permanently unstable situation, implying a threat to the natural environment and to the people living in it (Chopra & Gulati 1997). According to recent findings (Knerr 1998, Goria 2000, Cuffaro 2001, Garcia Latorre et al. 2001, Tanrivermis 2003), demographic change and economic development in coastal areas influence urban growth and sprawl, internal migration, and concentration of population in coastal areas, associated with unsuitable exploitation of natural resources. On the other hand, depopulation and ageing of farmers create crisis condition in traditional marginal rural systems. The consequent land abandonment produces environmental problems especially in steep areas.

Based on this framework, population dynamics for a 140 year period (1871-2011) were analysed in Latium (central Italy) at municipal level through a multivariate exploratory approach. The aim of this analysis is to assess the importance of migration movements along both elevation (mountain areas versus lowlands) and urban-rural gradients (the main city of Latium versus the surrounding countryside). Our hypothesis is that such movements impact coastal areas and lowland agricultural zones more than inland mountain areas determining a spiral provoking further socioeconomic disparities in the coming future.

2. Materials and Methods

This study was performed in Latium, central Italy, a region (17.000 km^2) with pronounced socioeconomic disparities between the highly populated metropolitan area of Rome and the low-density rural countryside. For further details, see Salvati and Zitti (2005). Population density and demographic variation over time were calculated by municipality from data collected over general population and household censuses carried out each decade by the National Institute of Statistics. Population density was expressed as inhabitants per square kilometers, and we also calculated the spatial distribution of population in each examined decade from 1881 to 2011.

Population data were analysed using four elevation belts (lowlands, coastal hilly areas, internal hilly areas, mountain) according to ISTAT (1958). Lowland municipalities are characterised by mean elevation ranging from 0 to 100 metres at sea level (a.s.l.), with maximum elevation lower than 300 m. Coastal uplands feature a mean elevation ranging between 100 m and 600 m a.s.l. and are close to the sea. Inland uplands are characterised by a mean elevation generally ranging between 100 m and 600 m a.s.l. and a distance from the sea higher than 10 km. Mountain municipalities include those with a mean elevation more than 600 m a.s.l.

To obtain a detailed outlook of population dynamics at a defined spatial resolution scale, we carried out a Principal Components Analysis (PCA) on population density data. The number of significant axes was chosen according to the scree-plot. Moreover, a non hierarchical cluster analysis (using k-means computation strategy) was performed on population density changes between 1881 and 2001 and the results were analysed using elevation, closeness to the sea, and a urban-rural dummy as ancillary variables. The results from PCA and cluster analysis are used to produce a spatial evaluation of the examined municipalities in terms of human pressure according to the distribution of population along the elevation gradient.

3. Results

Demographic dynamics were consistent in the investigated area over the whole time period (Table 1). Average population density by municipality increased from 80 inhabitants/km^2 in 1871 to more than 170 inhabitants/km^2 in 2011. Population increased especially during 1881-1951. The maximum population increase (21%) was observed in 1881-1901. Notably, the marked increase observed during 1931-1936, especially in the lowlands, was due to consistent internal migration from northern Italy (e.g. the Veneto region)

driven by Fascism policies concerning land exploitation around Rome. After a slight decrease observed from 1951 to 1971, population increased again, especially because of high fertility rates and consistent internal migration from southern Italy.

Table 1: Demographic variation (difference in population density between subsequent decades) in Latium according to elevation belt (average municipality value by belt)

Year	Lowlands	Coastal hilly areas	Internal hilly areas	Mountain areas	Latium
1871-1881	0.24	0.10	0.08	0.01	0.04
1881-1901	0.55	0.29	0.23	0.11	0.21
1901-1911	0.16	0.10	0.09	0.10	0.10
1911-1921	0.17	0.17	0.06	0.03	0.06
1921-1931	0.32	0.13	0.06	-0.04	0.04
1931-1936	1.78	0.05	0.06	-0.03	0.10
1936-1951	0.68	0.21	0.09	-0.01	0.09
1951-1961	0.38	0.16	-0.04	-0.15	-0.04
1961-1971	0.38	0.12	-0.05	-0.18	-0.06
1971-1981	0.21	0.17	0.07	-0.07	0.04
1981-1991	0.14	0.16	0.07	-0.01	0.06
1991-2001	0.09	0.08	0.04	-0.02	0.03
2001-2011	0.07	0.05	0.01	-0.02	0.01
Mean	0.42	0.14	0.06	-0.02	0.05

Source: Our elaborations on Italian Statistical Office Census data

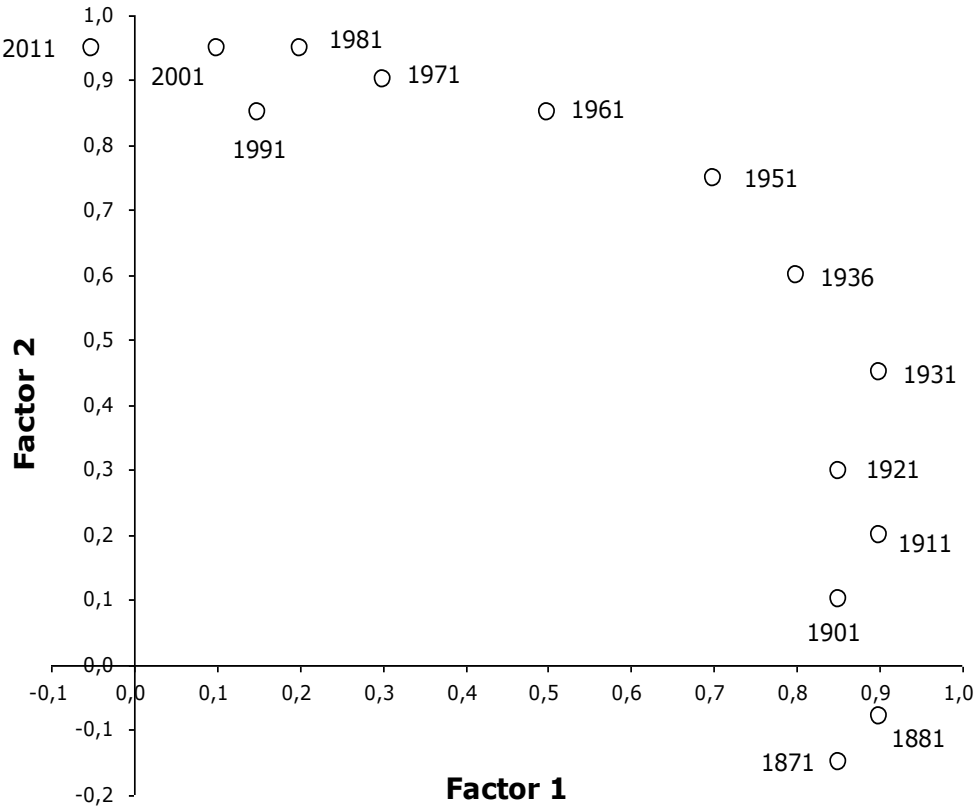
Population increase was observed throughout the period in both lowlands (+42%) and uplands close to the sea (+14%). To the contrary, a marked decrease was observed, especially during recent years, in both internal uplands and mountain zones (with a mean decrease averaging 2% during the examined period), suggesting that consistent population movements exist till nowadays along the elevation gradient.

Preliminary analysis on population density matrix suggests that a multivariate factor analysis is appropriate for this data-set. Both the Kaiser-Meyer-Olkin measure of sampling adequacy, which tests whether the partial correlations among variables are small (0.85), and Bartlett's test of sphericity, which tests whether the correlation matrix is an identity matrix ($\chi 2 = 2344$, df = 66, $p < 0.0001$), indicate that the model is appropriate to analyse these data. The PCA carried out on the available data-set extracted the first two axes which explain 97% of the total variance. The first and second axes accounted respectively for 76% and 21% of the total variance.

The plot of factor loadings on the first two axes (Figure 1) indicated a temporal path running from the late 19th century (positively associated with the first axis and negatively with the second) to the late 20th century (positively associated with the second axis and negatively with the first). Factor loadings on the first two axes illustrate the population increase during the examined period. Based on the inspection of factor loadings and scores,

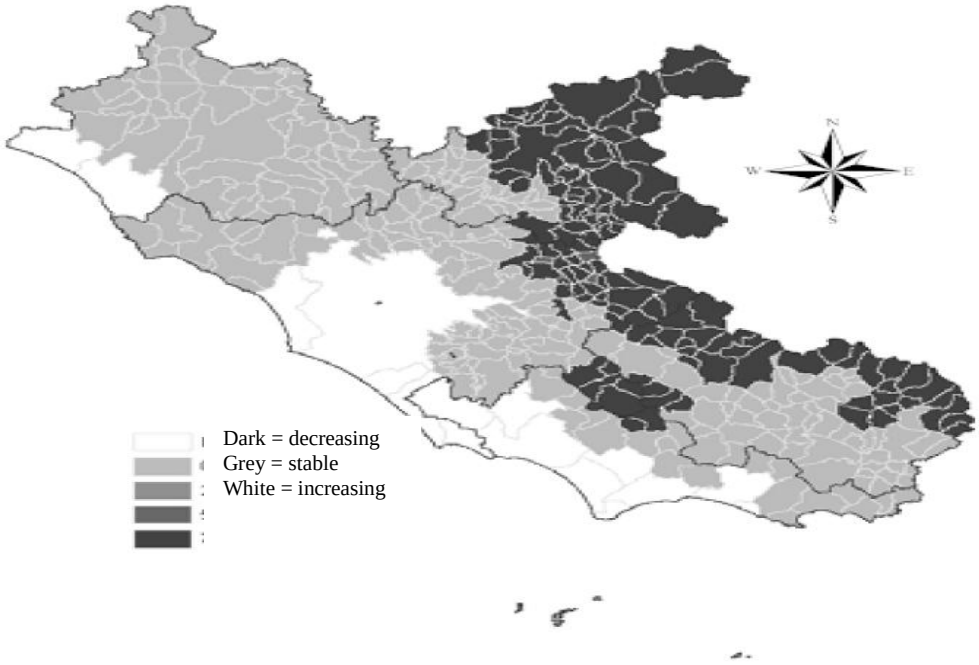
the first axis was regarded as the urban-rural gradient, whereas the second axis may account for population movements along the elevation gradient running from lowlands to internal mountain zones.

Figure 1: Factor loading plot of population density in Latium from 1871 to 2011



K-means cluster analysis classified the municipalities of Latium into three homogeneous groups, characterised by different demographic dynamics over time (Figure 2). The first group (labelled as "increasing" municipalities) includes all coastal municipalities close to Rome, featuring high population pressure, urban sprawl, and a consistent demographic increase in recent decades (1971-2001). The second group (labelled as "stable") includes municipalities placed in both internal lowland zones and rural uplands with intermediate population density, demographic increase during 1871-1951, and a more stable pattern during 1951-2011, moderate urban expansion, and agriculture intensification. The third group includes low-density mountain municipalities in the Apennines featuring a demographic increase during 1881-1921 and a subsequent decrease since 1931.

Figure 2: Map of Latium municipalities clustered according to the dominant demographic dynamics along the investigated time period



4. Discussion and Conclusions

Population movements which take place in reaction to increasing human impact on a given resource basis might contribute to a permanently unstable demographic situation determining a threat to the physical, natural, and economic capitals and to the people living in it (Garcia Latorre et al. 2001). The outcome of the interactions depends on the social, political, and economic framework which is set on the international, national, and local level (Goria 2000). Migration movements which take place in reaction to increasing discrepancies between carrying capacity and population density support the way to an equilibrium between both of them (Knerr 1998). It is essential for policy to gain deeper insights into the causes and consequences of migratory movements and about their relationship with increasing or decreasing capital stock in both physical and economic terms. As these reactions impact on the social, political, economic, and ecological conditions, their implications must be predicted in order to shape policy measures against undesired consequences, as far as this is possible (Herrmann & Hutchinson 2005).

To join in the effort to bring ecological and demographic development on a path towards a socially accepted equilibrium is also the most important element in the policy strategy to mitigate environmental degradation in the Mediterranean basin (Glenn et al. 1998). As a matter of fact, the growth of population density in coastal municipalities, coupled with seasonal tourism concentration and intensification of agriculture, leads to high seasonal water

use, land consumption, fire risks, and soil salinisation, triggering processes of degradation of both physical and natural capitals.

In Latium, the population grew throughout the whole study period and consistent migration movements occurred between inland rural areas and coastal municipalities (Salvati & Zitti 2005). Multivariate analysis confirms that population movements were based on both urban-rural gradient and elevation gradient. Population decreased in both the rural countryside as well as in internal mountain areas, taken as marginal zones from the economic point of view.

