Du Pont Analysis of a Bank Merger and Acquisition between Laiki Bank from Cyprus and Marfin Investment Group from Greece. Is there an increase of profitability of the new bank?

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Abstract
In this paper, we try to investigate how the acquisition of the Cypriot financial institution Laiki Bank with the Greek Marfin Investment Group has affected the profitability of the new bank that created after the merge. In order to do so we have selected data from the financial statements of the banks for four years before the acquisition and four years after until today. In order to achieve our goals in this paper we have measured the ratios of ROE, ROA applying the DuPont ratio analyses, which have been demonstrated with the aim of graphs to show the change periodically.
In the first chapter we give some definitions about banks mergers and acquisitions and the advantages and disadvantages of them. In the second chapter we describe how we can measure the profitability of a bank using the ratios of ROE, ROA and the Dupont Analysis. In the third chapter we report the historical elements, facts and financial statements about the two banks Laiki and Marfin before and after the merge. Finally we measure the ROE and ROA ratios before and after the merge between those two banks and try to find out if these two ratios have improved after the merge or not, so we can justify the merge.
The results have shown magnificent growth of the new bank MarfinLaiki Bank it's self from the first year of the acquisition and year-by-year even bigger growth.

JEL Classification Codes: G34 - Mergers; Acquisitions; Restructuring; G21 - Banks; Other Depository Institutions; Micro Finance Institutions; Mortgages

Introduction

The Republic of Cyprus is a developed country and has been a member of the European Union since 1 May 2004 and adopted the Euro on 1 January 2008.

The financial system of Cyprus[1] has been little affected by the recent international financial crisis and has been exhibiting a steady growth over time. Cypriot banks conduct mainstream banking mostly deposit taking and loan granting and this are not exposed to the toxic assets that were behind the outburst of the crisis.

[1] Financial Sector In Cyprus, Dionysios Dionysiou, 2011

However the excessive lending following the Euro adoption, led to increased exposure to the real estate market and the World financial and economic crisis and prudential regulation led to a containment of credit expansion.

The total consolidated assets of the banking sector were around 9 times as high as GDP at the end of December 2010, even though the above ratio is not giving correctly the overall picture, as it includes the following:

- Loans and bonds booked in Cyprus which is funded by the parent institution and credit risk remains also with the holding company, which were mainly booked in Cyprus for tax purposes.
- A bank is a subsidiary of a non EU government control banking institution.
- If the above assets are excluded, then the size of the banking sector is significantly reduced to almost 2/3 of the above percentage. Moreover 30% of the said assets are in the form of liquid assets which bear a low credit risk.
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Cypriot banks are well capitalised, with a solvency ratio of 12.2% (December 2010), which is well above the regulatory minimum of 8%. There is an adequate coverage of non performing loans by provisions made by the banks; the significant capital buffer available over and above the regulatory minimum could absorb additional unforeseen losses potentially arising as a result of the current crisis.
The Central Bank of Cyprus can provide emergency liquidity assistance for illiquid but solvent banks; however, collateral is required.

Chapter 1 Mergers & Acquisitions[2,3]

By the introduction of the new millennium and the eurozone area, banks in the Europe and all over the world started to understand that a cooperative work could lead to higher customer satisfaction and for the companies bigger profits. So financial institutions in order to compete into an aggressive market was showing its dynamics but the main principle behind banking mergers and acquisitions are to reap the benefits of economies of scale and increase the shareholders wealth. In other words, banks seek to achieve significant growth in their operations (i.e. growth of customer base) and minimize their expenses to a considerable extent and try to increase the ROE ratio that leads in raise of the wealth of the shareholders. As a result, we see a new merger or acquisition in the banking systems globally very often. First we would like to separate the meanings of mergers and acquisitions even though most of the times we treat them as having the same meaning. Merger is when two banks, agree to go forward as a single company while in an Acquisition a bank takes over another bank and clearly the accurate bank established as the new owner. In the banking system we have horizontal merger, which means two different companies involved in the same kind of business or commercial activities join. Another type of merger we see in the banking market is cross-border merger, which means one company from one-country join forces with one in another country. By doing this global banking corporations are able to place themselves into a dominant position in the banking sector, achieve economies of scale, as well gain market share, but the main goal remain the increase of the wealth of the shareholders. The whole difference is the atmosphere that exists between the high managerial stuff after the union happens. In a merger all staff from both existing banks agrees on

[2] Mergers and acquisitions in the banking sector, Economywatch.com, March 2011.
[3] The impact of banks' mergers and acquisitions on their staff employment and effectiveness, John Mylonakis, 2006.

the union while in an acquisition one company takes over the other by buying stock or by cash and the high managerial staff don't really find it satisfying. The apex financial authority of a particular country controls all mergers and acquisitions that happen in the banking sector.

Mergers and acquisitions in the baking system usually goes together with new technologies since it is easier and less costly for banks to introduce new technologies when they work together and the new technologies can be introduced in a more efficient manner. An example of new technology might be the internet banking. International experience research detects the important quantitative and qualitative consequences of mergers and acquisitions in employment.

Some consequences of a merger might be:

- Decrease in the employment of less specialized categories.
- Important changes in the role of enterprise senior staff towards more complex and more flexible duties.
- A relative increase in the employment of specialized and younger staff. Companies are relieved of less specialized or/and older excess staff through early or voluntary retirement programs.
- Serious incorporation and compatibility problems among the various management systems, industrial relations and organization of work. (Georgakopoulou,2000)

These factors require careful preparation and may become crucial for a successful merger when deriving from different negotiation systems, collective regulation and definition of payment and labor terms.

1.1. Advantages and disadvantages of bank merges and acquisitions[4][5][6]

a. Some main advantages of M&A could be:

- Economies of scale and of purpose.
- Tax benefits.
- Replacement of inefficient, in the wide competitive environment, in specialized issues management and confrontation of the increased competition.
- Maximization of shareholders' return.
- Infiltration into new markets and their exploitation more easily.
- Reduction of risk using new techniques of managing financial risk.
- The exploitation of the comparative advantage and the acquisition of oligopoly power.
- Creation of a new commercial logo and the supply of products and services at a competitive cost and high added value.
- More efficient confrontation of the phenomenon of disintermediation.

b. Some main disadvantages of M&A could be:

- The difficulties that arise for the personnel of the merged banks to get acquainted with the new fellow workers, the new policies and the new procedures.
- Jealousies and internal competition as well as frictions that often take place among the staff members of the merged banks.
- There is a possibility that the reduction of the personnel and equipment as a result of the merger will be damaging.

[4] "Mergers and Acquisitions and the Altman's Z-score Model for Bankruptcy" Kyriazopoulos, G., Petropoulos, D., ICOAE Athens 2010

[5] Explaining the M&A-success in European bank mergers and acquisitions, Patrick Beitel, Dirk Schiereck, and Marc Wahrenburg, April 2003.

