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**Determinants of Non-Performing Loans (NPLs)-case of European Union, Asia
and Middle- East**

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1. Introduction

Due to the financial crisis, the amount of non-performing loans (NPLs) have increased substantially in some EU countries. The highest level of NPL ratio belongs to the Cyprus with total ratio of 48 percent and lowest to Finland with a ratio of 0.41 percent, according to the Bloomberg database (2018). European Union has total amount of NPLs at approximately 1 trillion Euro and NPL average ratio of about 5.1 percent (Humblot, 2017). This research will critically examine the literatures studied the relationship between macroeconomics and bank specific factors in the level of NPLs.

In general, NPL is defined as a loan when the repayment is past due by 90 days or the debtor cannot pay and classified as “unlikely to pay” without understanding the collateral of the loan (Rajha, 2016). There are different macroeconomic factors such as unemployment, Gross Domestic Product (GDP), inflation and growth in export have considered to be the main reasons on rise in the level of NPLs in the last few years (Berger and DeYoung 1997, Louzis et al (2010), Rossi et al. (2005), Klein (2013) and Anjom and Karim 2015).

Large amount of NPLs could lower banks profitability, generate risks of financial stability and reduce the capital availability of the banks (Fell et al. 2017). This in turn results in systematic risk events and spill overs as well as reduce the lending growth in the European Union. This is specifically harmful for SMEs which are highly dependent on bank loans.

In this report, our aim is to critically examine the relationship between macroeconomic factors and NPLs level in different countries including Europe, Asia and Middle East. Our objective is to determine which factors have the most affect in rise in level of NPLs. Developing countries have different structuring forms where they are changing from a

centrally planned to more market-based economy. They also strengthening their financial institutions to facilitate their restructure and change their state-owned organisation to privatisation. Thus, this would be interesting to investigate both type of countries to understand the main factors affecting the level of NPLs.

The 2007-8 financial crisis resulted in understanding the importance of linking macroeconomic factors to the bank loans. Financial crisis caused asset prices to fall substantially and resulted in borrowers' default in the financial system (Humblot, 2017). This in turn results in significant losses for the banks and deteriorate their ability to extend credit. Banks are playing a key role in any country's economy and due to the interconnectedness of the financial market in a global scale it is important to them to stabilise their credit and default risk (Allen and Gale, 2000).

Different countries around the globe are facing difficulties and need to find a solution to reduce NPLs. Among academics and professional selling in secondary market, reforming tax rules, better supervision and securitisation scheme are the main proposals to date. However, there are obstacles in reducing NPLs using above proposals. For example, in terms of disposing NPLs in secondary market there is no fundamental model in setting at what price banks should sell their loans. The investors are interested to buy NPLs at a discounted price which is below what banks have to sell. This results in huge loss for the banks and thus results in further liabilities.

The structure of this report is as follow: chapter 2, covers the literature review including the background and previous research. Chapter 3 will critically analyse a research paper done by Dimitrios, Helen and Mike (2016) in this topic area. Chapter 4 covers the conclusion and finally chapter 5 includes the reference lists.