The abandonment of agricultural lands can be seen as the consequence of unbalanced population dynamics between internal and coastal areas which had been brought by man to an unstable equilibrium (Tanrivermis 2003). Land abandonment started during the 1950s because of industrialisation, increased costs of cultivation, decreases in profits, and changes in trade regulation between countries (Salvati and Zitti 2005). On the other hand, population increase along coastal areas triggered urban expansion into productive lands, which has reached high rates in recent years (Brouwer et al. 1991). Loss of agricultural land, degradation of high-quality soils, increase of fire risk, loss of semi-natural vegetation, as well as salinisation of groundwater are documented in Latium with a marked relationship between urbanisation and densification phenomena (Salvati and Zitti 2005).

An integrated evaluation of ecological, demographic, economic, and social aspects of land configuration should be carried out using a multi-temporal approach by taking into account the structural changes which have occurred during the last century in southern European regions. Using effective indicators, multivariate approaches like those applied in this study may reveal the spatial and temporal direction of population disparities and may delineate the contribution of different factors impacting physical and economic capitals.

5. References

Blaikie, P. & Brookfield, H.C.: *Land degradation and society*. Methuen, London, (1987).

Brouwer, F.B., Thomas, A.J. & Chadwick, M. J. eds.: Land use changes in Europe. *Processes of change, environmental transformations and future patterns*. Kluwer Academic Publishers, Dordrecht, The Netherlands, (1991).

Chopra, K. & Gulati, S.C.: Environmental degradation and population movements: the role of property rights. *Env. Res. Econ*. 9: 383-408, (1997).

Cuffaro, N.: Population, economic growth and agriculture in less developed countries. *Routledge*, New York, USA, (2001).

Garcia, Latorre J., Garcia-Latorre, J. & Sanchez-Picon, A.: Dealing with aridity: socio-economic structures and environmental changes in an arid Mediterranean region. *Land Use Policy* 18: 53-64, (2001).

Glenn, E., Stafford, Smith, M. & Squires, V.: On our failure to control desertification:

implications for global change issues, and research agenda for the future. *Env. Science Policy* 1: 71-78, (1998).

Goria, A. 2000: Desertification and migration in the Mediterranean: an analytical framework, pp. 207–223 – In: Enne G. & Zucca C.. Desertification indicators for the European Mediterranean region. State of the art and possible methodological approaches. Agenzia Nazionale per la Protezione dell'Ambiente, Rome, Italy, (2000).

Herrmann, S.M. & Hutchinson, C.F.: The changing contexts of the desertification debate. J. Arid Env. 63: 538-555, (2005).

ISTAT: Circoscrizioni statistiche. Metodi e Norme, Serie C(1), Rome, Italy, (1958).

Knerr, B.: Impact of labour migration on the sustainability of agricultural development in arid regions. In: Clarke J. & Noin D. eds. Population and environment in arid regions (Man and Biosphere Series 19). UNESCO, New York, (1998).

Pender, J.L.: Population growth, agricultural intensification, induced innovation and natural resource sustainability: an application of neoclassical growth theory. Agricultural Economics 19: 99-112, (1998).

Salvati, L. and Zitti M.: Land degradation in the Mediterranean basin: linking bio physical and economic factors into an ecological perspective. *Biota – Journal of Ecology and Biology* 5: 67-77, (2005).

Steer, A. 1998: Making development sustainable. Adv. Geo-Ecol. 31: 857-865.

Tanrivermis, H.: Agricultural land use change and sustainable use of land resources in the Mediterranean region of Turkey. *J. Arid Env*. 54: 553-564, (2003).

Strategic Design Information Systems for Increasing Competitiveness of Small Mexican Business: Vision Based on the Theory of the Firm and Resources

Abstract
In Mexico, the use and implementation of strategies related to information systems have not been consistently addressed a claim that can be applied to small, medium and even large companies. However, these firms and multinational companies also have achieved competitive advantage by their heavy investment in business intelligence systems. This study aims to inform the SME business sector resources that can be used as a basis for the development and creation of strategies to increase their competitiveness. The high costs of implementing such systems can lessen with the use of existing information technologies. This paper will present the alternatives that small and medium producers can use to break into the culture of decision making based on information resources as well as inputs for the development of capacities for the development of strategies.

Keywords: Capacities, competitiveness, resource information system, value, competitive advantage, strategy.

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1. Introduction

In Mexico, According to the National Survey of Employment, Wages and Training in the Trade Sector (Encuesta Nacional de Empleo, Salarios y Capacitación en el Sector Comercio), (ENESCOM, 2005), about 95% of establishments engaged in trade did not have systems for planning and decision making, or simply did not know them. 91% of business has no system to identify or create a customer portfolio and base and 88% do not have systems to identify their suppliers. This reflects one of the main issues which characterize most Mexican companies "sail on a sea of uncertainty" added to the market imperfections (monopoly or oligopoly), the incorporation of global markets and the inefficiency of Mexican institutions and others factors in which it was not enriched, as it will focus on the point of the lack of culture of information in decision-making by the companies.

Good management of this resource could provide companies sustainable competitive advantage to meet the dynamic market changes. In this vein it can be formulated the following question What effects would be achieved in terms of competitiveness for SMEs if they seize and exploit low cost alternative information resources making them inexpensive business intelligence systems? It is noteworthy that these resources are from public sources and have had a strong but insufficient diffusion in academic and business sectors. So while the development of an entrepreneurial culture on the use of such intangible resources could provide further impetus to the development of entrepreneurial skills in addition to promoting competitiveness.

Importantly, the application and usefulness of this resource will be linked to economic activity and the enterprise carries to give treatment that achieves to create value, in other words, the development of strategies for competitive advantage depends on the skills and capabilities firms have to use.

2. Theoretical background and literature review

Mexico has been influenced by the changes caused trade liberalization and integration of global markets implicitly bringing advances in science and technology, which changes the environment in which companies operate in the production structure of our country. This means that each of these production units has to analyze in detail its position in the market, and in particular the obligation to take advantage of the large body of information technologies to realize it. According to Torres (2000) strategy formulation leads companies to thoroughly review its environment and its competitive scheme so they can define a competitive strategy.

Nelson and Winter (1982) consider the promise and the problems that bring the evolution of the economic changes generated by globalization. They argue that economic analysis with the use of resources of a company engaged in the business strengthens its decision making, but more importantly highlights that companies should focus on a better understanding of technological change and the dynamics of competitive process.

In this context, the SME and overall Mexican company must constantly analyze their marketing and organizational plans to address these changes resulting from globalization. For most of the SMEs, globalization means a constant threat. However, there are companies with their capabilities, features and trade liberalization has meant making profits because they can export their products or import profitable products as the technology for commercialization. Unfortunately, most companies intend production to the domestic market of the country which makes it a threat.

Foreign direct investment and the entry of products have represented the extinction of many companies to take over the majority of the market. This reflects that growth and sustainability in the market is the major challenge faced by companies in this millennium. According to (Peng, 2006) the strategies that a company should propose, should be based primarily on a combination of planned and deliberate action on those activities that are not emerging, but the basic premise is to design strategies that SMEs can know themselves and know their opponents with an assessment of their forces (F) and weaknesses (D), as well as the opportunities (O) and threats (a) in the environment around them.

Be knowledgeable, capacity development, the use of equity by companies and government support represent some of the alternatives to address this challenge. Strategies to perform must consider social, political and governance factors. It is noteworthy that the regulation for market concentration by Mexican institutions has been poor, their lack of ethics and a high level of corruption in their structures has allowed national and multinational companies exploit these flaws as competitive advantages generating unfair practices. A recent example is the case WALMART occurred in April this year.

In this vein, to analyze the environment should lead to a result that defines what are the strengths and weaknesses of the company in relation to its current and future competitors, to make these sources of dynamic competitive advantage. Companies are different among them; their behavior is described in the theories of the firm on how to compete (Peng, 2006). There are three leading perspectives in which companies have to build and develop strategies to achieve competitive advantage known as the tripod strategy. The first is a vision based on

the industry where it is suggested that a company should review first the forces driving competition in the sectors of economic activity with which it interacts.

Companies face competitors and prevail in a rivalry with them. These potential competitors are considered as a threat for its possible entry into the sector, displayed bargaining power of suppliers, the bargaining power of customers and the constant threat of the entry of substitute products (Porter, 1985). The second view is focused on the resources and capabilities of a company. The binding constraint on the rate of growth of a company is provided by the current management capabilities (Penrose, 1959).

It is therefore important to note that companies should have the ability to identify competitive forces and generic strategies through a model that highlights specific business activities in which they can better implement competitive strategies. If a small producer in the food sector develops its skills could add value to their product but with more emphasis on marketing activities using information on marketing and commercialization that could identify its clients in a certain area and more. Surely an information system for the producer will have a strategic impact.

The value chain considers a company as a series of activities where each margin adds special value to the products or services of a company (Porter, 1985). The skills and abilities of the entrepreneur or business managers are a key part of the strategic design to provide them with sustainable competitive advantages, but there are different capabilities in all human beings that can limit maximum utilization of resources bounded rationality (Simon, 1947).

The present information is an essential element for survival in a competitive environment. Its evolution has been in recent years "explosive" under the technological revolution that has become an affordable, everyday and indispensable tool because without it the permanence of a company in the market would be virtually impossible. According to Laundon (2008) an information system is a tool with which a company can process information and can be defined as a set of interrelated components that capture, process, store and distribute information to support decision-making and control an organization.

Firms need to emphasize work with intangible assets such as a particular technology, the intellectual and information resources. The latter are often invisible in a company and can be a real source of unique competitive advantage that can be sustained with time as set by Itami and Roehl (1987)

3. Research methods

To support the above assumptions it was used and analytical and exploratory method as well as the fieldwork. According to the data observed in the ENESCOM (2005), a random

search was conducted in the National Directory of Economic Units (Directorio Nacional de Unidades Económicas, DENUE) in the municipality of Zapopan in order to find a small or medium enterprise (SME). The high probability of finding a company with the required characteristics facilitated finding the candidate: PNEUMAX as the company selected for the experiment; lacks an information system that allows you to develop strategies to position themselves in the market. It was proposed to address the implementation of an information system.

To achieve this, it was examined and determined which the possessed information needs were and the proposal was based on the value added, that when using a geographic information system (GIS) as a tool for commercialization and generating marketing strategies in order to improve decision-making and achieve efficient resource management and reduce uncertainty that the company had on market characteristics. The implementation of this system required the organization and systematization of statistical and geographical data available.

Structured information in the proposed geographic information system (GIS), allowing administer, manage, analyze and model situations present in the geographical areas where there are launched the company strategies, which potentiates its use as a support tool in planning activities and decision making.

The resources used to implement the system are the following:

• IRIS GIS Software 4.2, Google Earth or Arc Map 10.

• Digital geographic products: Digital urban maps, business directory geo-referenced DENUE 2011, national geo-statistical frameworks with a projection and a datum CCL ITRF92 reference. The cost was representative only, the following table shows:

Proposal	
Urban mapping work zone	0
Google earth	0
Business directory 2012	1,667
Training	12,000
Total	**13,667**

Source: Own elaboration

4. Case: Distribuidora PNEUMAX of México

PNEUMAX is a marketer and distributor of pneumatic equipment: cylinders, valves, solenoid valves, hoses, pistons, drivers, etc. It also offers specialized services automation machinery. Currently the firm has two places in the country: the matrix, located in the city of Guadalajara and one in the State of Mexico.

This case study presents the results obtained by the company PNEUMAX of Mexico to implement a geographic information system that allowed it to develop properly and timely marketing strategy to position its product portfolio in the market. Also the system implemented by PNEUMAX was aimed to expand its market in other regions and gain greater market share.

- Location: Volcano Popocatepetl 1844 Colony The Urban Colli, Zapopan, Jalisco. C.P. 45070. Phone: 36 20 35 99.
- Activity: Wholesale of other machinery and equipment for general use, 435,419.
- Economic unit size: 15 employees.
- Mission: To be a leader in the domestic market of pneumatic elements offering customers products and services that meet their needs in price, quality and service.
- Vision: The Company has a very important purpose, the continually expanding in order to be the best company of pneumatic equipment, with criteria of competitiveness, quality products and services.

The recommendations to the company PNEUMAX are based on the following assumptions:

• To identify the information needs of the company.

• A training program for sales management, on management of GIS.

•Consult and acquiring banks geo-referenced information requirements (business directory).

• Lower network GIS software Google Earth.

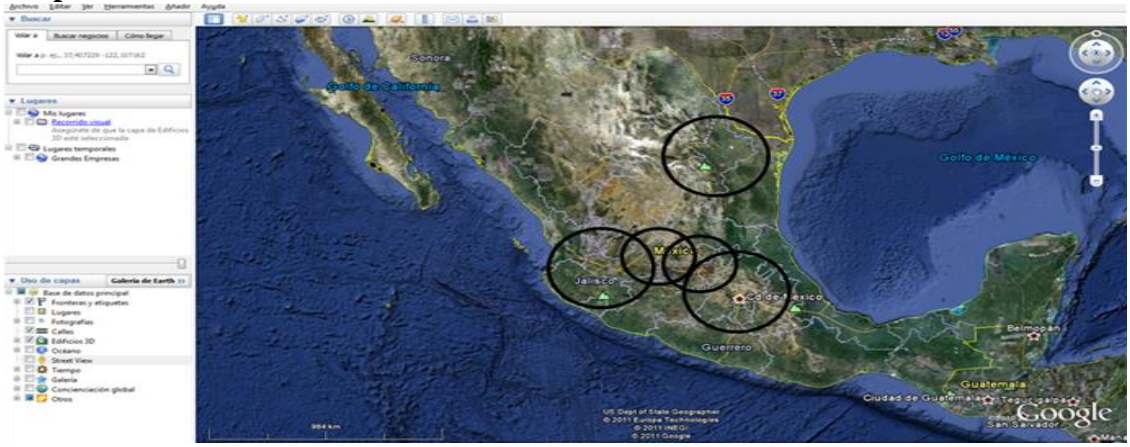
• Hardware for processing and output of information according to business needs: computer and printer.