[6] Mergers and acquisitions and bank performance in Europe, the role of strategic similarities, Yener Altunbas, David Marques Ibanez, October 1994.

- In some instances of mergers there will be required, new logos, new writing material, new forms or publications, and thus new stocks for expendable supplies and equipment items that already exist at an additional cost.
- The uncertainty with regards to the approval of the merger by the proper authorities.
- The possibility that the bank that will be created after the merger will have surplus personnel in some departments or positions. For example, it is possible to take place a necessary doubling of specialists in matters of foreign exchange markets, in matters of personnel training etc.
- A possible overoptimistic projection for the size of profitability that will result from the combination of operations of the merged banks will have as a result the buying bank to pay an exorbitant price for the bank being bought out.
- In many cases, the returns of the share of the banks that made buyouts of other banks were lower than the return of the sector as a whole.
- High social cost because it is usually observed a reduction in employment resulting from lying of personnel.

In a merger and acquisition situation Markowitz (1952) considers two rules while starting a new portfolio optimization model for the investor. First the investor does (or should) maximize expected returns, and secondly the investor does (or should) consider expected return a desirable thing and variance of return an undesirable thing.
Even though a merger and acquisition might be considered a relatively good move in the competitive market, facts prove that many times it can have a bad impact in the staff employed by the organizations. As an example, I bring the case of merger and acquisition in Hellenic bank market, which in the period of 1998 – 2003 had 3,627 jobs canceled after the demand of the shareholders to have demand limitations in the number of employed staff (Mylonakis, 2006).

With the introduction of one single market for financial services, and later on after the introduction of euro, an unprecedented process of financial consolidation has taken place in the European Union. During the late 1990's the number of mergers and acquisitions had increased with the introduction of Monetary Union. According to bankers and academics the process of banking integration seems far from completed and is expected to continue in the following years. First many of the forces underpinning this consolidation process, such us the effect of rapid technological advances and financial globalization will continue to exist.

Although banking assets as a percentage of GDP grew from 177.2% in 1985 to 244.2% in 1997 (European Central Bank 1999) the number of European banks decreased from 12,670 in 1985 to 8,395 in 1999 (European Central Bank 2000). This development is mostly driven by mergers and acquisitions among European banks. As a consequence, the European (EU-15) market concentration measured by the market share of the top 5 banks in terms of total assets (CR5) grew by 12 percentage points over the last 10 years to 57.1% in 1999. Second, the number of financial institutions per 1,000 inhabitants in the European Union is doubled than that in the United States of America, suggesting that there is room for consolidation in the European Union. Third, there is a considerable degree of heterogeneity across European Union countries in terms of concentration of banks.

The impact of bank consolidation on the transmission of monetary policy is a multidimensional issue. According to most empirical studies, an increase in banking concentration tends to drive loan rates up, in many local markets thereby probably hampering, to some extend, the pass-through from market to bank lending rates. On the other hand, in terms of quantities, early concerns about loan supply restrictions to small and medium enterprises arising from bank concentration seem to have been exaggerated. The results of the studies indicate a significant improvement in efficiency from bank mergers and acquisitions.

Parallel to empirical studies, literature that uses event study methodology, that typically tries to ascertain whether the announcement of the bank merger creates shareholder value for the target, have an underlying hypothesis that excess returns around announcement day could explain the creation of value associated to the merger.

Recent studies have provided an interesting contribution by sub-sampling the population of merging banks, according to product or market relatedness, to analyse whether certain shared characteristics among merging institutions could create or destroy shareholder value or performance. By and large, the main conclusion of these studies is that while mergers among banks showing substantial elements of geographical or product relatedness create value, dissimilarities tend to destroy overall shareholder value.

The geographic focus of a transaction in a domestic transaction provides a higher synergy potential (e.g., more cost savings) than cross-border transactions thus being able to create value easier and also more understandable for capital markets. Almost all studies that cover the geographic focus of a transaction conclude that more shareholder value is created when target bidder operate in a related geographical region.

The relative size of a target (the impact of the target’s size on the M&A-success) in relation to a bidder of the acquisition of smaller targets is less complex and although scale effects may be smaller, capturing existing value creation potential may be easier. However, the larger the target the larger possible synergies (through scale economies) may be. Thus the acquisition of targets that provide for sufficient synergies but still are of a manageable size should have a positive impact on value creation.

The growth focus of a transaction is considered as being growth focused if a bidder acquires a target with a strong growth rate. M&A-transactions often are considered as means for stimulating growth and thus the acquisition of a fast growing target supports the growth of a bidder even more.

The risk reduction potential of a transaction is measured by the correlation coefficient of the stock market returns of target and bidder returns during the estimation period of the event study. The lower the correlation coefficient, the higher the diversification/risk reduction potential of a transaction is. It is expected that diversifying transactions smoothen earnings volatility and thus provide for more certainty in stock returns. According to popular management theories, this may have a positive impact on value creation. On the other hand, diversifying transactions may suffer from the conglomerate discount due to the stock market preference for “pure play” stocks.

1.2 Quantitative factors[7]

In all mergers and acquisitions primary factor is the price the one buying has to pay for the other. The quantitative factors that are under primary consideration are:

- Current Profits
- Current stock price
- Logistic Accounts
- Net Capital movement

There are more factors that can't be measured in quantitatively that excuse the high selling price while the quantitative factors indicate a lower selling price.

1.3 Due Diligence Process[8][9][10]

Due diligence is a generally accepted method in undertaking an assessment of potential M&A targets. Sinickas (2004) defines due diligence as "where each party tries to learn all it can about the other party to eliminate misunderstanding and ensure the price is appropriate". Angwin (2001) identifies due diligence as critical in M&A process. This author points out that effective due diligence should be a comprehensive analysis of the target company's entire business, not just an analysis of their cash flow and financial stability as has traditionally been the case.

It is one of the most critical elements in the success of a merger and acquisition transaction. It is a two-way street: Buyers must understand what they are buying; and targets must understand who's pursuing them and whether they should accept an offer. For a successful conduct of due diligence, it should have senior management involvement and control and often assisted by outside experts such us management consulting firms. Due Diligence process is an analysis of outstanding surety liability and related indemnity matters which are all critical considerations during M&A. Surety bonds are credit instruments that are backed by corporate guarantees in the form of indemnity agreements. Sometimes from the company is required to provide collateral to further support the surety requirements.

The Due Diligence process covers four specific areas: (a) Impact of the indemnity agreement; (b) The transfer of surety liability; (c) Disruption to program management; and (d) Underwriting and credit elements. The goal of this analysis is to identify and address potential issues prior to the transaction closing date and help the parties affected from the purchase/sale agreement understand how these issues can effect the transaction.

