

EXPLAINING RISK RUMORS IN TRADE AND CONSTRUCTION NON-PERFORMING LOANS: A CASE OF ALBANIAN BANKING SYSTEM

Ardita Todri

Finance & Accounting Department, Faculty of Economics, Elbasan

University of Elbasan Aleksander Xhuvani, Elbasan, Albania

ardita.todri@gmail.com

Abstract

The controversy of Albanian banking system profitability in the economic slowdown context is actually oriented toward respective trade-off, concretely expressed in financing vital projects or money-market activities being that non-performing loans trend is increased while deposits and basic interest rates haven't maintained the same rhythm. For this purpose, the weighted regression linear panel-dataset analysis toward return on equity ratio with other quarterly explanatory variables such as: Deposits/Assets, Loans/Assets, Placements/Assets, GDP growth and interest rates (pertaining to 16 second level banks for the time period Q3/2007-Q4/2010) is explored aiming the identification of determinants of non-performing loans in trade and construction sector in the quality of most affected and important ones for the economy in question. Trying to do this, the research points out ethical issues in the a/m lending products affecting the most crucial activity also for the banks survival own selves, borrowing customers welfare and their social responsibility by revealing new standards in their credit risk management and future strategic goals.

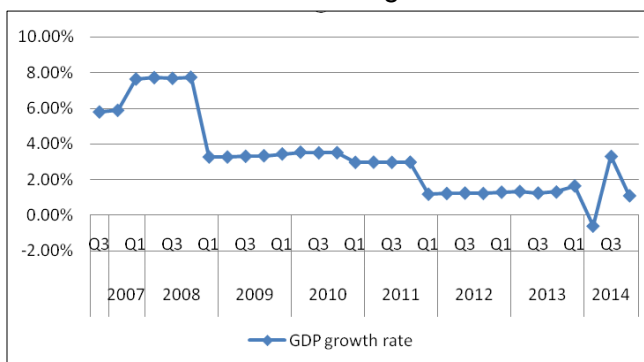
Keywords: Non Performing Loans, Bank Investment Portfolios, Risk Management, Credit Market Efficiency Monitoring, Macroeconomic Imbalances.

INTRODUCTION

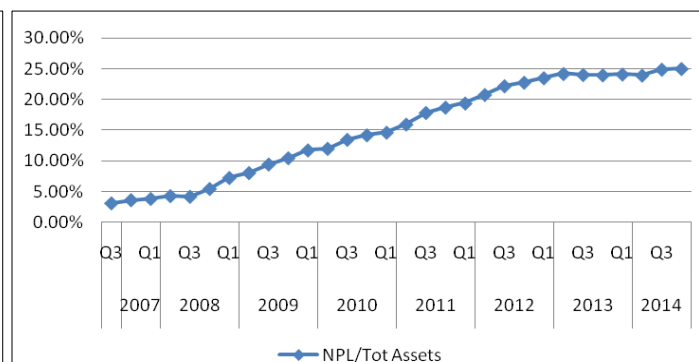
Mainly the deterioration quality of banks' loan portfolios caused the banking system failures and consequently the financial crises in developed economies. Due to this the "non-performing loans" (NPL) issue has frequently attracted the bankers and researches attention in recent decades. Hence, several studies examined bank failures and found that asset quality is an indicator of insolvency on behalf of Demirguc-Kunt (1989) and Barr and Siems (1994). But the literature also provides evidences on different factors causing non-performing loans and their impact on economic growth and vice-versa by explaining the non-performing loans as the outcome of a few macro and micro-economic variables. Also it can be argued that the large amount of bad loans in the banking system generally results in a bank failure and by this way, the NPL are among the main causes of economic stagnation while their minimization becomes a necessary condition for improving country's economic growth. In the same time each impaired loan in the financial sector increases the possibility to lead the "company" in difficulty and unprofitability. Concretely, Wheelock and Wilson (2001) conducted a study by including different micro variables (including quality of assets, EPS, liquidity ratio, bank type, management efficiency and asset size) in order to find out the main causes of NPLs by pointing out that inefficient banks are exposed to more risk and are lesser probable of being acquired.

From the other side, Stiglitz and Edlin (1995) found a significant relationship between NPLs and macro-economic variables. While Gourinchas, Valdes and Landerretche (2001) pointed out that the NPLs are the outcome of lending boom and economic circumstances in different countries and in a certain way this complies with Albanian economy circumstances from 2005-2009. Alternatively said, the slowdown of Albanian economy (see Fig.1) followed also from banking system performance during the last four years represented subsequently from non-performing loans to respective assets ratio significant growth (see Fig.2) are clearly translated in fear signals regarding its development.