2. Literature Review

2.1. Background

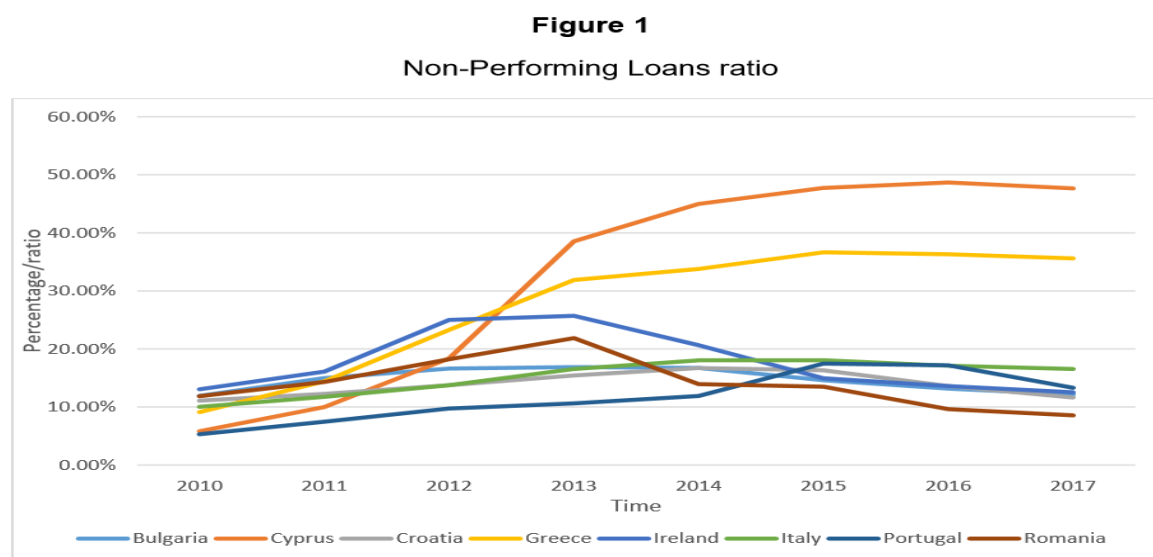
When a bank does not receive a full or partial payment of a loan, it should classify it as a bad loan and reflect in the bank financial statement (Rajha, 2016). By doing this, stakeholders, regulators, management and other individuals could see the level of NPLs as well as strength of the bank (Zhang et al. 2016). Therefore, bad loan is defined as financial agreement where the borrower did not pay the interest according to the agreed repayment schedule.

The NPLs are known as one of the main reasons of bank failures. A failed financial institution causes systematically negative affect to the whole economy resulting financial instability and contagion risk to other banks (Cifuentes et al. 2005). Therefore, it is important to understand and manage Non-Performing Loans in a way to maintain it in an acceptable level to bring more stability into the banks and financial system of a country. Therefore, to have a good management of NPLs it is important to understand the determinants of non-performing loans and their relationships with each other.

For example, IndyMac Bank based in United States was closed due to credit crisis on 11 July 2008. This was during the financial crisis where they would not able to withstand with the bank run plus their eroding loan portfolio. They have proved to be extended credit to non-qualified individuals and companies. This resulted in borrowers defaulting coupled with financial crisis resulted the bank to default. As of July 2008 IndyMac, bank had total assets of \$32 billion and total deposits of \$19.06 billion which clearly indicates their fragile loan portfolio.

According to the research conducted by Berger and De Young (1997) monitoring borrowers poorly by poor management skills, as well as poor evaluation of collaterals could result in an increase in NPLs level in future. Zhang et al. (2016) concluded that a rapid expansion in credit was the main factor resulting in developments of NPLs in the EU. The “too-big-to fail”¹ banks had assumption in extending loans to gain higher profit while causing loans to be extended to low quality borrowers. Therefore, adverse selection² and moral hazard³ problems have negatively affected EU banks causing in increase in level of NPLs.

Below Figure 1. Illustrate the countries with high level of NPLs ratio from the period 2010 to 2017. As you see, Greece and Cyprus have the highest level of NPLs ratio reaching to almost 50 percent and 35 percent, respectively. Other countries such as Italy, Croatia and Ireland are among the countries having NPLs ratio ranging from 8 percent to 20 percent.



¹ This theory asserts that some financial institutions are so big and interconnected that their failure results in economy disaster.

² This is when sellers have more prior information that buyers do not have or vice versa. Popular Lemons problem by George K Akerlof explain this in more details, please visit: <https://www2.bc.edu/thomas-chemmanur/phdfincorp/MF891%20papers/Akerlof%201970.pdf>.

³ This happens when the borrower happens to involve in more risky activities.

There are extensive literatures examining bank loan and macroeconomic performance. There are Literatures researching on non-performing loans using both empirical and theoretical models to learn the micro and macro determinants of NPLs. This report will critically examine the literatures to determine the macroeconomic as well as bank specific factors affecting the NPLs.