The recommendation is centered on the implementation of a geographic information system (GIS) as it seeks to strengthen the marketing strategies for PNEUMAX more productive and therefore more competitive in the market.

5. Marketing Plan

For the definition of the working area began by identifying the geographic coverage in order to define the areas of sales, as shown in the map 1 below.

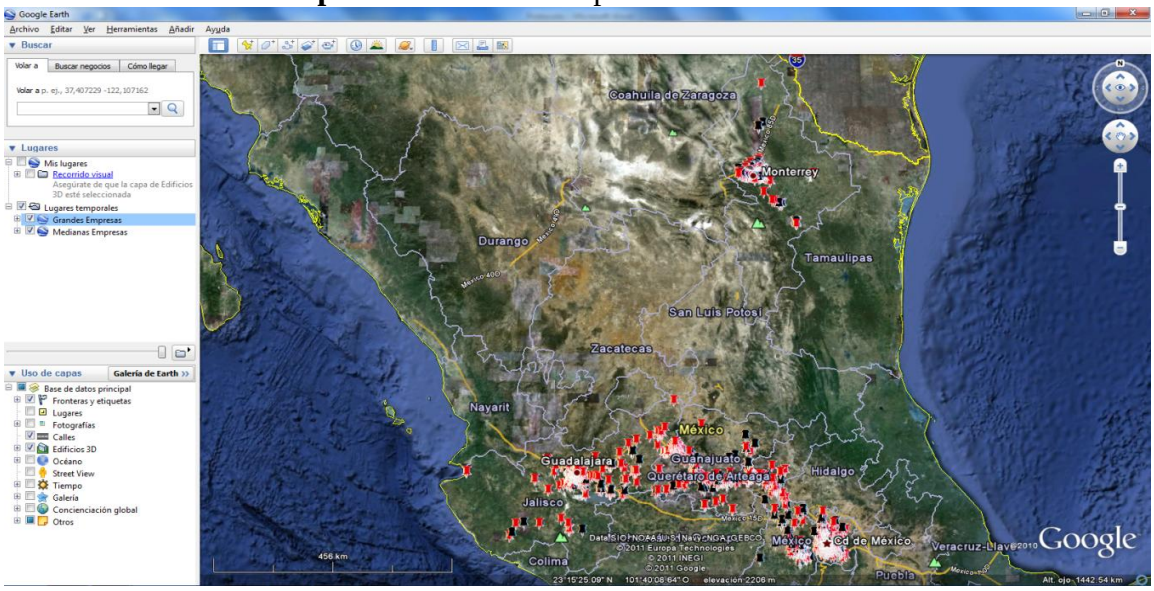
Map 1: PNEUMAX. Area Sales in the North, North Central, South Central and West regions



Source: Google Earth.

Geo-referencing the establishments' directory by mapping to determine the distribution and concentration of more than 3035 companies in each State selected. This allows, from a spatial perspective, to observe the composition of the market and to determine the areas of sales, to establish clusters and get the database to develop the marketing plan. The map 2 below shows the geographical distribution in the space market.

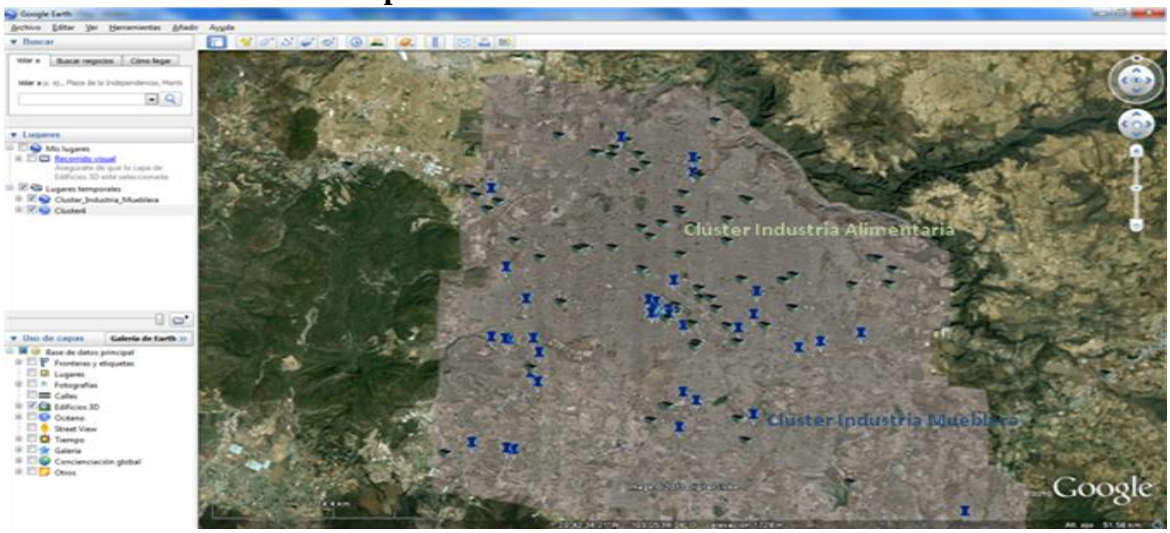
Map 2: NPNEUMAX. Spatial distribution of clients



Sources: Google Earth and own elaboration with information data from INEGI

The black dots represent large corporations and the red dots the medium-sized business. Once known the geographic distribution on the map, it begins to generate the cluster according to the activities and occupation. PNEUMAX handles profiles of services and products according to the characteristics of firms, depending on their activities and spin. This classification allows the firm to determine the needed profiles to be able to offer their products and services packages. So, the next step is to classify firms by size, but especially for their activities. The following map3 is an example.

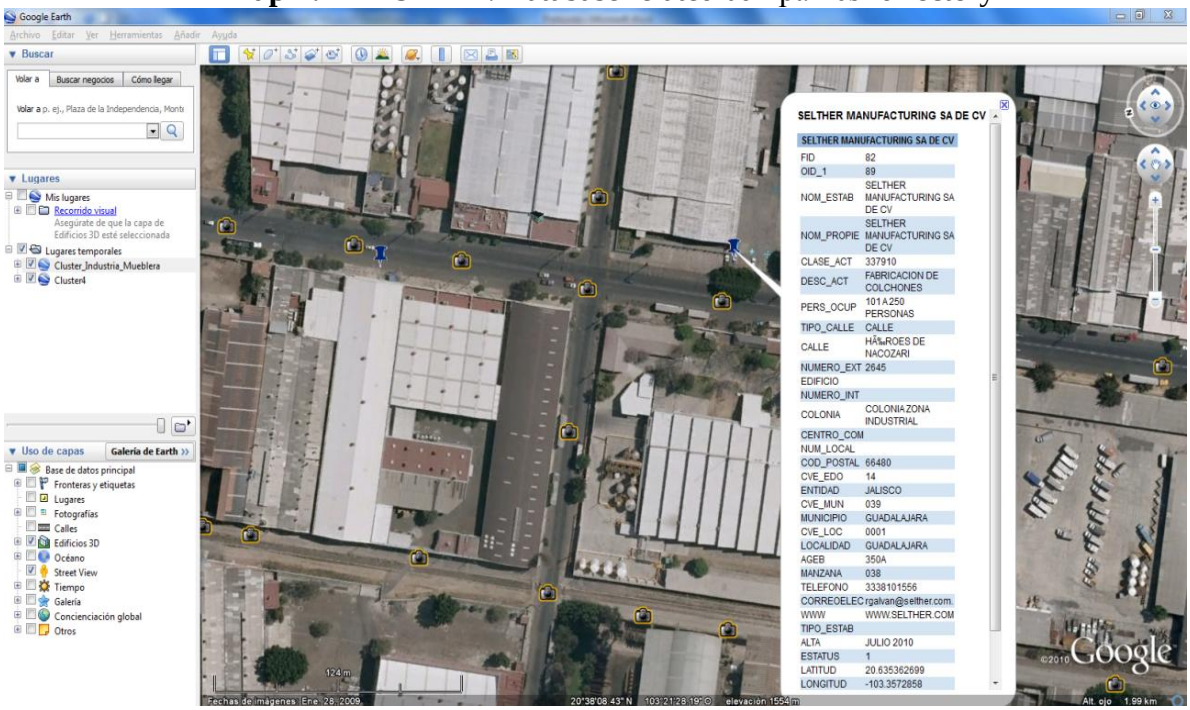
Map 3:PNEUMAX. Allocation of cluster



Source: Own elaboration with data information from INEGI.

This procedure used spatial analysis tools of GIS support called ARC MAP, in order to structure and define the cluster. Note that this system will be good enough to convert formats .shape to formats .kml, extensions that the system recognizes in Google Earth interface.

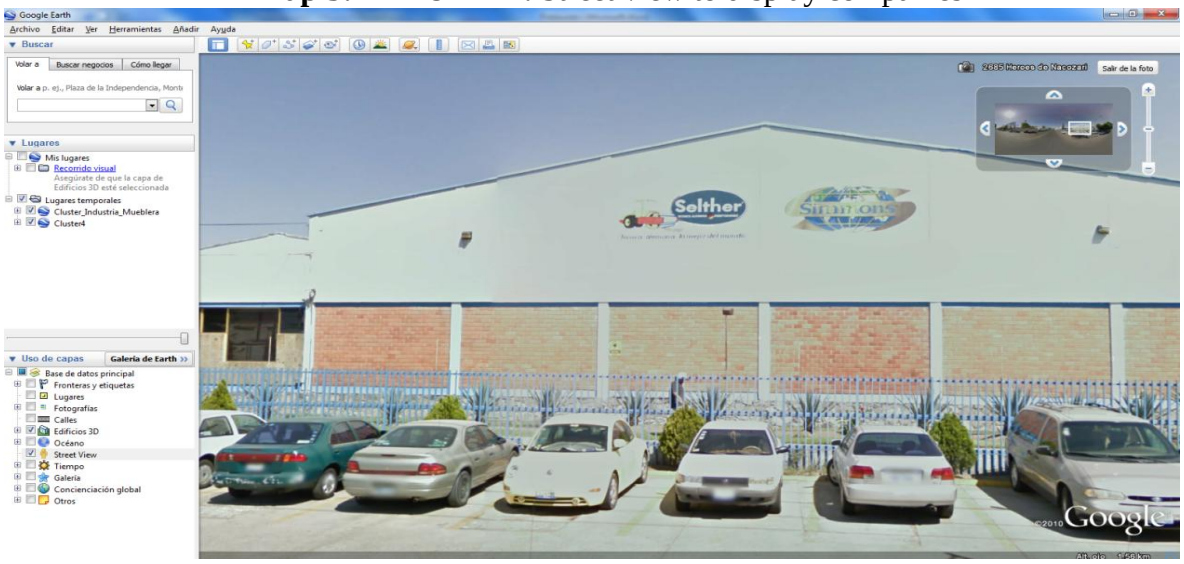
Map 4: PNEUMAX. Database related companies' directory



Source: Based on information from INEGI.

The system also features three-dimensional pictures of the streets of the cities of the country, giving them a concrete picture of companies to visit (See map 5).