Figure 1: Albanian GDP Growth Rate Trend



Source: World Bank Data



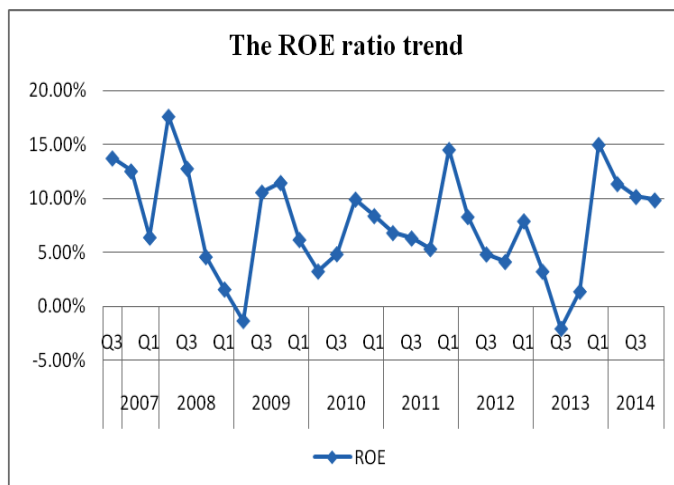
Source: Albanian Banking Association Data

Furthermore the latest, being mainly a commercial system acts accordingly to borrowing and lending market conditions and simultaneously is highly exposed to economic changes of the market in question which is the reason why it flexibly respond to them in confront to any other sector.

But the matter is as through the past years and currently system's more consistent profits are generated from lending activity (refer to Fig.3) when bank themselves haven't maintained the same profit levels in confront of the previous periods and above all they have been restructured in terms of lending personnel (concretely the number of business branches is significantly reduced). Despite this, referring to bank profitability it also known that some authors have used the latest to explain the behavior of principal risk managers.

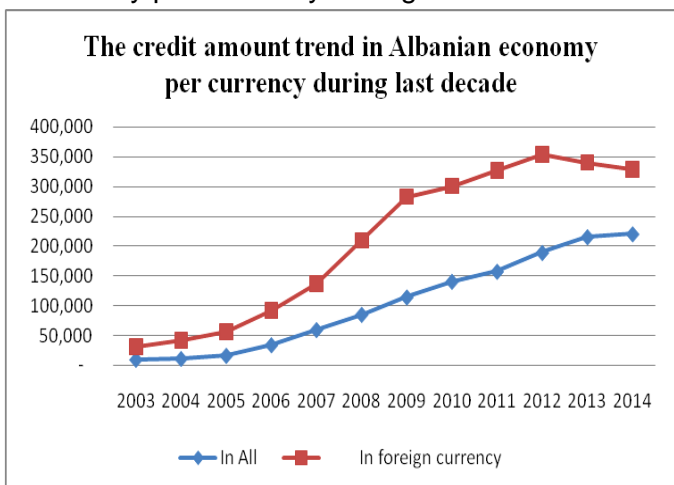
Thus, worth mentioned that NPLs are likely to hamper the country's economic growth and reduce its banks economic efficiency on behalf of Hou (2007). So, the shocks to the financial system can arise from factors specific to the bank (idiosyncratic shocks) or macroeconomic imbalances (systemic shocks). And in general, the researches adopted in the developed economies have confirmed that macroeconomic conditions affect credit risk. For this purpose this study proposes the explanation of loans granted by the Albanian banking system, specifically to bad debts by dealing with macroeconomic and bank-specific variables.

Figure 3-The ROE Ratio Trend



Source: World Bank Data

Figure 4- The Credit Amount Trend in Albanian Economy per Currency During Last Decade



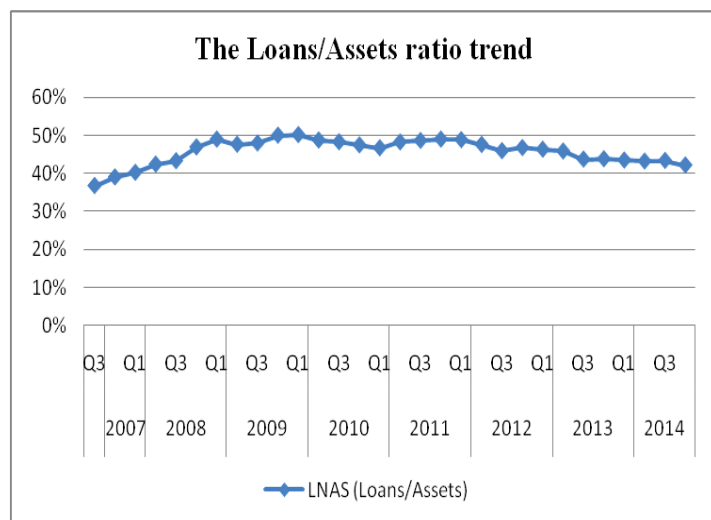
Source: Albanian Banking Association Data

Under this point of view, it was also tried to solve respective loan inefficiency problems by avoiding as much as possible their severe impact on country's economy according to Kwan and Eisenbeis (1996), Hughes and Moon (2000) and Resti (1995).