As an instrument through which we reveal and remedy potential sources of risk, due diligence enables firms to formulate remedies and solutions to enable a deal to proceed. Clearly it is easier to obtain high-quality data if the deal is friendly; in unfriendly deals due diligence may never progress further than publicly available data. This lack of access to internal information has scupper many a deal-for

[7] The advantages and disadvantages of mergers and acquisitions in banks in Global and Greek economy, Kyriazopoulos Georgios, Zissopoulos Dimitrios, Sariannidis Nikolaos, ESDO 2009

[8] Planning for a successful merger or acquisition: Lessons from an Australian study, Jarror McDonald, Max Coulthard, and Paul de Lange, 2005

[9] Surety Merger & Acquisition, Due Diligence, Douglas R. Wheeler.

[10] Due Diligence Requirement in Financial Transactions, Scott Moeller, 2007

example, the takeover attempt by Sir Philip Green of Marks& Spencer in 2004.

Each industry has its own special due diligence requirements, in the case of a bank it would require a review of its making policies and risk management systems. Due diligence also expands into:

- Financial Due Diligence
- Legal Due Diligence
- Commercial Due Diligence
- Innovation Due Diligence
- Management Due Diligence
- Cultural Due Diligence
- Ethical Due Diligence
- Risk Management Due Diligence

In the following study we also try to investigate the impact it had on Laiki Bank after the acquisition with Marfin Investment Group and the rename of the company to Marfin Popular Bank.

Chapter 2 Profitability and DuPont Analysis

The profitability of the banking sector, has improved significantly in the first seven years of the new millennium before the crisis start up. This was a result of the general reform of the banking system (write off of non-performing loans, privatization of state-owned banks, the introduction of modern banking techniques, credit expansion, and the introduction of the euro) and the high intermediation spread in these countries.[11] In the future, the financial institutions should find different sources of profitability, since the intermediation spread is expected to fall as the economies stabilize, the interest rates fall and the competition among banks increase. The financial institutions should seek for these new sources of profitability in the retail banking and the asset management, while they should try to increase their market share. On the other hand they should control their operating expenses and expand their activities quite careful, in order to minimize their losses from bad loans.

> The analysis of the financial statements of a business includes besides the selection of the appropriate index and the comparison, without which the resulting conclusions do not have any meaning and most probably they do not lead to the correct explanation. The comparison makes sense when it is done in relation to time and in relation to the similar businesses or the sector. This double comparison gives the capability of a more correct explanation of the indexes and consequently of the business condition (Papoulias, 2000).

Profitability of banks is measured mainly by two ratios. The Return on Equity (ROE) that increase the wealth of the shareholders and the Return on Assets (ROA) that show to the investors how cable is the bank management to yield earnings and how profitably use the hole assets of the bank.

2.1 Return on Equity ROE[12][13][14]

This index reflects the efficiency with which the bank uses the capital of its owners, as it shows the size of profits that were created by the

[11] "Does the Cross Border Mergers and Acquisitions of the Greek Banks in the Balkan area affect on the course of profitability efficiency and liquidity indexes of them"? Kyriazopoulos G., Petropoulos D., EBEEC Pitesti 2011

[12] Vasiliou D., Financial Management Patra 1999

[13] Financial Analysis of banking institutions, K. Selvavinayagam, 1995.

[14] Applied principles of finance, Woolridge, J. Randall and Gray, Gary, 2006.

capital that was invested by the shareholders (owners) of the bank enterprise. This ratio relates profit earned after tax by the bank to resources contributed by its owners (K.Selvavinayagam, 1995). Return on Equity (ROE) measures the rate of return on the ownership interest. It measures a firm’s efficiency on generating profits from every unit of shareholder’s equity. Finally, ROE shows how well a company uses investment funds to generate earnings growth. The equation for finding ROE is as follow:

$$ROE = \frac{\text{Earnings Before Interest And Taxes}}{\cancel{\text{Total Sales}}} \times \frac{\cancel{\text{Total Sales}}}{\cancel{\text{Total Assets}}} \times \frac{\cancel{\text{Total Assets}}}{\text{Equity}}$$

$$\text{Which simplifies to: } ROE = \frac{\text{Earnings Before Interest And Taxes}}{\text{Equity}} \quad \textbf{(1)}$$

ROE = Net Profits / Total Equity **(2)**

Analyzing the specific index of efficiency of the shareholders total equity, we can find out if the purpose of achieving a satisfactory result has succeeded.

2.2 Return on Assets (ROA)[15][16]

This index reflects the administrations capability to use efficiently the financial resources (assets) that has at its disposition, in order to create profits.

> This ratio often described as the primary ratio, relates the income earned by the bank to the resources employed by it. Normally ‘return’ is taken as profit before extraordinary items, since these items fall outside the scope of the bank’s normal operations. This does not mean that extraordinary items should be ignored by the analyst, but that their significance should be assessed as a separate exercise from the analysis of the bank’s performance (K.Selvavinayagam, 1995).

Return on Assets (ROA) ratio show us how profitable a bank’s assets are in generating revenue. It is a useful number for comparing competing banks in the same countries. The equation for finding ROA is as follow:

$$ROA = \frac{\text{Earnings Before Interest And Taxes}}{\cancel{\text{Sales}}} \times \frac{\cancel{\text{Sales}}}{\text{Total Assets}}$$

$$\text{Which Simplifies to: } ROA = \frac{\text{Earnings Before Interest And Taxes}}{\text{Total Assets}} \quad \textbf{(3)}$$

ROA = Net Profits / Total Assets. **(4)**

Analyzing the specific index we could:

- Compare the efficiency among the co-operative banks.
- Observe the efficiency through time.

[15] Does the Cross Border Mergers and Acquisitions of the Greek Banks in the Balkan area affect on the course of profitability efficiency and liquidity indexes of them”? Kyriazopoulos G., Petropoulos D., EBEEC Pitesti 2011

[16] Principles of Accounting, Susan V. Crosson; Belverd E., Jr Needles,Powers Marian, 2008.

- Compare efficiency of co-operative banks with the efficiency of the banking sector as a whole.
- Investigate the reasons of the changes through time.

2.3 The Dupont Analysis[17],[18],[19],[20],[21]

The DuPont system of financial analysis can be used to construct a financial plan for the bank. The DuPont system of financial analysis provides a means for the firm to monitor performance through the planning period and to post-audit the planning process.