2.2. Previous Research

One of the widely discussed topic among literatures are the vulnerability and stability of the banking sector in the depression and boom of business cycles. A study by Quagliariello (2007) analysing more than 200 banks in Italy to understand the affect of business cycles due to credit risk on bank losses. They found that bank losses are correlated with the business cycle. They concluded that during economic boom there is a high growth in bank loans while during depression period there is a decline in credit growth.

This business cycle is directly linked with NPLs, where during economic boom the level of NPLs are low due to high revenue that borrowers can meet their obligations. According to the study by Quagliariello (2007) the main reason for rise in the level of NPLs is the fall in value of the collateral due to the depression. This means that the collateral does not cover the outstanding balance in the event of default. This was further observed during and after the 2008 financial crisis where NPL level increased rapidly.

There are several literatures examining NPLs and have distinguished two set of factors which resulted in rise in the level of NPLs: the bank-specific and macroeconomic factors (Mazreka et al. 2018, Dimitrious, Helen and Mike (2016), Berger and DeYoung (1997), Louzis et al (2010), Rossi et al. (2005), Klein (2013), Anjom and Karim (2015),

Messai (2013), Beck et al. (2015) , Polat (2018), Mileris (2012) and Moinescu (2012)). They both focused on factors externally such as general macroeconomic factors which affected borrowers ability to repay as well as bank-specific factors including bad management and moral hazards.

A study conducted by Berger and DeYoung (1997) testing four banks management-related hypothesis about loan quality, bank capital and cost-efficiency relationships. They found that moral hazard and bad management were reasons explaining the growth in level of NPLs. In a similar research Louzis et al. (2010) examined factors affecting NPLs in different categories including consumer, business and mortgage and found that quality management and macro variables are significantly related to the NPLs. A rapid expansion of credit in the last two decades has resulted giving loans to non-qualified borrowers specifically in countries such as Greece and Italy where high level of social capital⁴ exists and resulted in development of NPLs.

Rossie et al. (2005) studied the relationship between the cost efficiency, loan quality and bank capital using 278 banks in nine transition countries. They found that when cost efficiency decrease follows with rise in NPL level. This is mainly due the banks spend resources on monitoring, disposing these loans and being more diligence in administrating the existing portfolio of performing loans. On the other side, they also found that decrease in cost efficiency will further increase NPLs due to bad management such as excessive spending. Also, they found that lower capital ratio results management to take excessive risks for higher profit which could further increase NPLs.

⁴ Social capital defines as networks of relationships in a society where individuals live and work enabling the society to function smoothly and affectively.

In another study, Mazreku et al. (2018) examined transition countries to understand determinants of NPLs in commercial banks. They used International Monetary Fund (IMF) to collect their data as well as sample of transition countries using the World Bank from the period between 2006 and 2016. They found that there is a negative relationship between the GDP Growth and inflation to NPLs, while there is a positive correlated between unemployment and NPLs. Similarly, Beck et al. (2015) estimating which factors influence NPLs at most in a global sample and found that GDP Growth, interest rates and exchange rates were the main factors in increase in the level of NPLs.

On the other hand, Messai, (2013) examined three countries (85 banks) including (Italy, Greece and Spain) and found that ROA and GDP Growth have negative impacts while real interest rates and unemployment are negatively influenced NPLs. These suggest that different regions result in different factors where they influence NPLs. A study of Messai (2013) examining three countries where there is a high level of NPLs could conclude different results to Mazreku et al. (2018) where they used sample of transition countries.

Similarly, Polat (2018) studied macroeconomic determinants of NPLs, case of Turkey and Saudi Arabia by using a dataset for the period between 2000-2016. He found that in the case of Turkey market capitalisation and inflation variables are positively correlated with the NPLs and for Saudi Arabia the inflation, GDP, debt, market capitalisation and money supply are positively related with NPLs. While, unemployment is negatively correlated with the NPLs in Saudi Arabia. This suggest that different countries with different macroeconomic conditions have different factors affecting NPLs. For example, Saudi Arabia where 90% of government revenue is from oil suggest that unemployment would not be a main factor on rise level for NPLs.