And obviously this led to a more conservative approach (see Fig.4 & 5) which decreased lending activity mainly in domestic currency independently from the tenor (short-medium-long term loans) by acting in controversy of basic interest rate reduction as a consequence of an expansive monetary policy (see Fig.6) by generating turbulences regarding the forecasted macroeconomic scenarios.

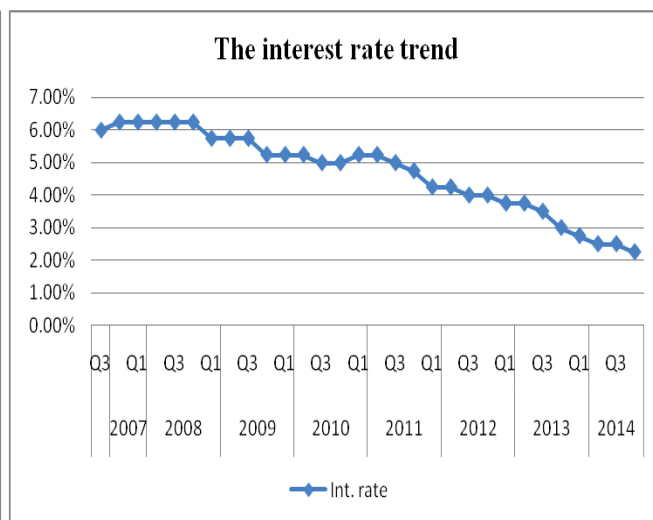
Therefore the main target activity in the system for the time being is the non-performing loans collection even through the help of bailiff offices and factoring services.

Figure 5: The Loans/Assets Ratio Trend



Source: Albanian Banking Association Data

Figure 6: The Interest Rate Trend



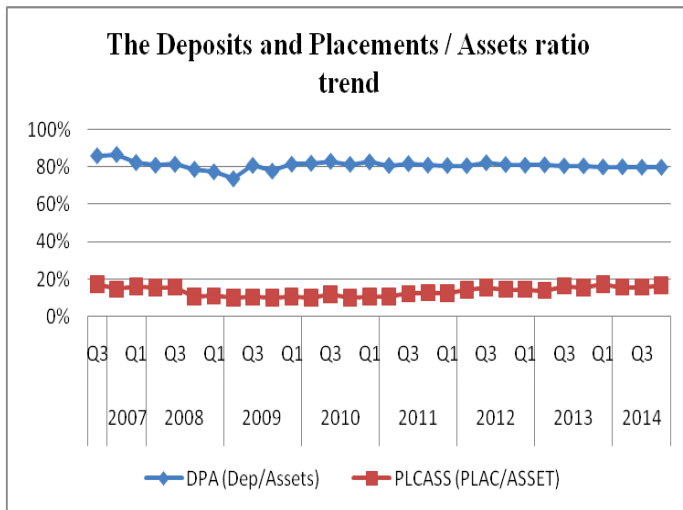
Source: Bank Of Albania Data

Meanwhile is observed that Deposits to Assets ratio (DPA) has maintained a constant trend in contradiction with Loans to Assets ratio (see Fig.7). The vice-versa occurred in 2009 when Loans to Assets ratio reached it maximal value on behalf of the exploitation of loans products.

And this important element frequently explored in literature regarding NPL is named “the unnecessary lending” of commercial banks by referring to Salas and Saurina (2002), Jimenez and Saurina (2005), Keeton and Morris (1987), and Keeton (1999) argumentations.