> *DuPont comes from DuPont Corporation that started using this formula in 1920s. DuPont ratio analysis breaks down ROA (Return on Assets) and ROE (Return on Equity) into three basic components that determine profit efficiency, asset efficiency and leverage. This is an attempt to isolate the causes of strength and weakness in the firm's performance. DuPont focuses on expense control, asset utilization and debt utilization (Bodie, Zane; Alex Kane and Alan J. Marcus, 2004).*

The Return on total-Assets can be broken into two components. It equals the product of the profit margin and total asset turnover ratio. Like the Return on total Assets, Return on Equity can be broken down into component parts to tell us why the level of return changes from year to year or why two banks' returns on equity differ. The Return on Equity is identical to Return on total Assets multiplied by the Equity Multiplier. A bank's Return on Equity may differ from one year to the next, or from a competitor's, as a result of differences in profit margin, asset turnover, or leverage. Return on Equity directly reflects a bank's use of leverage or debt. If a bank uses relatively more liabilities to finance assets, the Equity Multiplier will rise, and, holding other factors constant, the firm's Return on Equity will increase. This leveraging of a bank's Return on Equity implies only a greater use of debt financing. This breaking down of Return on total Assets, and Return on Equity into their component parts is what DuPont analysis is.

It is believed that measuring assets at gross book value removes the incentive to avoid investing in new assets. New asset avoidance can occur as financial accounting depreciation methods artificially produce lower ROEs in the initial years that an asset is placed into service. If ROE is unsatisfactory, the DuPont Analysis helps locate the part of the business that is underperforming.

The Return on Equity model disaggregates performance into the three components that determine Return on Equity: net profit margin, total asset turnover, and the Equity Multiplier. The profit margin allows the evaluation of the income statement and the components of the income statement. Total asset turnover allows the evaluation on the left-hand side of the balance sheet which is composed of the asset accounts. The Equity Multiplier allows the evaluation of the right-hand side of the balance sheet which is composed of liabilities and owners equity. Return on Equity analysis provides a system for planning (budgeting) in addition to analyzing the financial institution's performance.

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[17] Evaluating the impact of a rapidly changing economic environment on bank financial performance using the DuPont system of financial analysis, Henry W. Collier, Carl B. McGowam & Junaina Muchammad, 2010.

[18] Essentials of Investments, Bodie, Zane; Alex Kane and Alan J. Marcus, 2004.

[19] Reviewing and Assessing financial information, techbooks, 2006.

[20] DuPont Analysis, Investopedia.com, 2011.

[21] Evaluating the impact of a rapidly changing economic environment on bank financial performance using the DuPont system of financial analysis, Henry W. Collier, Carl B. McGowam & Junaina Muchammad, 2010.

The net profit margin allows the development of a pro forma income statement. An abbreviated income statement would be composed of net income equal to revenues minus expenses. The financial planner can determine the projected revenue level needed to meet the target net income level. The total asset turnover ratio permits the determination of the total asset level needed to generate the projected total revenue level. The total asset requirement can be used to project the pro forma levels of all of the asset accounts based on the target current asset to fixed asset level. The fundamental equation of accounting is that assets equal liabilities plus owners equity. The Equity Multiplier ratio can be used to determine the pro forma financial needs and the financial structure of the financial institution.

DuPont analysis simplified is similar with ROE even though it uses its own formula to present the same results compiling together ROA and Equity Multiplier.

DuPont Analysis: $ROE = ROA \times \text{Equity Multiplier}$

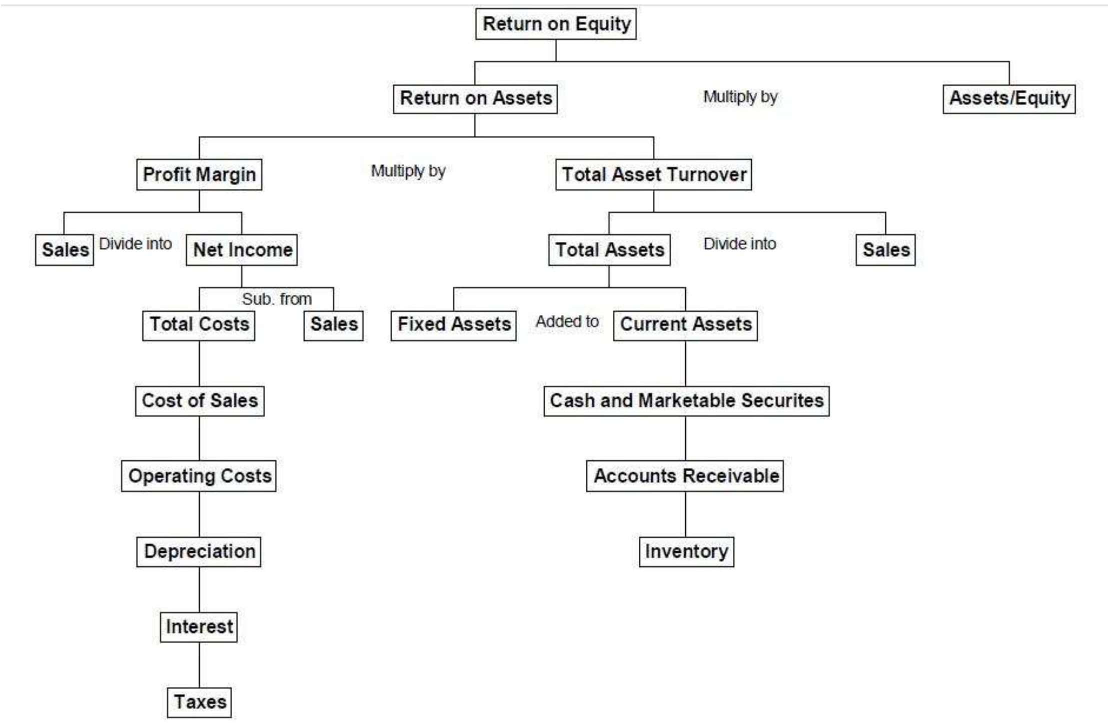
$$ROE = \frac{\text{Earnings Before Interest and Taxes}}{\cancel{\text{Sales}}} \times \frac{\cancel{\text{Sales}}}{\cancel{\text{Total Assets}}} \times \frac{\cancel{\text{Total Assets}}}{\text{Equity}}$$

Which Simplifies to:

$$ROE = \frac{\text{Earnings Before Interest and Taxes}}{\text{Equity}} \quad \textbf{(5)}$$

Equity Multiplier = Total Assets / Equity. **(6)**

Below in the ***graph No.1*** it is representing the expanded DuPont analysis.



Source: Van Voorhis, K.R. "The DuPont Model Revisited: A Simplified Application to Small Business"

2.4 Net Income

Net income or net earnings and net profit are all three terms to describe the residual income of a bank after adding total revenue and gains and subtracting all the expenses and losses for a reporting period (for the current study for yearly periods). Net income can either be distributing among the shareholders or be held by the bank as additional retained earnings.