Map 5: NPEUMAX. Street view to display companies



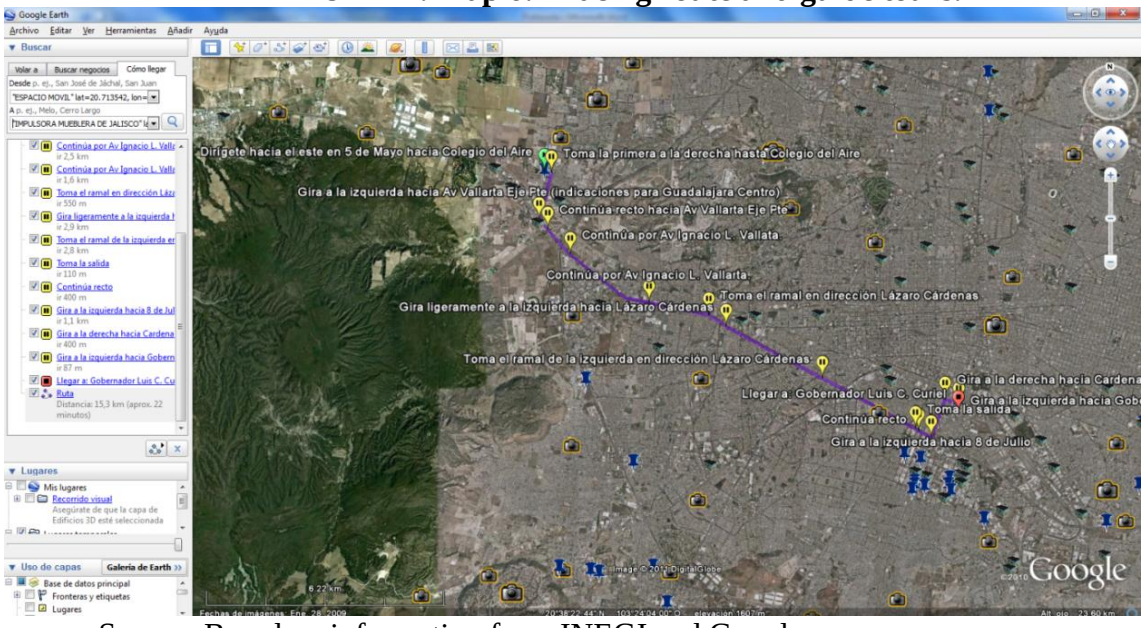
Source: Based on information from INEGI and Google.

As seen in the maps above, the determination of cluster or clusters was based especially in the activities of the company. For example, it can be seen the concentration in the city of Guadalajara of companies engaged in furniture category with a blue pin and those involved in the food industry with a pin in the form of a factory.

The specificity of this information has more added value, as each geographical object representing a firm on a map is associated directly with a database that identifies and determines specific characteristics of each of the companies, such as its name and social registered name, address, email address and the name of its legal representative.

Another important thing to mention is that the company can trace routes and visit sequences and determine which direction to take to get from one point to another.

PNEUMAX. Map 6: Tracing route and guide tours.



Source: Based on information from INEGI and Google.

Based on this information, management takes appropriate decisions to determine which vendors will cover the new market. Moreover, according to this analysis of the information obtained, it may be a need to hire new vendors that meet and attend the new outlets and sales points.

Now PNEUMAX geo-referenced has a directory that allows it to implement effective marketing strategies which can steer the company to achieve its objectives and to boost productivity and become a competitive company in the field of its product distribution

6. Results and Conclusions

The results are reflected primarily in the planning and organization functions: setting goals and the appropriate course of action to achieve them. By implementing a geographic information system, it has helped to define strategies to positioning in the market portfolio of products offered, the design of a strategic plan for marketing based on a detailed analysis of the composition of potential customers in the metropolitan area of Guadalajara, Monterrey, Mexico City, Queretaro and Guanajuato.

The creation and implementation of an efficient logistics aims to set the procedure for promotion, sale and distribution of products. Moreover, the geographic information system allowed the organization to define the direction of human resources effectively, to implement strategies designed in order to achieve the goals: customer acquisition and increased volume of daily sales.

The information system allowed the company to have a control to ensure that activities conform to planned activities by management.

In short a good implementation of an information system can provide:

- Increased accuracy and effectiveness in the strategies developed.
- Reduced risks and uncertainty in decision making.
- Physical assessment of the current market.
- Physical assessment of the potential market.
- Placing a product in a chosen segment.
- Optimization vendors, outlets and sales routes.
- Exploration of new markets.

Now regarding the implementation costs are reduced significantly, the use of public information packets and software can be reduced from 70% to 90%.

PNEUMAX SA de CV	**Price(pesos)**
Commercial proposal	
Urban mapping work zone	50,000
Arc Map 10	38,626
Directory of firms 2010	1,700
Training on ARC MAP by persons	12,180
Total	**102,506**
Alternative proposal	
Urban mapping work zone	0
Google earth	0
Directory of business 2012	1,667
Training	12,000
Total	**13,667**

Sources: ESRI, INEGI

Now it can be assumed that the high costs of implementation and access to information can be more limiting for companies who cannot have information systems. However it is observed that with affordable substitute products, costs can be used by companies as a strong business intelligence tools.

The importance of being able to develop a culture of information use and management, use of information technologies and systems focused on the business of small and medium entrepreneurs will have a direct impact on the competitiveness of SMEs

Increased government intervention mechanisms developed by institutions such as INEGI, Secretary for Economic Development, Chambers of Commerce and industry among others would be essential for the specialization of SMEs in development strategies.

7. References

Itami, H. A. (1987). *Mobilizing Invisible Assets*. Cambridge, Mass.: Harvard University Press.

Laundon, K. C. (2008). *Sistemas de información gerencial administración de la empresa digital*. Naucalpan, Edo de México: Pearson.

Nelson, R. R. and Winter (1982). *An Evolutionary Theory of Economic Change*. Cambridge, Mass.: Harvard University Press.

Peng, M. W. (2010). *Estrategia Global*. México, DF: CENAGE Learning.

Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. New York: John Wiley & Sons.

Porter, M. (1985). *Competitive Advantage: Creating and sustaining superior performance.* New York: A. Division of Simon and Shuster Inc.

Simon, H. A. (1947). *Administrative Behavior*. New York, NY.: Macmillan.

ENESCOM (2005). ENESCOM. En S. d. Social, Encuesta Nacional de empleo, salarios y capacitación en el sector comercio.

Torres, H. A. (2000). Mercado y Agronegocios: Situación y perspectivas del gerenciamiento de las agroempresas. *Revista Mexicana de Agronegocios* , 44-58.

Analytical study of the perspectives for implementation of ERP

Abstract:

Enterprise Resource Planning is a process for accounting-oriented computer information system that assists enterprises to define and plan on the resources required during the operation process of purchase, production, distribution, and strategic planning to satisfy customers' orders. Basically, it evolved from MRP-II which further was developed from MRP. In this survey based research work, an effort has been made to study the outlook of ERP implementation that is, factors contributing to ERP implementation, role of higher officials and successfulness of the project. The integration among business functions facilitates communication and information sharing, leading to dramatic gains in productivity and speed. Cisco Systems, for example, harnessed ERP to help it become the market leader in the global networking industry. Cisco's ERP system was the backbone that enabled its new business model Global Networked Business based on the use of electronic communications to build interactive, knowledge-based relationships with its customers, business partners, suppliers and employees. In the process, Cisco doubled in size each year and reaped hundreds of millions of dollars in both cost savings and revenue enhancements. Autodesk, a computer-aided design software company, reported a decrease in its order fulfillment times from two weeks to 24 hours after installing an ERP system. For this purpose a questionnaire has been prepared and forwarded to industries for their response. To accomplish this at this level, manufacturing industries are selected in India. For those industries it is proposed to carry out analysis from the collected data as such analysis has not been yet attempted.

Keywords: ERP, ERP implementation, manufacturing industries.

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1. Introduction

APICS (American Production and Inventory Control Society) **[11]** defines ERP (Enterprise resources Planning) as an accounting-oriented computer information system that assists enterprises to define and plan on the resources required during the operation process of purchase, production, distribution, and strategic planning to satisfy customer's orders. It also effectively integrates and manages these resources so as to enhance overall performance and reduce costs.

ERP covers a wide range of fields, for example, purchase and sale management in distribution; production management, MRP (Material Requirements Planning), quality control, management of products in process, cost management, and project design change management, which represents a complete manufacturing process including research and development, production, product management, and total quality control. In addition, ERP also involves accounting, human resource, and decision-making resource management. The ultimate goal of ERP is to improve enterprise's operating cycle of planning, implementing, auditing, and improving, and to strengthen corporate internal control and auditing capabilities **[11]**.

Enterprise resource planning or ERP consists of three word—enterprise, resource and planning. Among the three the last two words are insignificant compared to the first. Yes ERP packages do help in planning and also in managing the resources. There are many other software solutions that does the same thing—planning and resource management. It is the enterprise part that is important. ERP's true power and potential comes from the movement from traditional business model to the enterprise business model. ERP packages attempt to integrate all departments and functions across a company onto a single computer system that can serve all those different department's particular needs. This kind of integration is a very difficult task. Building a single software program that serves the needs of people in finance as well as it does the people in human resources and in the warehouse. Each of those departments typically has its own computer system optimized for the particular ways that the department does its work. But ERP combines them all together into a single, integrated software program that runs off a single database so that the various departments can more easily share information and communicate with each other. That integrated approach can have a tremendous payback if companies install the software correctly.

Take a customer order, for example. Typically, when a customer places an order, that order begins a mostly paper-based journey from one in-tray to another in-tray around the company, often being keyed and re-keyed into different department's computer systems

along the way. All that lounging around in in-trays causes delays and lost orders, and all the keying into different computer systems invites errors. Meanwhile, no one in the company truly knows what the status of the order is at any given point because there is no way for the finance department, to get into the warehouse's computer system to see whether the item has been shipped on, will have to call the warehouse and ask them to check the status of the shipment. This can be a quite tedious and frustrating experience.

An ERP system streamlines business processes by creating an enterprise-wide transaction structure that integrates the key functions of different departments within an integrated information system platform. Through the integration of these diverse systems, organizations can gain a competitive advantage in the rapidly changing digital age ERP is therefore a key part of the information infrastructure of modern businesses. Recent research has shown that ERP projects have grown to become the largest information system project investment in companies worldwide. Furthermore, this trend is expected to continue for years to come **[19, 55]**.

However, if ERP projects are not implemented properly, the results can be disastrous, since the rate at which ERP projects fail is surprisingly high, with serious consequences including failure to fulfill anticipated functions and cost/schedule overruns **[7,8]**. Many companies have seen no alternative but to terminate their ERP projects during the implementation phase once their resources have become depleted because of mismanagement. For instance, Dell Incorporated abandoned its ERP project after committing two-years and expending US$200 million. Waste Management Incorporated aborted its ERP implementation after spending $45 million of an estimated $250 million budget **[3]**. Failed ERP projects have even led to problems as serious as bankruptcy **[13]**. So an active implementation of ERP is required to avoid above disastrous.

Active management of ERP implementation refers to the management's ability to react to the changing environment in the long implementation process, and take appropriate action to manage the inherent risks. Several streams of study have proposed foundational theories on ERP implementation. One such stream focuses on the interaction between ERP and organizations **[44, 45]** and makes the observation that ERP implementation is closely intertwined with complex organizational factors. Take organization's culture for example, organizational culture affects an organization's shared beliefs, ideologies, and norms that influence organizational behavior **[37, 46]**, and therefore plays a critical part in ERP implementing. Besides, ERP requires high computer self-efficacy among employees because organizational changes resulted by the ERP implementation require a large-scale use of

computers **[47]**, which presents different learning process for different types of organizations. Therefore, different types of organization's experience different organizational fitting process **[31]**, which makes implementation of ERP, face both technical and social uncertainties that cannot be predefined in full, and must, of necessity, be actively managed. Another stream concentrates on risk factors in ERP implementation. Such studies point out explicit key risk factors, such as process fit and user fit, which contribute to the failure of ERP implementation if left unchecked. Other studies investigate risk factors in different ERP implementation phases and note that by actively managing problems that evolve over time so that better ERP implementation can be achieved.

Various studies focused the attention to "change management" where ERP implementation will involve changes to business processes **[20, 25, 27]** as they strongly support change management , supply chain management **[14]**, and organizational performance improvement .

According **[9]**, organizations decide to implement ERP's for different reasons:

(i) The need to improve the performance of current operations,

(ii) The need to integrate data and systems

(iii) The need to prevent a competitive disadvantage or a business risk from becoming critical.

2. Literature Review

1. Amin Hakim & Hamid Hakim's [1] study reveals that the various factors of implementation of ERP in number of companies that leads to successful implementation of ERP. Also their study reveals the decision-making process for ERP implementation from three perspectives; strategic, tactical and executive are examined.

2. Al-Mudimigh et al. [2] suggested that ERP implementation is a socio-technical challenge that requires a fundamentally different outlook from technologically-driven innovation, and will depend on a balanced perspective where the organization as a total system is considered. ERP implementation is considered to rely on behavioral processes and actions .ERP implementation is a process that involves macro-implementation at the strategic level, and micro-implementation at the operational level.

3. Alessandro Spano and Benedetta Bello [4] article reports the results of a research aimed at investigating the impact of an ERP system on organizational processes and individual employees in a public sector organization (Italian Regional Council).

4. Ada wong, Harry scarbrough, Patrick Y.K. Chau, Robert Davison[5] study firstly examines the current literature concerning ERP implementation problems during

implementation phases and causes of ERP implementation failure. A multiple case study research methodology was adopted to understand "why" and "how" these ERP systems could not be implemented successfully.

5. **Adel M. Aladwani [6]** describe an integrated, process oriented approach for facing the complex social problem of workers' resistance to ERP.

6. **Claire Berchet, Georges Habchi's [10],** study suggests ERP implementation using five-stage model: selection of the vendor and software, deployment and integration, stabilization, progression, and evolution.

7. **Chan-Hsing Lo, Chih-Hung Tsai, and Rong-Kwei Li [11]** study aims to help enterprises successfully implement ERP system by proposing strategies and tactics to tackle the common problems encountered in implementing ERP system.