An empirical study case of Bangladesh conducted by Anjoman and Karim (2015) found that there is a negative relationship between the NPLs and inflation, return on equity, return on assets and public debt as a percentage of GDP. Other study by Klein (2013) investigating determinants factors as well as their impacts on NPLs using time series analysis in Central, eastern and south eastern Europe for the period 1998 to 2011. He found that economic recovery is directly linked and high level of NPLs are negatively impacted the economic recovery. They also concluded that there is a relationship between macroeconomic conditions including unemployment, inflation and GDP growth and NPLs.

There are also more studies based on panel cross-country analysis including Mileris (2012) and Moinescu (2012). A study done by Mileris (2012) concluded that macroeconomic environments are strongly correlated with the performing loans. They found that there is a relationship between unemployment rate and interest and NPLs. They found that when unemployment and interest rates are high the level of NPLs increase substantially. Other study done by Moinescu (2012) conducted his research examining determinants of NPLs in Central and Eastern European countries. He found that GDP growth is the main factor in developments of NPLs in this region.

This long list of studies of determinants of NPLs suggest the importance of understanding which factors are influencing the NPLs at most and how these could be improved. Different literatures have used different models, countries and data to further expand the scope of this title. This helped in validity and verifiability of this topic. However, there are also different factors which has not been yet discovered and or impossible to measure. Institutional indicators are among the least explored indicators due to the difficulty in measuring such factors.

3. Dimitrios, Helen and Mike (2016), “Determinants of Non-performing Loans: Evidence from Euro-area Countries”

3.1. Introduction

A study conducted by Dimitrios, Helen and Mike (2016) investigating the main determinants of NPLs using General Methods of Moments (GMM) estimates in the European Union from the period 1990Q1- 2015Q2. They found that both bank and country specific variables are playing key role in NPLs while adding also income tax and output gap as other factors that found to be relevant.

They employed both bank-specific and country-specific variables affecting NPLs. They collected quarterly data in an unbalanced panel in the euro area. They estimated three dynamic and three static types of models: 1. macroeconomic variables, 2. bank-specific variables and 3. both dynamic and static. They also presented two new factors which were discussed in theoretical literatures including income tax rate as a percentage of GDP and the output gap. They argued that if the income tax increase then disposal income will reduce and the borrower's capacity to repay the loan will be reduced. Regarding output they argued that it is business cycle proxy and it will negatively impact the NPLs.

In this research, they focused on 15 different countries, more specifically commercial banks from the period 1990Q1 to 2015Q2. They used the DataStream to collect necessary data. The bank-specific determinants include Return on Equity, Return on Asset, and loans to deposits ratios as a proxy for riskiness and management quality. The country-specific factors they included are income tax as a percentage of GDP, unemployment, inflation, GDP, government budget surplus/deficit, public debt as a percentage of GDP and output gap. They found that these factors seem to be affecting the banking sector vulnerability. Below, we will provide main factors in more details.

NPLS: The non-performing loans ratio is used as the dependant variable.

ROE and ROA: These shows how well the managers converting their assets into profit. Thus, higher ROO and ROE leads to lower NPLs.

Unemployment: Higher unemployment results in more borrowers to unable to pay back their loans.

Income tax as a percentage of GDP: As personal income tax increases, then the ability of borrowers to repay will reduced.

Loan to deposit ratio: increase in this ratio is a sign of risk and possibly lead to rise in NPLS.

Debt: This is the general government debt as percentage of GDP.

GDP Growth: the increase in GDP is anticipated to negatively impact the NPLs level.

Inflation Rate: the inflation rate found to improve loan repayments as it makes it cheaper to repay.

Government Budget: This could directly affect NPLs when the fiscal policy gets worsened.

They started their analysis by testing unit roots of each variables. Due to the reason that their panel unit root test was unbalanced. Therefore, they used Augmented Dickey-Fuller (ADF) fisher type test. The null hypothesis was that all panels contain a unit root. They implemented difference Generalised Method of Moments (GMM) which was firstly done by Arellano and Bond (1991).