2.5 Total Assets[22]

Total assets in financial accounting are all tangible and intangible economic resources that are owned by the bank or controlled in order to produce positive value for the bank. Tangible assets are divided into different subclasses, including current assets and fixed assets. Current assets are all assets on the balance sheet which can either be converted to cash or be used to pay current liabilities within 12 months. Typically current assets include inventory. Fixed assets, also known as a non-current asset are all assets and property which cannot easily be converted into cash; include buildings, equipment and etc. Intangible assets are non-physical resources and rights that have a value to the firm because they give the firm some kind of advantage in the market place. Intangible assets could be goodwill, copyrights, trademarks, patents and computer programs. Intangible assets are all non-monetary assets that cannot be seen, touched or physically measured and are created through time and effort and that are identifiable as a separate asset. Intangible assets have two primary forms, legal intangibles and competitive intangibles. Legal intangibles are known under the generic term intellectual property and generate legal property rights defensible in a court of law. Competitive intangibles are the sources from which competitive advantage flows, or is destroyed. In banks it is used to describe a resource held by the bank that has the following characteristics:

- The bank has a probable future benefit from the asset.
- The business has an exclusive right to control the benefit.
- The benefit must arise from some past transaction or event.
- The asset must be capable of measurement in monetary terms.

One key feature of the assets a bank's balance sheet has as opposed to a bank's balance sheet is the loans which are recorded as assets. Another important feature of a bank's balance sheet is whether a contract is an asset in the banking book or whether it is in the trading book, because a part of the bank may be buying and selling the same bonds in the secondary market with a view to make profits from buying at a low price and selling at a high price later. These would form part of the assets in the trading books.

2.6 Equity[23]

This means 'ownership.' An equity investment in a bank usually means ownership of ordinary shares in the bank. Equity is the residual claim or interest of the most junior class of investors in assets, after all liabilities are paid. Shareholders' equity represents the remaining interest in assets of a bank, spread among individual shareholders of common or preferred stock.

[22] Report On Banks, Accounting in Banks, Robert Tripp, 2005
[23] Glossary of financial terms, Stewart Alison, 2000

2.7 Profit Margin[24]

Profit margin is a measure of profitability that is mostly used for internal comparison. It is difficult to accurately compare the net profit ratio for different entities. Individual businesses' operating and financing arrangements vary so much that different entities are bound to have different level of expenditure, so that comparison of one with another can have little meaning. A low profit margin indicates a low margin of safety: Higher risk that a decline in sales will erase profits and result in a net loss, or a negative margin. Profit margin is an indicator of a company's pricing strategies and how well it control costs. It differences in competitive strategy and product mix cause the profit margin to vary among different companies.

$$\text{Profit Margin} = \frac{\text{Net Income}}{\text{Revenue}} \quad \textbf{(7)}$$

2.8 Equity Multiplier[25]

A formula also known as debt management ratio used to calculate a bank's financial leverage, which in other words is the debt a bank uses to finance its assets. The way of calculating equity multiplier is by dividing the total assets by the stockholder equity of a bank's balance sheet. What we get out of this calculation is a direct measurement of the total number of assets per dollar of the stockholders' equity.
The way to give a term to the result is that a lower number indicates lower financial leverage and vice versa. Of course, a lower equity multiplier is desired because it means a bank is using less debt to fund its assets. The Equity Multiplier is also a kind of leverage ratio, which is any method of determining a bank's financial leverage. Other leverage ratio equations include the debt-to-equity ratio, which assesses financial leverage by taking a bank's total liability and dividing it by the shareholders' equity. Other leverage ratio equations are similar, using some formulaic combination of a company's assets, liability and shareholder equity to measure the amount of debt being used to finance assets.
The equation for equity multiplier is as follow:

$$\text{Equity Multiplier} = \frac{\text{Total Assets}}{\text{Equity}} \quad \textbf{(8)}$$

2.9 Earning Before Interest and Taxes (EBIT)[26]

This is an indicator of a company's profitability. It is calculated as revenue minus expenses, excluding tax and interest. Other similar terms that describe EBIT are: "operating earnings", "operating profit", and "operating income". EBIT is all profits before taking into account interest payments and income taxes. EBIT nulls the effects of the different capital structures and tax rates. By excluding both taxes and interest expenses, the figure hones in on the company's ability to profit and thus makes for easier cross-company comparisons.

[24] What is profit margin, investorwords.com, 2011
[25] What is an equity multiplier, Matt Brady, Jenn Walker, 2011.
[26] Earnings Before Interest and Tax – EBIT, Investopedia.com, 2011

Chapter 3: MarfinLaiki Bank. A new bank after the merge

After the merge that took place in 2005 between Laiki bank from Cyprus and Marfin Investing Group from Greece a new big bank created which established in Cyprus.

3.1 Laiki Bank

Laiki bank formerly known as “Popular Savings Bank of Limassol” was established in 1901 in Limassol. In the first 23 years of its operations, the Savings Bank accepted deposits of “one shilling or more” and granted loans on current accounts and bonds. In 1924, “Popular Savings Bank of Limassol” converted after a decision by the board of directors into a fully-fledged banking institution, in accordance with the public companies law. It was the first public company in Cyprus to be registered. The public from now on has the opportunity, to not only save and deposit, but also to invest in the shares of its own bank in the stock exchange in Cyprus. This novelty was justifiably described as the first incentive for the creation of the Stock Exchange in Cyprus. Forty-three years later and in 1967 the management decided to expand the activities of the bank to cover the entire island and to change its name to the “Cyprus Popular Bank Ltd”, reflecting its true character of being a Pancyprian bank until 2005.[27]

3.2 Marfin Investing Group[28]

MIG traces its origins to Marfin E.P.E.Y., an investment Services Company incorporated under Greek law in 1998. Under the leadership of Mr. Andreas Vgenopoulos, this company developed a strategy focused on restructuring and consolidation in the Greek banking sector.
Beginning in 2001, the company executed a series of investments and acquisitive transactions involving Greek and Cypriot financial institutions. This investment strategy culminated in December 2006 in the establishment of Marfin Popular Bank as one of the largest retail banking groups in Greece and Cyprus, following the acquisition by Laiki Group S.A. of approximately 97% of the issued share capital of MIG and the subsequent assimilation of the banking assets of MIG, Laiki Group S.A. (Laiki Group) and Egnatia Bank S.A. (Egnatia) at an operational level. Around the same time in 2006 the Dubai Group bought 35% stake in the company.

Shortly thereafter, on 4 May 2007, MIG disposed of its principal banking assets to MPB (with the separate transfer of AS SBM Bank to MPB subject to Estonian and Cypriot regulatory consents) and separated itself operationally from Marfin Popular Bank, reflecting the end of Marfin Popular Bank’s restructuring/consolidation phase and its relative maturity as an operating entity.