8. **Chuck C.H. Law et. al. [12]** examined the relationship between the success of ERP system adoption, extent of business process improvement (BPI) and organizational performance and investigated the associations between the outcomes of these initiatives.

9. **E.W.T. Ngai et. al. 2008 [15]** identified a comprehensive set of CSF's of ERP implementation like business plan, project champion role, software/system development , ERP team work, ERP strategy and ERP methodology, ERP vendor, national culture, evaluation of performance.

10. **Eric T.G. Wang, Sheng-Pao Shih, James J. Jiang, Gary Klein [16]** study explores the interaction patterns among the ERP implementation success factors from a co variation (co-alignment) perspective.

11. **Elisabeth J. Umble, Ronald R. Haft, M. Michael Umble [17]** article identifies success factors, software selection steps, and implementation procedures critical to a successful implementation.

12. **Gargeya and Brady [18]** article identifies the ability to implement ERP with minimal customization requires assistance from several other factors, primarily streamlining operations and re-engineering the business - both of which will help the organization to run in a more straightforward manner.

13. **Hsiu Ju Rebecca Yena, Chwen Sheu [21]** this study investigates the relationship between ERP implementation practices and a firm's competitive strategy.

14. **Huigang Liang et. al. [22]** develops and test a theoretical model to investigate the assimilation of enterprise systems in the post-implementation stage within organizations.

15. Jose Esteves and Joan Pastor [24] seek to analyze the relevance of critical success factors along ERP implementation phases. The ERP implementation methodology is used as the ERP implementation reference model.

16. Jaideep Motwani, Dinesh Mirchandani et. Al.[26] This research examines what factors facilitate or inhibit the success of ERP projects and what actions can be taken to bring troubled ERP projects under control.

17. Liang-Chuan Wu, Chorng-Shyong Ong, Yao-Wen Hsu [30] , objective of this paper is to propose an active ERP implementation management perspective to manage ERP risks based on the Real Options (RO) theory, which addresses uncertainties over time, resolves uncertainties in changing environments that cannot be predefined.

18. Mary C. Jones, Melinda Cline, Sherry Ryan [34] examines eight dimensions of culture and their impact on how ERP implementation teams are able to effectively share knowledge across diverse functions and perspectives during ERP implementation.

19. Pramod Kumar et. al. [38] suggested that ERP solutions are the revolutionizing the way industries produce goods and services. ERP systems bring lot of benefits to the industries by tightly integrating various departments of the industry.

20. Parijat Upadhyay et. al. [41] attempts to explore and identify issues affecting Enterprise Resource Planning (ERP) implementation in context to Indian Small and Medium Enterprises (SMEs) and large enterprises.

21. Shih-Wei Chou, Yu-Chieh Chang [43] examines ERP performance at the post-implementation stage, particularly from the perspective of managerial intervention.

22. V. Botta-Genoulaz et. Al [51] noticed that in industries the stakes control of integrated systems cannot be limited to the phases of implementation or deployment. Better use of these information systems drives industries to new organizations and to continuous adaption of industry's strategy.

23. Young B. Moon [35] article intends to serve three goals. First, it will be useful to researchers who are interested in understanding what kinds of questions have been addressed in the area of ERP. Second, the article will be a useful resource for searching for research topics. Third, it will serve as a comprehensive bibliography of the articles published during the period. The literature is analyzed under six major themes and nine sub-themes.

3. Methodology Adopted:

Research method adapted to survey is collection of data through questionnaire. Method of data collection is quite popular, particularly in case of big enquiries. It is being

adopted by private individuals, research workers, private and public organizations and even by governments. In this method a questionnaire is sent (usually by post) to the persons concerned with a request to answer the questions and return the questionnaire. A questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. The questionnaire is mailed to respondents who are expected to read and understand the questions and write down the reply in the space mean for the purpose in the questionnaire itself. The respondents have to answer the questions on their own. The method of collecting data by mailing the questionnaires to respondents is most extensively employed in various economic and business surveys.

We are using this type of method. For which the major issues were highlighted form the literature survey and considered for enclosure in the questionnaire. The questions were laid out in such a way to cover all aspects of ERP that had been identified as being important from the literature survey. Scaled questions are used in which the multiple choices are provided giving some idea of a development in size or order of something. In some questions the Likert scale is also used to get respondent's attitude by asking them the extent o their agreement or disagreement. Binary response questions are also used which offer only two alternatives i.e. yes or no.

4. Questionnaire on ERP Implementation

Section 1: Company Profile

1. Please state your principal area/region of business?
    - Hong Kong
    - Mainland China
    - India
    - Other countries please specify…….
2. Your industry sector belong to:
    - Business Services
    - Community and Social
    - Construction
    - Communications
    - Engineering
    - Finance
    - Insurance
    - Import/Export
    - Logistics
    - Manufacturing
    - Transport
    - Utility
    - Whole sale/Retail
    - Any other, please specify…….
3. Please state your job title:
    - Business/System Analyst
    - Consultant

- Chief Executive Officer
- Chief Technology Officer
- Data Base Administrator
- IT manager
- Internet Specialist
- Project Manager
- Programmer
- Other, please specify…….

4. Please Describe the Size of Organization:
   - Small
   - Medium
   - Large
5. Any ERP system implemented or in the process or implementation in your organization?
   - Yes
   - No

Section 2: Business and Management Profile

6. Which department initiated the idea for adopting an ERP system?
   - IT Department
   - Senior Management
   - Finance Department
   - Third Party !V Consultant
   - Third Party !V ERP Vendor
   - Other, please specify……
7. Did you find it necessary to re-engineer the business processes?
   - Prior to implementation
   - As a part of implementation
   - After implementation
   - No engineering done
8. In your Industry, What are the prime goals of implementing ERP?(*You may tick more than one, if applicable*).
   - Gain competitive advantage
   - Be an ERP implemented company
   - Meet customer needs
   - Gain more profits

   Other(s) if any please specify.....
9. Was ERP implementation in your industry successful?
   a) Yes
   b) No
10. Which ERP software availed by your industry…….
11. What was the reaction of Top and Middle management during ERP implementation?
    a) Supportive
    b) Unsupportive

Section 3: Technical Profile

12. Which was the most challenging phase of ERP implementation?
    - Planning
    - Design
    - Transition
    - Implementation

13. How much time in months (approximate) did it take on implementing different phases?
    - Planning
    - Design
    - Transition
    - Implementation
14. What percentage of Business has improved after ERP implementation?
    - Up to 20%
    - 21% to 40%
    - 41% to 60%
    - 61% to 80%
    - 81% to 100%
15. Do you get proper information required with ERP implementation?
    - Agree
    - Strongly Agree
    - Disagree
    - Strongly Disagree
16. What percentage of operational disruption was during Testing & Go-Live?
    - Up to 20%
    - 21%-40%
    - 41%-60%
    - 61%-80%
    - 81%-100%

Section 4: ERP implementation

17. How long was the implementation of the ERP system?
    - Under 9 months
    - 9 months to 1 year
    - 1 year to 1.5 years
    - 1.5 to 2 years
    - 2.5 to 3 years
    - Over 3 years
18. How the end users responded towards ERP implementation?
    - Supportive
    - Unsupportive
19. Your industrial head of ERP is accountable to:
    - CEO/Managing Director
    - Chief Financial Officer
    - Chief Operating Officer
    - Other(s) If any please specify……
20. What percentage of target was achieved after ERP implementation?
    - Up to 20%
    - 21% to 40%
    - 41% to 60%
    - 61% to 80%
    - 81% to 100%

21. Did your business process improve with ERP implementation?
    - Yes
    - No
22. Was there any delay in ERP implementation?
    - Yes
    - No

    If yes, give delay in percentage.....
23. What are the reasons for delay in ERP implementation?
    - Inefficient budget
    - Resistance from employees
    - Poor planning by Consultants
    - Other(s) if any please specify.....

Section 5: Budget/Finance

24. What sort of Budget was involved for ERP enforcement?
    - Fixed Budget
    - Unlimited Budget
25. Was there any over Budgeting while ERP enforcement?
    - Yes
    - No

    If yes, give percentage of over-budgeting……..
26. Approximate expenditure for ERP Implementation……
27. How much financial benefits improve after ERP implementation?
    - Up to 20%
    - 21% to 40%
    - 41% to 60%
    - 61% to 80%
    - 81% to 100%

Section 6: Employees

28. How is the Communication between management & employees during ERP implementation?
    - Excellent
    - Good
    - Fair
    - Poor
29. How proficient the project team of ERP implementation?
    - Excellent
    - Good
    - Fair
    - Poor
30. Atonement of employees with current ERP solutions?

    Excellent
    Good
    Fair
    Poor
31. Atonement of executives with current ERP solutions?
    - Excellent
    - Good
    - Fair
    - Poo

5. Response of Each Question by Different Companies

S.no.	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
1.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2.	10	10	10	10	10	10	10	10	10	10	5	10	10	10	10	10
3.	9	8	3	8	4	5	2	8	5	1	6	7	9	10	3	8
4.	2	3	2	1	1	3	2	3	3	2	3	2	3	2	3	3
5.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.	3	3	1	1	3	1	1	1	3	1	3	3	1	1	1	1
8.	3	2	2	1	1	2	5	2	2	2	4	3	2	2	2	2
9.	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	1
10.	1	2	1	4	4	1	2	1	3	1	1	4	3	1	1	1
11.	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
12.	4	3	4	1	2	4	3	4	3	4	4	1	3	4	4	4
13.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.	4	5	4	3	3	5	4	3	5	4	4	1	5	4	5	5
15.	1	2	1	1	1	2	1	1	2	1	1	1	2	1	2	2
16.	3	1	3	2	4	1	3	1	1	3	3	2	1	3	1	1
17.	2	4	2	1	1	4	2	6	4	2	4	2	4	2	4	4
18.	1	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1
19.	1	1	1	3	1	1	1	1	1	1	1	3	1	1	1	1
20.	4	5	5	3	3	5	5	3	5	5	4	3	5	4	5	5
21.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.	2	2	2	1	1	2	2	2	2	2	2	1	2	2	2	2
23.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24.	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1
25.	1	2	2	1	1	2	2	2	2	2	2	1	2	2	2	2
26.	2	2	4	3	2	2	1	5	2	3	3	3	2	4	2	2
27.	4	5	4	2	2	5	4	2	5	3	3	2	5	4	5	5
28.	2	1	1	2	2	1	1	2	1	1	2	2	1	2	1	1
29.	2	1	1	4	2	1	1	2	1	1	3	2	1	2	1	1
30.	2	1	1	3	2	2	2	2	2	1	3	2	1	2	1	1
31.	2	1	1	3	2	2	2	2	3	1	2	2	1	2	1	1

C: Code which represents each company

6. Conclusion

From the research work, we conclude that for the successful implementation of ERP following things need to be considered:

1. Top management and middle management support is necessary during ERP implementation so that there is a good understanding between them and ERP packages provider, without their support it's quite difficult to understand about various departments.
2. Consultants hired plays very crucial role and they have to be accurate because they provides the path between the management and the ERP packages provider.
3. Team leaders of ERP implementation should be experienced so that they can lead their teams in a better way.

4. The most important are the end user who actually works on the packages; they not only have good experience but should have the proper knowledge of the packages.

Based on the research work and the conclusion, following future scope has been prepared:

1. Analysis of the research undertaken can be carried out.
2. Research can be enhanced to more companies.
3. Sections in questionnaire can be enhanced and improved.

7. References:

1. Amin Hakim, Hamid Hakim, "A practical model on controlling the ERP implementation risks", Information systems 35 (2010) 204–214.
2. Al-Mudimigh A., Zairi M., Al-Mashiri M., "ERP software implementation: an integrative framework", European Journal of Information Systems, 216-226, (2001).
3. A. Wong, H. Scarbrough, Patrick Y.K. Chau, R. Davison, "Critical Failure Factors in ERP Implementation."
4. Adel M. Aladwani, "Change management strategies for successful ERP implementation."
5. Benaroch, M., Kauffman, R.J., 2000. Justifying electronic banking network expansion using real options analysis. MIS Quarterly 24 (2), 197–225.
6. Bingi, P., Sharma, M.K., Godla, J.K., 1999. Critical issues affecting an ERP implementation. Information Systems Management 16 (3), 7–14.
7. Claire Berchet, Georges Habchi, "The implementation and deployment of an ERP system: An industrial case study." Computers in Industry 59 (2008) 548–564.
8. Chan-Hsing Lo, Chih-Hung Tsai, and Rong-Kwei Li.(2009).
9. Chuck C.H. Law, Eric W.T. Ngai, "ERP systems adoption: An exploratory study of the organizational factors and impacts of ERP success". Information & Management 44 (2007) 418–432.
10. Davenport, T.H., 1998. Putting the enterprise into the enterprise system. Harvard Business Review 76 (4), 121–133, Jul–Aug
11. D. James, S. Russell, G. Seibert, Oracle E-Business Suite Financials Handbook, McGraw-Hill/Osborne, California, 2002
12. E.W.T. Ngai, C.C.H. Law, F.K.T. Wat "Examining the critical success factors in the adoption of enterprise resource planning". Computers in Industry 59 (2008) 548–564.
13. Eric T.G. Wang, Sheng-Pao Shih, James J. Jiang, Gary Klein, "The consistency among facilitating factors and ERP implementation success: A holistic view of fit." The Journal of Systems and Software 81 (2008) 1609–1621.