Arguing with in the text, it is clear that they used realism theory (Thompson, 2019). This research used hypothesis to see whether there are any relationships between these bank-specific and macroeconomic variables and NPLs. Then they collected data and used statistical analyse to see whether their hypothesis is validated or not. This is ontological realism because the researcher believes that they are objective and universal truths about this matter of NPLs. They believe that there is a real problem and these factors are playing key roles in rising the level of NPLs.

3.2. Results

Their results are compatible with theoretical literatures. Starting with loan to debt ratio which reflects the risk preference of the banks, they found to be significant. They found correlation of approximately 0.000335 for two models and negative correlations of -

0.0286 for one model. Overall, this suggest that moral hazard problems are not found and does not fully support. Moral hazard problem occurs when the borrower increases their exposure to more risks and hence increase its default risk. They show that an increase in loan to debt ratio results the NPLs to increase by 0.0335 percent which is not significant. However, more research needs to be conducted to have a clear conclusion of this factor.

The performance indicators, ROE and ROA were negatively related to NPLs in most models. They found ROA and ROE to be correlated by -0.224 and -0.00243, respectively. This suggest that when profitability factors increase by 1 percent they result NPLs to reduce by 2.24 percent and 0.24 percent, respectively. A bank that generates high profit is less likely in insecure activities including generating loans to risky borrowers. ROA was significantly coefficient in two models only. They found the government budget and debt have negative but not significant coefficient. This suggest that when the debt and government budget increase the NPLs level decrease but not significantly only by -0.0112.

Looking at growth rate and inflation rate they also found that they have negative but not significantly coefficient. They found the growth rate to be negatively -0.000884 and for inflation rate -0.0559. This means that for growth rate an increase of 1 percent in growth rate results the NPLs to decrease by 0.008 percent. This is true in most literatures stating that in the event of economic growth creates more profit for companies and subsequently results the NPLs to reduce. Inflation rate states that an increase in inflation rate results the NPLs to decrease by approximately 5 percent. This suggest that high inflation worsens the currency value of the domestic country

and thus results borrowers to repay their loans faster. However, this could be argued to be applicable for exporters. In the case of importers or manufacturers currency devaluation could results in bankruptcy and hence higher NPLs.

The unemployment rate was found to be significantly correlated with the NPLs. The GMM estimation result shows a significant positive correlation of approximately 0.47. This means an increase of 1 percent in unemployment rate results the NPLs to increase by 47 percent. This strong relationship suggest that unemployment seems to be the main determinant of NPLs. Unemployment results in loss on output, fiscal costs, loss of income and economic growth and ability of borrowers to repay their loans.

They also found that the two proposed variables out put gap and income tax as a percentage of GDP are significantly correlated and affect the quality of loans. They found strong correlations of 1.281 for income tax as a percentage of GDP and -0.023 for output gap. The strong correlation of income tax as a percentage of GDP suggest that increase in income tax results the NPLs to increase by 128 percent meaning that borrowers' ability to repay their loans would decrease substantially. The increase in output gap results in potential growth in the economy and thus reduce the NPLs level.

This research was conducted using data from 15 different euro countries where few countries including Malta, Latvia, Cyprus and Estonia were omitted due to not enough bank specific data were found. This research data was collected using the DataStream database Plus, their results are consistent with other literatures and concluded similar findings. This shows that their data were valid and reliable.

The researcher conducted this study to further develop the existing literatures in determinants of NPLs. They believed that these determinants are playing key roles in rise in the level of NPLs and would be a key grounding in understanding and tackling the NPLs in the European Union. They believed their research will help the banks to further understand the relationships between the macroeconomic and bank specific factors to NPLs as well as helping regulators and government in designing fiscal policies.