The acquisition of Laiki Bank from Marfin Bank as stated before happened in 2006. In 2006 Marfin Investment Group acquired 12.81% of the stock exchange of Laiki bank for 5.21 Euro for each share, with a plan of acquiring the 100% of the whole bank. 19th May 2009 it is officially announced between the two banks that at 30th of June 2009

[27] Marfin Laiki Bank history, laiki.com, 2011
[28] Marfin Investment Group History, marfininvestmentgroup.com, 2011

they will merge together. By that date Marfin Popular Bank acquires 97.02% of Marfin Egnatia Bank. The merge had as a result the creation of a bigger bank which uses all the recourses from both banks as one under the name Marfin Popular Bank. In a newer announcement of Marfin Egnatia Bank on 30th of March 2011 state that as from 01/04/11 the bank (MEB) stops to exist and as from that day on it will operate as a branch of Marfin Popular Bank Public Co Ltd. Along with the above announcement of MEB, Marfin Popular Bank announced the acquisition of 49.96% of the Russian bank OJSC RPB-Holding and OOO Rossiysky Promyshlenny Bank for the price of 51.6 million Euro. The transaction is expected to be completed by the end of the second half of 2011.

3.3 Financial Ratios for Marfin Laiki Bank before and after the acquisition

First, we demonstrate the numbers from which the results have come. All numbers are in Euro (€) currency. From 2002 to 2005 the numbers correspond only to Laiki Bank and from 2006 to 2010 the numbers correspond to Marfin Laiki bank, the new bank that emerged after the acquisition with Marfin Investment Group. EBIT, Total Assets and Equity have all been retrieved from the consolidated balance sheet and bank's balance sheet of Laiki Bank and later known as Marfin Laiki Bank

Table 1: E.B.IT/Total Assets/Equity/Net Interest Income for Laiki bank before the acquisition

Year	E.B.I.T	Total Assets	Equity	Net Interest Income
2002	321,72	8.417,41	474,31	211,90
2003	338,26	8.750,81	904,95	225,14
2004	382,16	9.814,90	586,35	258,14
2005	443,98	12.273,67	659,61	299,75

Source: Laiki Bank balance sheets. The amounts are in million euros

The numbers for the values in Euro in the diagram 1 (see appendix) correspond to millions and the numbers that are listed in table 1.

Table 2: E.B.IT/Total Assets/Equity/Net Interest Income for Marfin Laiki bank after the acquisition

Year	E.B.I.T	Total Assets	Equity	Net Interest Income
2006	538,54	22.600,00	3.100,00	359,06
2007	1.242,33	30.253,80	3.482,55	669,37
2008	1.085,28	38.353,23	3.561,45	744,40
2009	1.074,85	41.828,36	3.759,24	635,78
2010	1.012,41	42.580,48	3.641,27	709,54

Source: Marfin Laiki Bank balance sheets. The amounts are in million euros

The numbers for the values in Euro in the diagram 2 (see appendix) correspond to millions and the numbers that are listed in table 2.
The next table presents the EBIT, Total Assets and Equity of Marfin Investment Group; the data have been taken from the company's official website from the Annual reports.

Table 3: E.B.IT/Total Assets/Equity/Net Interest Income for Marfin bank before the acquisition

Year	EBIT	Total Assets	Equity	Net Interest Income
2004	12,979,00	958,99	249,84	8,37
2005	26.730,00	1.633,96	662,46	12,10

Source: Marfin Bank balance sheets. The amounts are in million euros

The numbers for the values in Euro in the diagram 3 (see appendix) correspond to millions and the numbers that are listed in table 3.

Table 4: ROA & ROE for Laiki Bank from the year 2002-2005

Year	ROA	ROE
2002	3.82%	67.83%
2003	3.87%	37.38%
2004	3.89%	65.18%
2005	3.62%	67.31%

Source: Financial Results from financial Statement Laiki Bank.

Return on Assets has been steady for these four years between 3,89% the maximum in the year 2004 and 3,62% the minimum in the year 2005. On the other hand Return on Equity is steady around 67% even if it had a decrease of almost 30% in the year 2003 the bank managed to get back to the same healthy results.

Table 5: ROA & ROE for MarfinLaiki Bank from the year 2006-2010

Year	ROA	ROE
2006	2.38%	17.37%
2007	4.11%	35.67%
2008	2.83%	30.47%
2009	2.57%	28.59%
2010	2.38%	27.80%

Source: Financial Results from financial Statement MarfinLaiki Bank.

ROA of the new bank compare with Laiki Bank in the first year after the merge (2006) had a decrease and it went down into 2,38% from the last year (2005 3,62%) before the merge but in the year 2007 it had a very high increase and went up to 4,11%. However the new bank MarfinLaiki Bank did not manage to maintain this high percentage of ROA from the year 2007 and it went down again in the years 2008-2010. On the other hand ROE of the new bank compare with Laiki Bank had a deep decrease and it went down into 17,37% in the first year of the merge (2006) from the last year before the merge (2005 37,61%) that it measured only for Laiki Bank. In the year 2007 the new bank managed to double the index of ROE but not in the level of Laiki Bank. However from the year 2008 until the year 2010 the ROE had a decreasing course.

Table 6: DuPont Analysis for Laiki Bank from the year 2002-2005 and DuPont Analysis for MarfinLaiki Bank from the year 2006-2010

Year	DuPont
2002	67.79%
2003	37.42%
2004	65.11%
2005	67.36%
2006	17,35%
2007	35,70%
2008	30,48%
2009	28,60%
2010	27,80%

Source: Financial Results from financial Statement Laiki Bank.

In the above diagram we can see the course of the DuPont Analysis of the Laiki Bank from the years 2002-2005 and the Dupont Analysis for the new bank MarfinLaiki Bank from the years 2006-2010. We observe that after the merge the new bank had very low level of the index of ROE even though someone would expect that the new bank will have a very high increase of ROE. We can justify this decrease of ROE only if we consider that the financial crisis began in the year 2007 and it goes on until today.

Conclusions

Laiki bank shows that before the acquisition took place managed to maintain high standards for her investors and customers. The index of ROE of Laiki Bank never felt below 37%, making the company reliable for the investors. At the same time, return on assets has been steady through the period of four years before and after the acquisition but in a high level. The bank before the acquisition was getting bigger and more reliable year by year, showing no operating inefficiencies. The acquisition came and just added to Laiki's roster more customers globally and domestically, making it into one of the leader financial institutions in Cyprus and Greece.

However ROA lower percentage touched 3.62% and the higher 3.89% ROE lower percentage was 37.38% and the higher 67.83% before the acquisition and after the acquisition ROA lower percentage touched 2.38% which was in 2006 and in 2010 and the higher 4.11% which is the higher percentage that was achieved from the bank before or after the acquisition for these years being studied and ROE lower percentage was 17.37% and the higher 35.67%.