14. Elisabeth J. Umble a, Ronald R. Haft b, M. Michael Umble, "Enterprise resource planning: Implementation procedures and critical success factors" European Journal of Operational Research 146 (2003)241–257.
15. Gargeya, V. B. and Brady, C. "Success and failure factors of adopting SAP in ERP system implementation", Business Process Management Journal11 (9), (2005).
16. Gattiker, T.F., Goodhue, D., 2005. What happens after ERP implementation:understanding the impact of interdependence and differentiationon plant-level outcomes. MIS Quarterly 29 (3), 559–585.
17. Griffith, T.L., Zammuto, R.F., Aiman-Smith, L., 1999. Why new technologies fail? Industrial Management 41, 29–34.
18. H. R. Yen, C. Sheu, "Aligning ERP implementation with competitive priorities of manufacturing firms: An exploratory study." Int. J. Production Economics 92 (2004) 207–220.
19. H. Liang, N. Saraf, Q. Hu, Y. Xue, "Assimilation of Enterprise systems: The effect of institutional pressures and the mediating role of top management."
20. Jose Estevez, Joan Pastor, "Analysis of critical success factors relevance along SAP implementation phases" (2001).
21. Jones, M.C., Cline, M., Ryan, S., 2006. Exploring knowledge sharing in ERP implementation: an organizational culture framework star, open. Decision Support Systems 41 (2), 411–434.
22. J. Motwani, D. Mirchandani, M. Madan, A. Gunasekaran, "Successful implementation of ERP projects Evidence from two case studies" Int. J. Production Economics 75 (2002) 83–96
23. Laudon, K.C., Laudon, J.P., 2007. Management Information Systems: Managing the Digital Firm. Prentice-Hall, New Jersey.
24. Liang-Chuan Wu, Chorng-Shyong Ong, Yao-Wen Hsu, "Active ERP implementation management: A Real Options perspective." The Journal of Systems and Software 81 (2008) 1039–1050
25. Markus, M.L., Tanis, C., Van Fenema, P.C., 2000b. Multisite ERP implementations. Communications of the ACM 43 (4), 42–46.
26. Mary C. Jones, M. Cline, S. Ryan, "Exploring knowledge sharing in ERP implementation:an organizational culture framework." Decision Support Systems 41 (2006) 411 – 434

27. Moon, Young, "Enterprise Resource Planning (ERP): a review of the literature" (2007). Mechanical and Aerospace Engineering.
28. Pfeffer, J., 1981. Management as symbolic action: the creation and maintenance of organizational paaradigms. In: Cummings, L.L., Staw, B.M. (Eds.), Research in Organizational Behavior, vol. 3. JAI Press, Greenwich, CT, pp. 1–52.
29. Pramod Kumar, Dr. M.P.Thapliyal, "Successful implementation of ERP in Large organization". International Journal of Engineering Science and Technology Vol. 2(7), 2010, 3218-3224.
30. P. Upadhyay, R. Basu, R. Adhikary, P. K Dan. A Comparative Study of Issues Affecting ERP Implementation in Large Scale and Small Medium Scale Enterprises in India: A Pareto Approach. International Journal of Computer Applications (0975 – 8887) Volume 8– No.3, October 2010.
31. Shih-Wei Chou, Yu-Chieh Chang, "The implementation factors that influence the ERP (enterprise resource planning) benefits" Decision Support Systems 46 (2008) 149–157.
32. Somers, T.M., Nelson, K.G., 2004. A taxonomy of players and activities across the ERP project life cycle. Information & Management 41 (3), 257–278.
33. Soh, C., Kien, S.S., Tay-Yap, J., 2000. Cultural fits and misfits: is ERP a universal solution? Communications of the ACM 43 (4), 47–51. Apr.
34. Schein, E.H., 1996. Culture: the missing concept in organization studies. Administrative Science Quarterly 41 (2).
35. Sheng, Y.P., Pearson, M., Crosby, L., 2003. Organizational culture and employees' computer self-efficacy. Information Resources Management Journal 16 (3), 42–58.
36. V. Botta-Genoulaz P.-A. Millet, B. Grabot , "A survey on the recent research literature on ERP systems" Computers in Industry 56 (2005) 510–522.
37. Wang, E.T.G., Klein, G., Jiang, J.J., 2006. ERP misfit: country of origin and organizational factors, ME Sharpe. pp. 263–292.

Effective Management of Public Organizations (organization structural function of effective management) with new Technologies

Abstract:

In a period where economic convergence presupposes in the public administration and the changes in the European setting are dramatic, the adoption of modern standards of administration and the response of its personnel to these standards are rendered necessary. Within this framework, the Greek administration attempts to incorporate the principles of New Public Management and to implement policies of organisation, planning, goal setting, measurement of performance and evaluation of its action. This paper deals with the effort of measurement of performance and establishment of a system based on "Management by Objectives" in the Greek administration. The research and development of the subject were based mainly on the analysis of that the Greek public administration has begun to modernize with the help of new technologies (IT) and especially during the period of 2000-2010. However, the effectiveness cannot exist without organization, planning, goal setting, measurement of performance and evaluation of action.

Keywords: Effectiveness, efficiency, productivity, planning, goal setting, performance metrics, New Public Management, Management by Objectives.

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1. Introduction

New Public Management (NPM) is at the forefront of the agendas of several countries in the attempt to modernize the public administration, improve efficiency of operations, improve effectiveness of public services provided to citizens and increase quality levels; all these under the scope of re-establishing the focal point of public organizations which is to serve the populations (Denhardt and Denhardt, 2011). For the specific case of Greece, new public management can be conceptualized in the light of reforms taking place in the country to accommodate the need to align with the European Union requirements and standards on the one hand and remedy the public sector 'pathologies' on the other hand. This paper is concerned with the general concept of new public management and its exemplification in the case of Greece. Notably, the author reviews some reforms in public management and public organizations in the country and provides insights to specific problems emerging from the lack of strategic orientation, strategic goal-setting, consistent performance measurement and performance objectives; these problems are viewed in terms of the underlying 'doctrines' of New Public Management with regards to accountability and performance improvement.

2. The New Public Management

The New Public Management (NPM) is a term that is too often found in academic articles and research papers concerning governance and the administration of public organizations. While frequently used, as Miller and Dunn (2007) explain, the notion on what exactly is or what exactly stands for remains rather blurred. This probably results from the fact that New Public Management is many times explained or described in terms of contrasting it with the Old public management (Riccucci, 2001) or even from the fact that NPM has emerged as a paradigm out of the practices of countries and states and for this reason it lacks a solid theoretical definition and clear boundaries (Miler and Dunn, 2006). In that respect currently there are different views and different definitions provided by authors; Ewalt (2001) and Ongaro (2008) note that the New Public Management represents transformation attempts directed towards re-configuring and re-thinking the management of public organizations to reach efficiency, effectiveness and quality objectives. O'Flynn (2007) describes NPM as an emerging paradigm generated primarily as a "reaction to perceived weaknesses of the traditional bureaucratic paradigm of public administration" (p.

354) but equipped also with fundamental "doctrinal" aspects which have eventually shaped a new platform for managing public organizations and services.

In the views of Denhardt and Denhardt (2011) the new public management is an umbrella term for reforms (or efforts for reforms) in public administration signaling a shift in the philosophy of providing public services. This shift is based on the premise that the public services should rent principles, structures, management and functions from the private sector philosophy. As the authors explain, in the new public management framework, governments are faced with the challenge to design public services in a manner that constitutes them (along with the public organizations) accountable to citizens such as accountable, private organizations are to their customers and at the same time achieve some efficiency standards just as private organizations are squeezing costs. New public management is described as a pathway to solve particular problems that exist in the public sector, and which relate primarily to the bureaucratic structures and processes and the inefficient and in many cases ineffective provision of the public services (Kakouris and Melliou, 2011; Levy, 2010; O'Flynn, 2007; Philippidou, 2005; Philippidou et al., 2004; Philippidou et al., 2008). Michalopoulos (2001) argues that such problems have been successfully dealt with in the private business sector and in that respect the public sector has a lot to learn by adopting a 'business – like – approach' to management and administration. Efficiency, effectiveness and quality become the major goals in reforms under the new public management; under the business logic of public administration.

Other authors and researchers perceive the concept of New Public Management as a means towards modernization; Newman (2000) for example suggests that the essence of NPM lies in modernizing public services and public administration and innovating by finding new ways of coping with the deep-rooted and traditional management practices, which have proved insufficient or non-effective. Zampetakis and Moustakis (2007) perceive NPM as being very close to public entrepreneurship (also implying innovation); the authors comment that the entrepreneurial underpinning is to be found in the efforts to transform governments (or re-invent governments) so as to become flexible and adjustable to changing environments and on the basis of this build an 'entrepreneurial' culture which aligns with the goals of adding efficiency and effectiveness in public service provision.

Lane (2000) sees the new public management as a movement which is prescriptive in nature rather than descriptive; the theories, concepts and propositions

in the new public management have emerged and developed only to provide recommendations to administration and managerial approach and not to describe how governments and public institutions or public organizations function and work. In the same respect, drawing from the observations of Kettl (2000), Denhardt and Denhardt (2011) identify six major issues, which new public management is concerned with: first, the ways in which governments can provide more of the public services at the same or at lower costs; second, the ways in which governments can minimize the bureaucracy "pathologies"; third, the means by which citizens can be dealt with as being customers (increasing public service availability and providing better customer service); fourth, the ways in which public administration can become decentralized and devolve responsibilities to middle and line public managers; fifth, the ways to shift focus from the processes (administrative) and structures to results, outcomes and objectives (objective-oriented management); and sixth, the ways in which governments can distinguish its roles in acquiring and providing services.

The essence of new public management lies in the concentration of 'reforms', given that the prescriptive nature of NPM as well as its areas of interest, suggest new approaches replacing old approaches in administration (Denhardt and Denhardt, 2011). Pollitt and Bouckaert (2011) describe pubic management reforms in the agenda of New Public Management as the "deliberate changes to the structures and processes of public sector organizations with the objective of getting them to run better" (p. 2). The terms "structures and processes" may adhere to different perspectives; structures and processes can be seen in relation to the organizations, in relation to the public employees or even in relation to the administrative functions. Likewise, the emphasis on "getting them to run better" also includes various perspectives; public organizations can run better by achieving efficiency, by aligning processes to specific objectives, by being more responsive to the citizens or even by managing all these simultaneously, when there are no challenges for tradeoffs between goals (ways to 'run better'). Thus, public management reforms are seen as changes relevant to either of the perspectives over structures and processes towards either (or all) of the perspectives over 'better running'.

3. New Public Management and Greece

Introna et al. (2009), Prassopoulou (2011), Spanou (2008), Spanou and Sotiropoulos (2011) and Sotirakou and Zeppou (2006) make a very insightful

contribution to a brief overview of the Greek public sector, its history and its underlying mechanisms. The authors provide a simplistic yet too realistic picture of some important constructs of the history of the Greek public sector, described here. The Greek public administration was officially formed in 1832 after the country's independence from the Ottoman empire; the public administration platform was drawn from the Weberian bureaucratic structures with a major and critical difference being the absence and the lack of formal regulation, which was adopted and passed on many years later to eventually create a too formalistic character of the public administration. The typical formation of the public organizations involved either employment of citizens who favored each administration or ruling political party at the time or the employment of impoverished citizens as a way to engage into a vote-seeking behaviour; in each of these two the public organization formation were seen as "means to an end, rather than an end itself" (Introna et al., 2009, p. 15), reflecting the opportunistic intentions of governments and political parties to gather votes and create a 'give-and-take' relationship with the people. In that respect the identification and "integration" of the public sector with each administration government was unavoidable and as Spanou (2008) characteristically comments the result was a state which featured political "interference into routine administrative operation" (p. 152).

The strong interrelationship between the public sector and each ruling political party at different points in the Greek history was made apparent not only with regards to the formulation of the public services and public administration but also with regards to any changes, reforms or initiatives to improve and make the public service provision more effective. As Spanou and Sotiropoulos (2011) argue the political competition between the parties has largely impacted competitive activities towards public sector reforms; governments at one point introduced reforms when in rule, and new governments (mainly interchanging between two political parties – New Democracy and PA.SO.K.) at another point disregarded or discontinued the reforms introduced by the previous governments. Notably, as Spanou (1996) points out, the Greek public sector was seen more as an 'arena' or a combat between the political parties and prospective governments and less than a challenging issue requiring focus and change in a political-free manner. Prassopoulou (2011) explains that the interference of the political interests with the public sector has resulted into a largely fragmented system, where increased rules,

policies and regulations tend to 'govern' every bit of activity in the public services, explicitly showing that in the country, the public actions become legitimized only by referring to the government (the ruling political party in essence) and its agenda.