3.3. Axiological Justifications (ethics)

This research has fully complied with the ethical standards. This study was only involved secondary analysis of data and do not cause any harm to any individual or companies. The data was collected using DataStream which does not constitute any confidential information. The data is available online for anyone who would like to research any relevant topic including this topic. The authors did not collect any primary data to be considered for ethical issues. This research has been clearly approved by ethical committee and have been published as Finance Research Letters from Athens University of Economic and Business.

In this literature researchers are also examined two variables never researched previously including output gap and tax on personal income. This suggest that they were interested to enhance and expand the scope of their literature through adding different variables never researched before. Also, they decided to conduct their research within the scope of European Union studying 15 countries due to availability of data and presence of high level of NPLs in this region.

Also, in their methodology they used General Method of Moments (GMM) estimation done by Arellano and Bond (1991) to estimate parameters in statistical models. However, there is an argument on why the researchers decided to use this particular model. In the case of Polat (2018) examining the determinants of NPLs, they used different articles in using their models. They used Ordinary Least Square Model (OLS) firstly proposed by Ferrari and Cribari-Neto (2004) and further extended by Smithson and Verkuilin (2006).

Thus, this research studied the determinants of NPLS in Euro area from the period 1990Q1 -2015Q2 in a quarter basis. They found macroeconomic variables including unemployment and growth rate are playing a key role and there is a strong relationship between these factors and NPLs. They also found risk preference and management skills were necessary to avoid increasing the NPLs level in the future. Considering risk and having good management skills results banks to avoid lending to risky borrowers. This research is the first empirical literature examining output gap and tax on personal income as determinants of NPLs. They both found to be significantly related to NPLs which could be considered by regulators designing fiscal policies.

4. Conclusion

This report examined the determinants of NPLs in the European Union, Asia and Middle East. We aimed to determine which factors are affecting the rise in level of NPLs in these regions. We found that there is a strong relationship between macroeconomic and bank-specific factors and NPLs. Macroeconomic factors we conclude that GDP growth, inflation, market capitalisation and unemployment are playing key role in increase in the level of NPLs. Regarding bank-specific variables we

found quality management and monitoring resources are among the most important variables in relation to the NPLs. As mentioned above, we also examined an article (Dimitrios, Helen and Mike ,2016) in more depth and found that apart from above macroeconomic and bank-specific factors, output gap and income tax as a percentage of GDP have strong relationship with the NPLs.

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Appendices

Total Level of NPLs (European Banks)