The DuPont analysis show us that the new bank in the following years need to increase its profitability significantly, so it can be able to face the financial crisis that started in the year 2007 and goes on until now. As it is kwon the increase of ROE also increases the wealth of shareholders. But in this merge we can see that after the creation of the new bank Marfin Laiki the index of ROE was lower than the ROE of Laiki Bank. So in the new bank MarfinLaiki we did not have icresed of the wealth of the shareholders. There is no doubt that if we had not this financial crisis we could say that until today the examined in this paper merge did not work out from the terms of profitability.

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APPENDIX

Diagram 1 extract from table 1

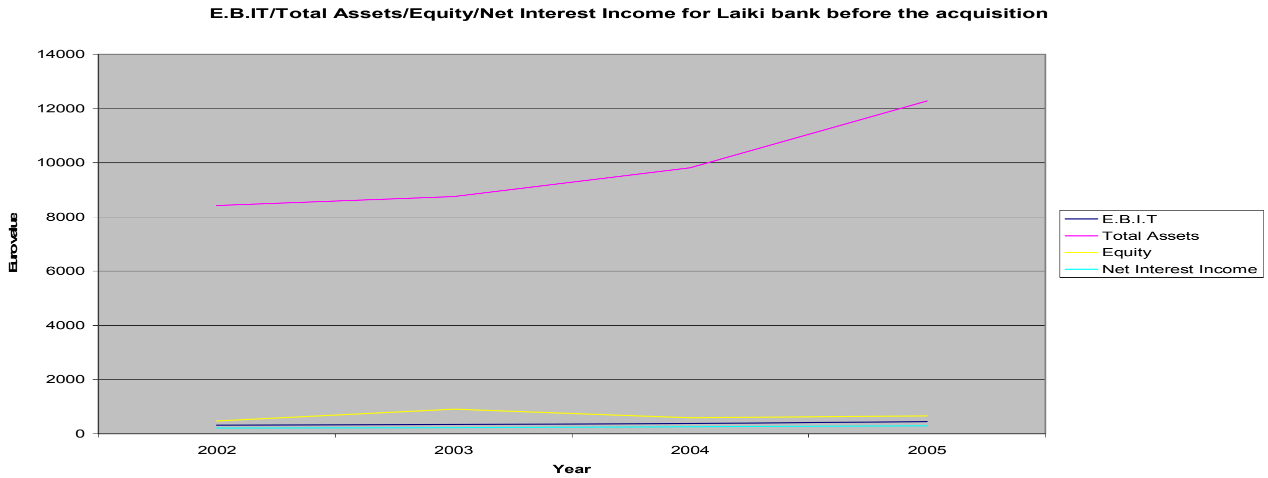


Diagram 2 extract from table 2

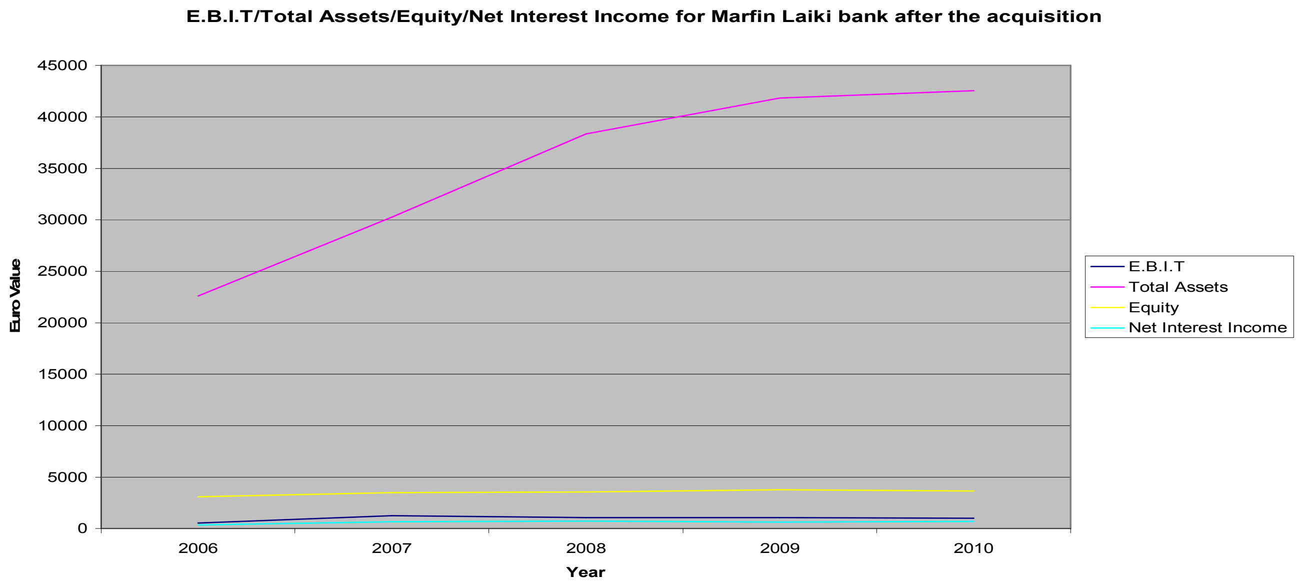


Diagram 3: extract from table 3
E.B.IT/Total Assets/Equity/Net Interest Income for Marfin bank before the acquisition