The underpinning link between each administration and the public sector had also implications on the strong unionism within the sector and the derivation of any reforms being largely determined by the political parties' attempt not to threaten the public sector employees (Introna et al., 2009). Simply put, governments in the light of introducing reforms had always an agenda for negotiating with the unions in the public sector (which largely ensured political stability when in favor of the government) so as to avoid posing threats to job security or any other non-welcomed (by the civil servants) outcome generated by the prospective reforms and changes.

These brief notes on the Greek public sector and the public administration have been considered as main factors contributing to the ineffectiveness of the public services in the country. "The majority of studies on the administrative phenomenon in Greek civil service state that Greek public administration is a bureaucratic, highly centralized, inflexible and inefficient system that needs urgent and radical changes if it is to survive in the current competitive European environment" (Sotirakou and Zeppou, 2006, p. 1281).

The first attempts of Greek public administration reform (in line with the umbrella term of New Public Management) are traced in the late 1990s, with a white paper publishing a number of goals relevant to increasing the efficiency of the public organizations (by improving speed and reducing administrative costs), increasing the effectiveness (by improving the quality of the services provided to the citizens) and combining these with the use of ICTs (Introna et al., 2009). In 2001 The Modernization Government Act clearly showed a shift in the interest from paying attention to public organizations' structure to public organizations' processes towards outcome and result-orientation (Sotirakou and Zeppou, 2005; Sotirakou and Zeppou, 2006). A fundamental issue in the Modernization Government Act was that it required all public organizations to adopt a new public management agenda by setting goals, devising strategies, measuring outcomes and performance and evaluate results.

One of the first information technology reform program was the KLEISTHENIS program with its major constituent the SYZEFXIS project (OECD, 2011; Introna et al, 2009; Koutrakou, 2006; Markellos et al., 2007). The SYZEFXIS

program main objectives were to modernize public corporations in the country by adding information technology network infrastructure connecting the main public organizations and training human resources to new technologies (Koutrakou, 2006). A second constituent of KLEISTHENIS was the TAXIS project, which aimed at synthesizing and integrating dispersed information on the taxable citizens and at the same time modernizing and incorporating the information technology to the tax administration in order to improve efficiency and establish better control (Koutrakou, 2006; Markellos et al., 2007; Prassopoulou, 2011). Both e-government initiatives were underpinned by the strategy to reduce the information technology distance between Greece and other European countries, to increase access to public services on the part of the Greek citizens, to reduce bureaucracies stemming from intense centralization, to diffuse ICTs in the public administration and to develop human resources towards modernized technologies (Introna et al., 2009; Philipidou et al., 2004).

The SYZEFXIS project, representing a network of public administration in the beginning linked approximately fifteen different public agencies but soon expanded and as of 2011 it connects 4500 agencies and provides services to as much as two hundred thousand public employees in Greece (OECD, 2011). The program's intention was to create an intranet for the entire public administration in Greece in order to increase speed and reduce costs as much as possible (Koutrakou, 2006) and to provide integrated services to citizens using modernized systems (Dikopoulou and Mihiotis, 2010). The TAXIS project alternatively had to do with the electronic services provided for both internal administration of public services and external use of the services by the citizens. TAXIS (taxation information systems) introduced as an online taxation system which connected tax agencies in the country on the one hand and offered web access to the Greek population on the other hand (in terms of retrieving information and later on for conducting any tax related transactions through the internet). The TAXIS project was initially perceived not only as a reform towards modernization and reduction of bureaucracies but also as a mechanism for controlling and minimizing corruption through increasing transparency (Prassopoulou, 2011).

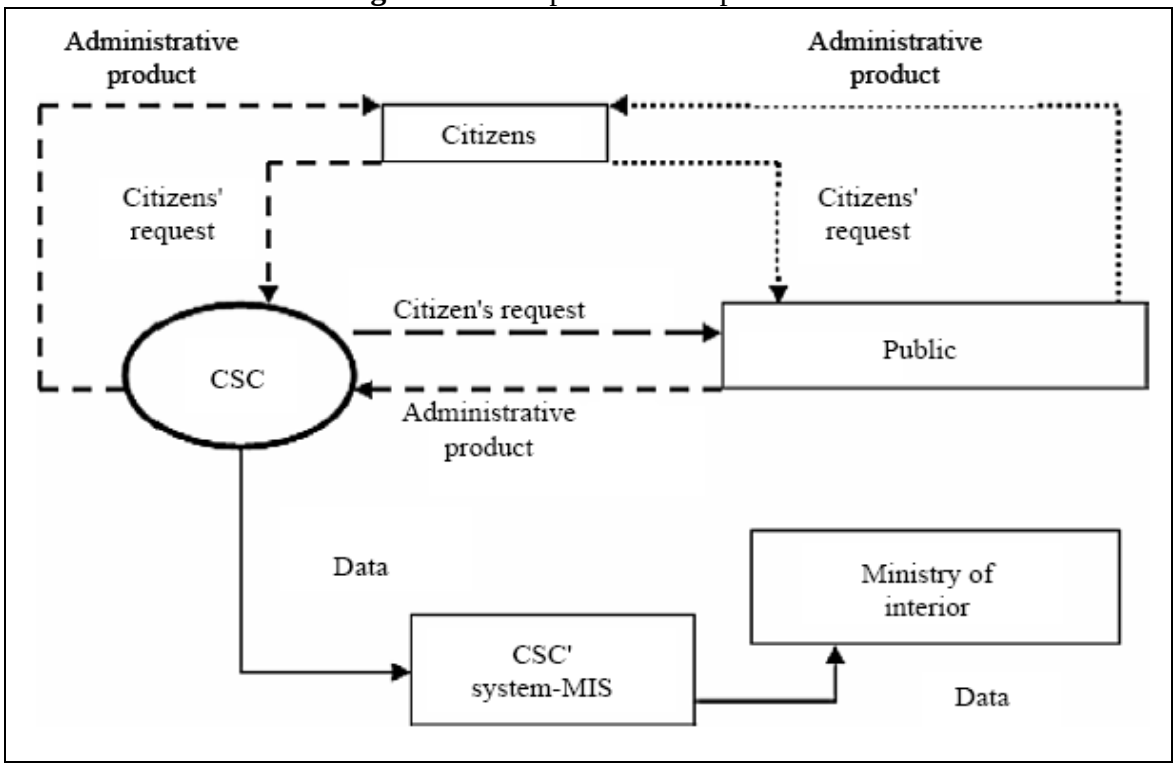
Prassopoulou (2011) explains that while TAXIS started off as an ambitious plan to accommodate the new public management philosophy incorporating the use of ICTs (in modernizing public services along with achieving fundamental objectives

of efficiency), the lack of strategic administrative planning and management that would make use of the overreaching capacity to integrate information on the taxable population for the improvement of the effectiveness of the public organizations (the tax agencies) which is the outmost goal, eventually resulted into far more strengthening the bureaucracies. Whereas the standardization and automation of the transactions could be seen as opportunities to strengthen the tax collection system, the absence of planning, the absence of audits and measurements of outcomes (in regards to effectiveness) in the end added little to the ambitious reforms. "TAXIS made a significant contribution since it managed to standardize administrative procedures [but] it failed to simplify them enough and most importantly did not establish a new culture of accountability" (Prassopoulou, 2011, p. 18). Stamoulis et al. (2001) had earlier noted that the TAXIS system would benefit: minimization of paper work, accountability and continuous access to tax services, only if proper 'vision' and methodologies accompany this particular reform in the public services. Terpsiadou and Economides (2009) conducted a research study on the perspectives of the public employees operating and using the TAXIS and one of their conclusions (serving as a recommendation for public administration) is that adequate and sufficient training needs to be provide to the users of TAXIS to track down inefficiencies or problems in the system. This too reveals to a certain point that the use of ICTs in public management has no particular benefit if the 'infrastructure' is not in place. In that respect, infrastructure does not pertain to the ICTs system but predominantly to the consistency in managing the public services in such a way that accountability, quality and efficiency become apparent through reforms. This is actually the essence of reforms and the 'concept' of the new public management; to effectively accommodate changes or new practices which address to the objectives of these changes or new practices.

The ARIADNE project manifested itself through the creation of Citizens' Service Centers (CSCs or KEPs as they are known in Greece). ARIADNE was initially introduced as a platform for enabling citizens to acquire fast information only any public service issue and later on with the introduction of CSCs to acquire any public document or other public service related data directly from one integrated system of public services (Koutrakou, 2006). The basic objective was to make the public services more efficient (reducing the long queues in public offices) and to integrate various public organizations in terms of their service provision directly to

Greek citizens (Introna et al., 2009). To accommodate the increased demand for such speed services at further lower costs, Citizens' Service Centers were established. CSCs first developed in 2002 and constituted "one –stop shops" intermediating between Greek citizens and public organizations (Petrakaki et al., 2009). As of 2011 almost 1080 Customer Service Centers had been developed and operated across the country, with a two fold function: they are locally administered but the processes and operations are centrally administered by the MIDE (Ministry of Interior, Decentralization & E- government) (OECD, 2011). The flow of transactions and the flow of processes in CSCs are represented in Figure 1 below taken from Petrakaki et al. (2009) (the dot arrows show the direct links between Greek people and public organizations, whereas the dash arrows show the processes flow of the Customer Service Centers). Interestingly enough, CSCs have front and back office operations; front office operations relate to the citizens' requests and provide the service to the public (documents etc), while the back office which normally would be responsible for processing the requests, is actually a 'mediator' between citizens and public organizations (often transferring the requests hand by hand to the public organizations though the frequent procedures involve fax and telephone processes) (Introna et al., 2009).

Figure 1: The process of operations in CSCs



Source: Petrakaki et al. 2009, p. 168

While the CSCs have been considered successful in regards to delivering quicker services to the Greek citizens, especially if one takes into account that they offer IT enabled filling (through the platform e-KEP) which files and stores requests and generates an integrated directory) and they have managed to reduce administrative costs (Markellos et al., 2007; Pateli and Philippidou, 2011), their objective to increase accountability of the public organizations and introduce as well as implement measurement of performance principles that adhere to the NPM (calling for effectiveness and performance –oriented management) is challenged. Introna et al. (2009) and Petrakaki et al. (2009) both study the performance measurement within the CSCs; the design and the mechanism of the Citizens' Service Centers incorporates a central MIS system which amongst others provides data used to measure the productivity and performance of the staff, with the ultimate goal to provide performance evaluations and accordingly handle staff productivity through reports and recommendations. The procedure for measuring performance includes identification of the volume of citizens' requests processed by CSCs staff, estimation of the average time required to serve the citizens and complete the requests. The data then are reported to the managers of CSCs and are distributed to the staff.

The researches of Introna et al. (2009) and Petrakaki et al. (2009) however showed that in spite of the fact that in some cases 'compliance' was a source for improving productivity; essentially many of the staff members find ways to improve their performance outcomes by a number of practices including: processing 'false' requests into the system in order to raise their personal volume of handling services, processing incomplete requests (regardless the fact that they would be possibly declined due to missing data). These were found to be actions undertaken by staff to meet the productivity and performance standards established through the results-oriented approach. In addition to that, as Petrakaki et al. (2009) note, their study showed that the staff feels non-responsible for all productivity failures or low levels of performance, given the deep-rooted dependency on the productivity of the public organizations' employees. Given that the completion of requests is not only a matter of the CSCs but also a matter of the speed and services of the public organizations; CSCs' staff members were found to attribute prospective low performance on the 'failure' of civil servants to provide the services in time or adequately. This gives rise to the 'client relations' with the civil servants (maintaining good relations in

order to 'get the job done'). All these 'pathologies' eventually lead to two important issues: first the fact that performance improvement and accountability have not yet been achieved despite the performance and management by objectives approaches and second that performance standards do not necessarily translate into quality services (through incentives for staff) but more into finding 'manipulative' ways to improve productivity only to meet the standards. The implications of these findings suggested are illustrated in the following assumptions: attempts for reform only at the surface without proper infrastructure will only prove ineffective given that the introduction of new principles and approaches will prompt the "regime" to find legitimacy of the past practices (Introna et al., 2009); accountability and performance improvement cannot be based on the quantitative approach to monitoring and measuring performance because this only produces a quantitative approach to achieving performance standards (not a qualitative approach to performance and productivity improvement). Kondylis (2011) commenting on the performance improvement in public organizations suggests that organizational development needs to be in place so as to make interventions in the cultures of the public sector and transform attitudes, behaviours and beliefs towards the public service provision.