Description	Country	2007	2006	2005	2004	2003	2002	2001	2000	
Non-Performing Loan		€m	€m	€m	€m	€m	€m	€m	€m	total
ABN AMRO Group NV	Netherlands	3,964.00	3,602.00	4,203.00	6,114.00	7,379.00	8,630.00	4,444.00	5,219.00	43,555.00
AIB Group PLC	Ireland	6,330.00	9,136.00	13,085.00	22,162.00	20,911.00	29,416.00	24,833.00	12,141.00	145,014.00
Banco Bilbao Vizcaya Argentaria SA	Spain	19,753.00	23,995.00	25,996.00	22,750.00	25,478.00	20,001.00	16,029.00	15,361.00	168,943.00
Banco Santander SA	Spain	37,996.00	33,643.00	37,094.00	41,709.00	42,420.00	36,961.00	32,036.00	20,522.00	269,081.00
Barclays PLC	UK	5,994.00	6,491.00	7,807.00	9,338.00	13,298.00	18,965.00	21,342.00	24,322.00	107,167.00
BNP Paribas SA	France	37,531.00	41,779.00	41,251.00	42,896.00	43,585.00	42,453.00	43,696.00	42,100.00	335,291.00
Bank of Ireland Group PLC	Ireland	6,521.00	7,927.00	11,973.00	15,800.00	19,835.00	17,702.00	19,628.00	16,874.00	116,260.00
Commerzbank AG	Germany	5,969.00	6,914.00	7,124.00	11,843.00	15,563.00	18,936.00	19,788.00	21,682.00	107,534.00
Credit Agricole SA	France	15,697.00	15,991.00	14,769.00	16,322.00	16,596.00	17,349.00	24,759.00	21,769.00	143,162.00
Credit Suisse Group AG	Switzerland	2,110.00	2,472.00	2,255.00	1,561.00	1,495.00	1,789.00	1,718.00	1,863.00	15,233.00
Danske Bank A/S	UK	34,479.00	45,954.00	56,181.00	72,033.00	85,129.00	92,345.00	113,300.00	103,100.00	602,491.00
Deutsche Bank AG	Germany	6,234.00	7,447.00	8,151.00	9,348.00	10,148.00	10,335.00	9,484.00	6,265.00	67,567.00
DNB ASA	Norway	26,502.00	36,781.00	22,647.00	27,051.00	30,804.00	29,212.00	29,089.00	27,682.00	229,768.00
Erste Group Bank AG	Austria	5,776.00	8,255.00	11,437.00	13,845.00	15,855.00	16,076.00	15,672.00	16,142.00	103,066.00
HSBC Holdings PLC	UK	15,470.00	18,228.00	23,780.00	29,263.00	36,438.00	38,671.00	41,584.00	46,871.00	250,293.00
ING Groep NV	Netherlands	12,175.00	13,312.00	15,029.00	16,889.00	15,521.00	14,538.00	13,382.00	13,779.00	115,415.00
Intesa Sanpaolo SpA	Italy	52,073.00	58,137.00	63,114.00	62,867.00	57,342.00	49,673.00	41,798.00	37,517.00	402,521.00
KBC Group NV	Belgium	5,242.00	5,711.00	6,596.00	7,676.00	8,086.00	7,387.00	11,294.00	10,950.00	63,232.00
Lloyds Banking Group PLC	UK	7,841.00	8,495.00	4,172.00	14,308.00	32,259.00	46,259.00	60,289.00	64,636.00	238,143.00
Natixis SA	France	4,576.00	4,534.00	4,596.00	4,878.00	5,707.00	5,315.00	5,179.00	5,381.00	40,120.00
Nordea Bank AB	Sweden	6,068.00	5,541.00	5,960.00	6,425.00	6,540.00	6,881.00	5,488.00	4,848.00	47,702.00
Royal Bank of Scotland Group PLC	Scotland	8,904.00	10,310.00	12,137.00	26,084.00	39,291.00	41,127.00	40,845.00	38,598.00	218,197.00
Skandinaviska Enskilda Banken AB	Sweden	8,283.00	7,643.00	8,027.00	10,599.00	9,458.00	13,840.00	10,074.00	24,254.00	100,178.00
Societe Generale SA	France	20,900.00	23,900.00	24,600.00	25,700.00	24,900.00	29,800.00	24,100.00	23,100.00	189,000.00
Standard Chartered PLC	UK	8,679.00	9,687.00	12,799.00	7,492.00	6,479.00	5,588.00	4,183.00	4,631.00	59,448.00
Svenska Handelsbanken AB	Sweden	7,944.00	7,746.00	8,844.00	8,702.00	6,944.00	7,325.00	6,888.00	9,212.00	63,575.00
Sveabank AB	Sweden	8,579.00	8,955.00	6,085.00	6,281.00	7,499.00	13,938.00	24,885.00	34,778.00	110,010.00
UBS Group AG	Switzerland	2,035.00	2,399.00	1,630.00	1,602.00	1,382.00	1,516.00	2,155.00	4,199.00	17,172.00
UniCredit SpA	Italy	48,348.00	56,342.00	80,005.19	84,079.31	81,910.60	77,866.60	75,545.40	63,938.10	566,067.19
Alpha Bank AE	Greece	19,800.00	23,000.00	22,800.00	21,400.00	20,500.00	11,678.00	6,493.00	5,378.70	130,989.70
Hellenic Bank	Cyprus	17,300.00	18,700.00	21,500.00	20,760.00	21,766.00	24,287.00	20,828.70	7,142.40	152,284.10
Total NPLs		488,394.00	591,367.00	585,845.19	666,547.31	739,542.60	748,933.60	776,388.10	742,228.20	5,259,148.99