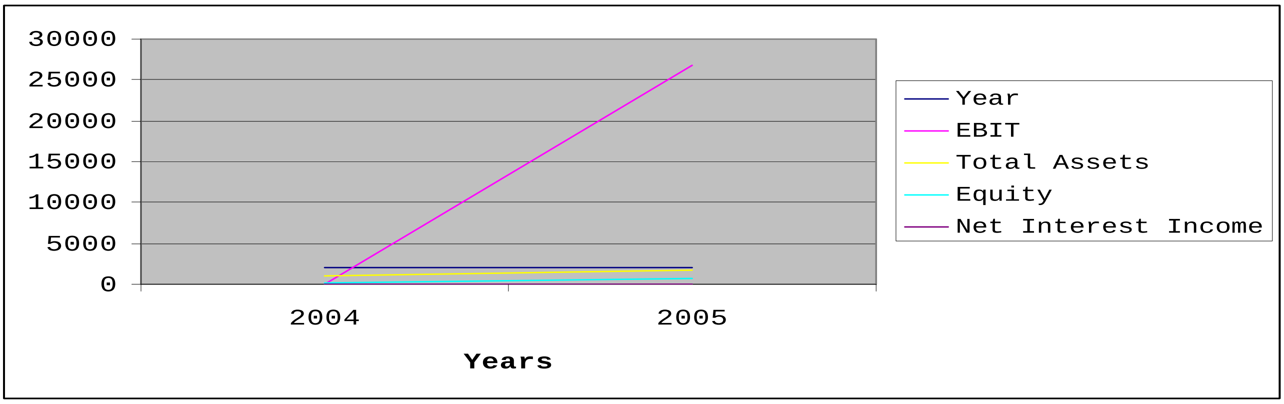


Diagram 4 extract from table 4
ROA & ROE for Laiki Bank from the year 2002-2005

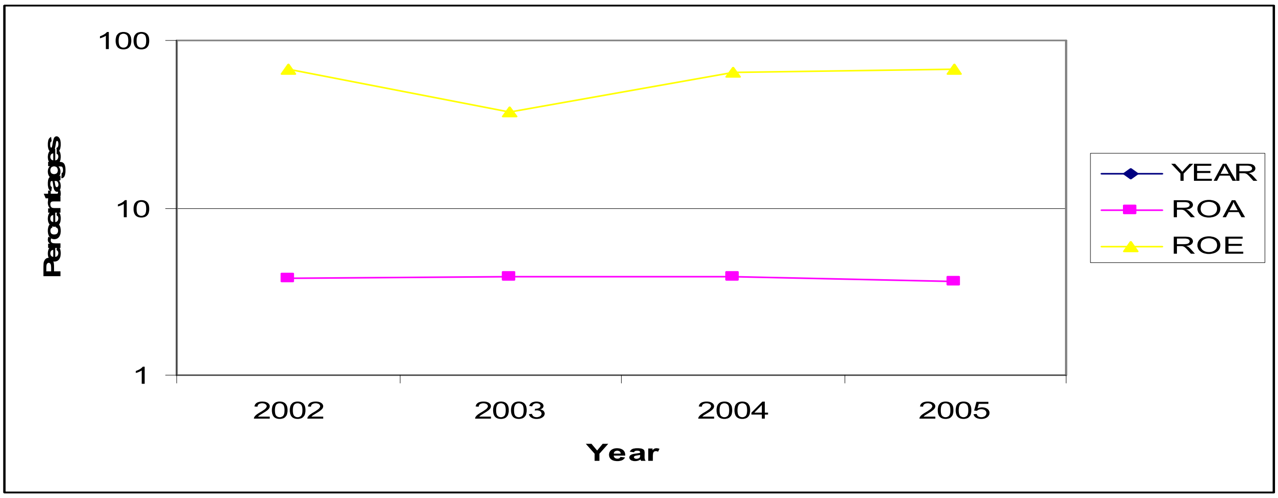


Diagram 5 extract from table 5
ROA & ROE for Marfin Laiki Bank from the year 2006-2010

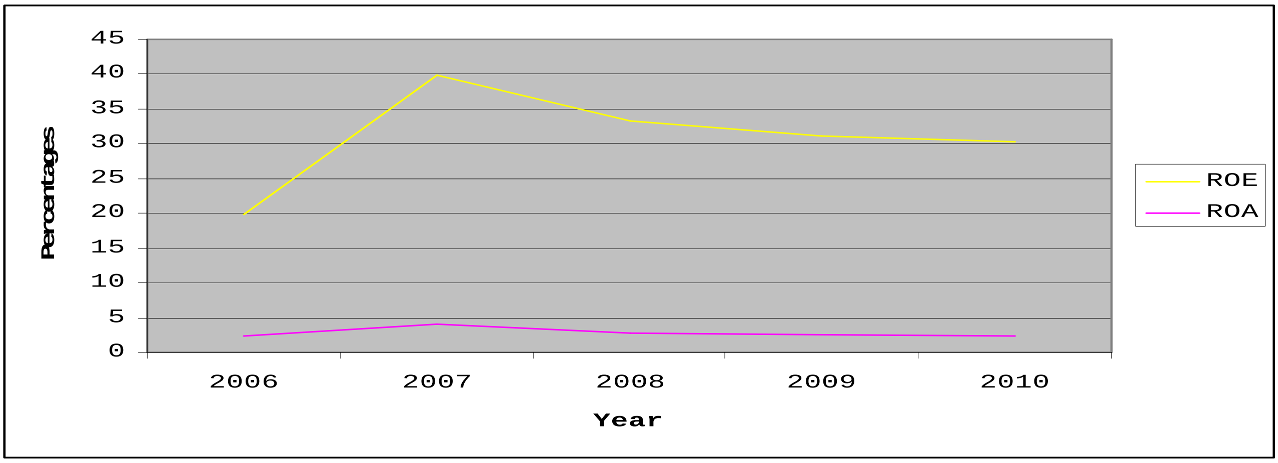
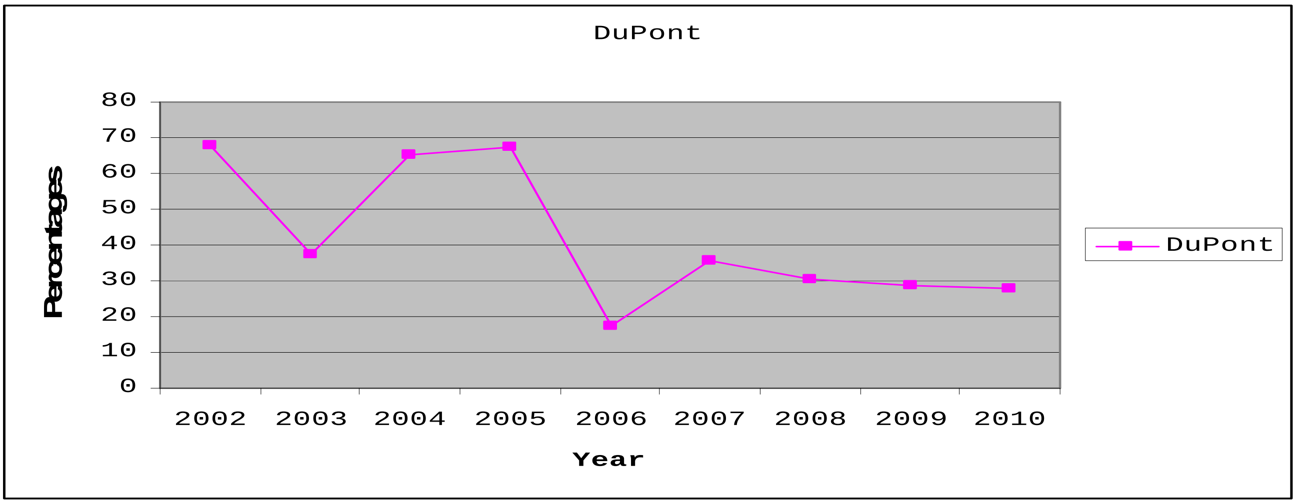


Diagram 6 extract from table 6

DuPont Analysis for Laiki Bank from the years 2002-2005 and DuPont Analysis for MarfinLaiki Bank from the years 2006-2010



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