Many of the public management reforms in Greece are underpinned by the 'legality' instead of the actual focus on the changes that are necessary for establishing accountability in the public sector. Spanou (2008) indicates that in most reforms the creation of monitoring and control mechanisms and bodies is most concerned with identifying legalities pertaining to performance rather than improving performance. But apart from the inherent in the reforms weak practices, the reforms themselves in Greece have been rather challenged by a general absence of long-term orientation, lack of strategic goals and sufficient planning which could provide the basis for effective new approaches to public administration and management. While reforms may be ambitious in many cases and may explicit target the effective management of public administration, the tight political relations with the public sector remains an issue which challenges the success; for example reforms attempt to become institutionalized but governmental changes (which imply changes in the administration of public organizations) disrupts the institutionalization (Spanou and Sotiropoulos, 2011).

Sotirakou and Zeppou (2005, 2006), addressing the inefficiency and ineffectiveness of reforms in the Greek public sector stemming from the increased

challenges to cope with improving performance and productivity but not from a quantitative perspective only, suggest that the implementation of a strategic model is rather imperative. The STAIR model (strategy, target, alignment, implementation, results) recommends a step by step approach to transforming the management of civil servants and of the public organizations on the basis of a coherent, consistent and integrated manner that is by nature results' and objectives' oriented. In this respect, the model accounts for what is missing in the reforms and in the attainment of new public management in Greece; the proper planning with regards to undertaking a scanning of the environment, its changes and devising specific strategies, the establishment of goals and objectives to be in line with the strategies, the implementation of the strategies and most importantly the monitoring of the effectiveness of the strategies which allows the evaluation of the results. Similar recommendations have been produced by Kakouris and Melliou (2011) who studying the tax office management and the degree in which modernization under New Public Management is feasible, state that what needs to be done to effectively combat the dissatisfaction of citizens is to identify the expectations of tax payers so as to transform these into knowledge and input for performance management and objective establishment for the tax collectors. Essentially, identifying the needs and service qualities as perceived by the citizens themselves, becomes the starting point for developing appropriate performance management approaches and setting objectives that are meaningful.

Zampetakis and Moustakis (2007), who as mentioned in the beginning of this paper, advocate that entrepreneurship and entrepreneurial behaviour in the public management and the public sector are actually the answers to improving service provision, increasing efficiency, improving effectiveness and increasing accountability, recommend that there needs to be a transformation in the culture and the structure of public organizations in such a way that line staff (line civil servants) can adopt themselves such desired behaviours and an entrepreneurial mentality; which alternatively is viewed as a key ingredient in reforming public management. In particular, as they state, public organizations and specifically public management needs to provide a supportive environment to encourage initiatives in the line and trigger accountability to be driven by the staff itself. This is a bottom up approach, which is also strongly suggested by Petrakaki et al. (2009) in regards to "instilling" accountability in the public employees to make the public organizations accountable

to the citizens. In an environment where accountability starts from the bottom (the line staff) the transformation of the organizations is far more viable. In simple words, as the authors recommend imposing new practices by not first triggering the adoption of new mentalities and new approaches in the line adds little to the reconfiguration of public service provision. What is meant by this is clearly encapsulated in Zampetakis and Moustakis (2007) views who explain that it is each individual employee's contribution that will transform the public organization and the public services and it is the management's role to enhance their subordinate's contribution.

4. Conclusions

The New Public Management (NPM) is essentially a paradigm which reflects transformation and reform of public sector and particularly public organizations with the objectives to improve effectiveness, increase efficiency, increase accountability and provide quality public services to citizens. On a global scale, new public management practices are traced in reforms aiming at strengthening performance objectives and establishing an MBO (management-by-objectives) approach and decentralizing processes towards public services. As Ongaro (2008) explains, not all reforms in public management have showed success stories, given that deep-rooted and traditional practices or even the lack of strategic planning and orientation hinder the effectiveness. This paper has focused primarily in the Greek public management area and particularly in some fundamental reforms which had been sought to reflect an approach to new public management. In all reforms that have been discussed in this paper it has become apparent that three core issues come in the way: first, the strong relationship between political/governmental action and public organizations, which even in attempts to decentralize processes, there public sector still remains subject to political combats between ruling parties; second, the deep-rooted practices of the public organizations' employees which are difficult to change and this creates difficulties in institutionalizing reforms; and third, the lack of consistency, integrative and strategic approach to introducing and implementing reforms. This last issue is of critical importance as it hinders potentially successful reforms (especially ICTs' related reforms) due to the absence of aligned performance management systems, monitoring practices and performance-based objectives. Based on research done to the specifications of this study, it is indicated that public management in Greece is facing many problems associated with bureaucracy, organizational

problems, lack of staff especially within the financial crisis and finally with the failure of the authorities to bring about changes that will assist the public management to become more flexible and competitive by setting new goals and giving citizens the best and most competitive services. Quality systems, staff training, investment in new technologies are some of the factors that will give an extra dynamic to the public management and assist better and more efficiently the operation of the state.

5. References

Denhardt, J.V. and Denhardt, R.B. (2011) *The New Public Service: serving not steering*, 3rd edition, New York: M.E. Sharpe, Inc

Dikopoulou, A. and Mihiotis, A. (2010) Records Management: A Key Element for Effectiveness, Accountability and Development in the Greek Public Administration, *International Journal of Public Administration*, 33 (5), pp. 262-287

Ewalt, J.A.G. (2001) *Theories of Governance and New Public Management: Links to Understanding Welfare Policy Implementation*, Paper Presented at the annual conference of the American Society for Public Administration, Newark New Jersey

Introna, L., Hayes, N. and Petrakaki, D. (2009) The Working out of Modernization in the Public Sector: The Case of an E-government Initiative in Greece, *International Journal of Public Administration*, 33 (1), pp. 11-25

Kakouris, A.P. and Meliou, E. (2011) New Public Management: Promote the Public Sector Modernization Through Service Quality. Current Experiences and Future Challenges, *Public Organization Review*, 11 (4), pp. 351-369

Kettl, D. (2000). *The Global Public Management Revolution: A Report on the Transformation of Governance*. Washington, D.C.: Brookings Institution.

Kondylis, E.C. (2011). Considerations on the Public Sector Organizations Performance: a systems approach, *The Journal of Applied Business Research*, 5 (4), pp. 15-19

Koutrakou, V.N. (2006) The Greek E-Government Experiment, *Journal of E-Government*, 3 (2), pp. 75-98

Lane, J.E. (2000) *New Public Management*, London: Routledge

Levy, R. (2010) New Public Management: end of an era?, *Public Policy and Administration*, 25 (2), pp. 234-240

Markellos, K., Markellou, P., Panayiotaki, A. and Stergianelli, E. (2007) Current state of Greek e-government initiatives, *Journal of Business Systems, Governance and Ethics*, 2 (3), pp. 67-88

Michalopoulos, N. (2001) Trends of administrative reform in Europe: towards administrative convergence? *International Public Management Review*, 2 (2), pp. 39-53

Miler D. and Dunn W. (2006). A critical theory of new public management. [Online], Available at: http://bambangkesit.files.wordpress.com/2012/07/bag-ii-03-a-critical-theory-of-npm.pdf

Miller, D.Y. and Dunn, W.N. (2007) Critical theory of new public management and

the Neo-Weberian State: Advancing a critical theory of administrative reform, *Public Organization Review,* 7 (4), pp. 345-358

Newman, J. (2000) Beyond the New Public Management? Modernizing Public Services, In: Clarke, J., Gewirtz, S. and McLaughlin, E. (Eds), *New Managerialism, New Welfare?* London: Sage Publications Ltd, pp. 45-61

O'Flynn, J. (2007) From New Public Management to Public Value: Paradigmatic Change and Managerial Implications**,** *The Australian Journal of Public Administration,* 66 (3), pp. 353–366

OECD (2011) *The call for Innovative and Open Government: an overview of country initiatives*, Publishing

Ongaro, E. (2008) Introduction: the reform of public management in France, Greece, Italy, Portugal and Spain, *International Journal of Public Sector Management*, 21 (2), pp. 101 – 117

Pateli, A. and Philippidou, S. (2011) Applying Business Process Change (BPC) to Implement Multi-agency Collaboration: The Case of the Greek Public Administration, *Journal of Theoretical and Applied Electronic Commerce Research,* 6 (1), pp. 127-142

Petrakaki, D., Hayes, N. and Introna, L. (2009) Narrowing down accountability through performance monitoring technology: E-government in Greece, *Qualitative Research in Accounting & Management*, 6 (3), pp. 160-169

Philippidou, S.S. (2005) *Efforts to modernize public administration: The Greek case [Online], Available at: http://cas.edu.om/index.php/applied-sciences-journal/issues/20-volume-1-issue-1-april-2009/46-title-qefforts-to-modernize-public-administration-the-greek-caseq*

Philippidou, S., Karageorgiou, M., Tarantilis, C., Soderquist, E. and Prastacos, G. (2008) Meeting the challenge of technology-driven change within an institutional context: the Greek case, *Public Administration,* 86 (2), pp. 429-442

Philippidou, S.S., Soderquist, K.E. and Prastacos, G.P. (2004) Towards New Public Management in Greek Public Organizations: Leadership vs. Management, and the Path to Implementation, *Public Organization Review*, 4 (4), pp. 317-337

Pollitt, C. and Bouckaert, G. (2011) *Public Management Reform*, 3rd edition, Oxford: Oxford University Press.

Prassopoulou, E. (2011) In quest for accountability in Greek Public Administration: the case of the Taxation Information System (TAXIS), GreeSE Paper No. 53, Hellenic Observatory Papers on Greece and Southeast Europe

Riccucci, N.M. (2001) The "Old" Public Management Versus the "New" Public Management: Where Does Public Administration Fit In?, *Public Administration Review,* 61 (2), pp. 172-175

Sotirakou, T. and Zeppou, M. (2005) How to align Greek Civil Service with European Union public sector management policies: A demanding role for HR managers in the contemporary public administration context, *International Journal of Public Sector Management,* 18 (1), pp. 54 – 82

Sotirakou, T. and Zeppou, M. (2006) Utilizing performance measurement to modernize the Greek public sector, *Management Decision*, 44 (9), pp. 1277-1304

Spanou, C. (1996) Penelope's suitors: administrative modernisation and party competition in Greece, *West European Politics*, 19 (1), pp. 98-125

Spanou, C. (2008) State reform in Greece: responding to old and new challenges, *International Journal of Public Sector Management*, 21 (2), pp. 150-173

Spanou, C. and Sotiropoulos, D.A. (2011) *The Odyssey of administrative reforms in*

Greece, 1981-2009: a tale of two reform paths, Public Administration, *89 (3), pp. 723–737*

Stamoulis, D., Gouscos, D., Georgiadis, P. and Martakos, D. (2001) Revisiting public information management for effective e-government services, *Information Management & Computer Security,* 9 (4), pp.146 – 153

Terpsiadou, M.H. and Economides, A.A. (2009) The use of information systems in the Greek public financial services: the case of TAXIS, *Government Information Quarterly,* 26 (3), pp. 468-476

Zampetakis, L.A. and Moustakis, V. (2007) Entrepreneurial behaviour in the Greek public sector, *International Journal of Entrepreneurial Behaviour & Research*, 13 (1), pp. 19 – 38

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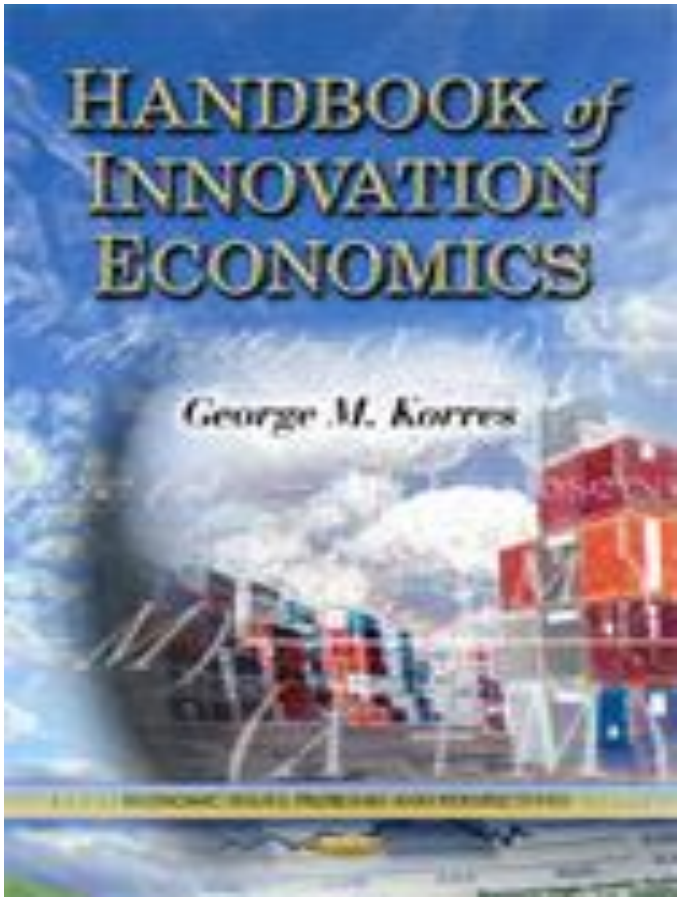

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