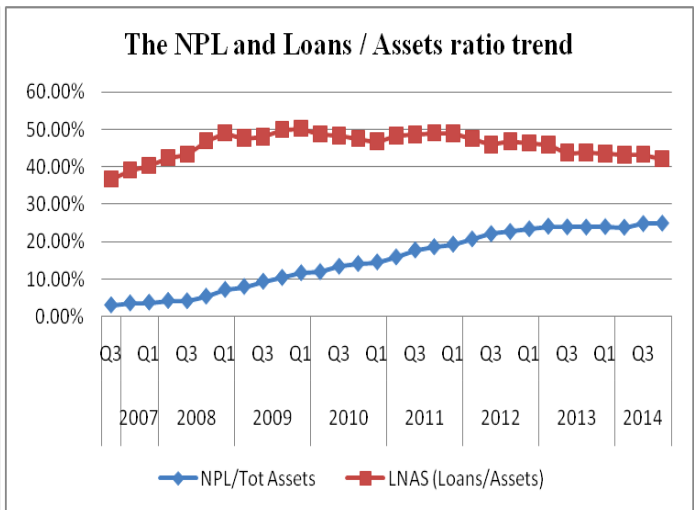
But it also refers to other internal local banking factors affecting NPL/Assets ratio particularly in developing economies like the Albanian one. And empirically dealing, there is evidenced an inverse relationship between non-performing loans and normal lending activity growth and the results are compliant with the Albanian case (see Fig.8) and maybe this stands for an alternative increase of money-market investments in the sector.

Figure 7: The Deposits & Placements/Assets Ratio Trend



Source: Albanian Banking Association data

Figure 8: The NPL and Loans/Assets Ratio Trend



Source: Albanian Banking Association data

Therefore becomes more than interesting to understand which factors affect NPL ratio growth in Albanian market being that the country circumstances have evolved. Corresponding to this different empirical works, such as Beck T., Demirguc-Kunt, A., and Levine, R., (2005), Stiglitz., J and Edlin A., (1995), Gourinchas, V., and Landerretche, O., Valdes, R., (2001) have concluded that macroeconomic and endogenous factors impact non-performing loans by establishing the bank failure limit to a NPL/Assets ratio at 75%. While, Kassim (2002) highlighted as the major causes of NPLs : inefficient management, poor credit banking policy, poor credit risk analysis and monitoring, focus on profit rather than quality of loan, fraud, economic decline, un-ethical competition, inconsistent policies and regulation, unstable real sector, undue influences (social and political) etc.

In fact, Minsky (1992) named this phenomenon “euphoria” by evidencing the over-investments and over-lending problems as a major cause of financial crises. Precisely, under this point of view Corsetti et al. (2012) posed the role of implicit and explicit bail out guarantee and moral hazard problem in sales managers which has caused banks excessive risk accompanied from insufficient monetary capacity, asymmetric information and deposit insurance schemes as the main causes of over lending problem.

That's why Schall and Halley (1980) opted out for the risk management which is the basis of lending and represents a challenging task for the general banks' managers. They also highlighted the 3C-system (capacity, collateral and capital conditions) together with banking character as a key indicator for loan analysis improvement process by evidencing that the a/m factors may vary from country to country and bank to bank.

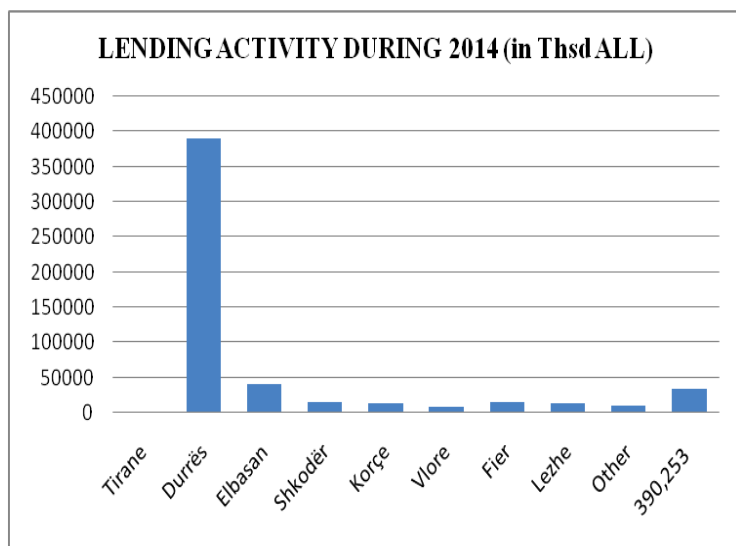
ANALYSIS OF NPLS TREND PER SECTOR IN ALBANIAN ECONOMY

Referring to official sources the non-performing loans (NPLs) in Albania have reached scary figures, up to 25%. This means that one fourth of loans issued by commercial banks in the country deteriorate and reach the category in which becomes hard to be paid back on time. Thus, Bank of Albania has confirmed that “in the second quarter of 2014, the non-performing loans ratio in banks’ portfolios in Albania is 23.9% or 69 billion ALL (670 million USD)”. According to these figures, from 2008, there was a progressive increase of 6.7% and by this way, the percentage of NPLs in Albania is one of the highest in the region.

But, the experts of the Confederation of Industries in Albania claim that “in absolute value, there are over 1 billion Euros worth of NPLs and half of them have been reported as lost in the first half of 2014”.

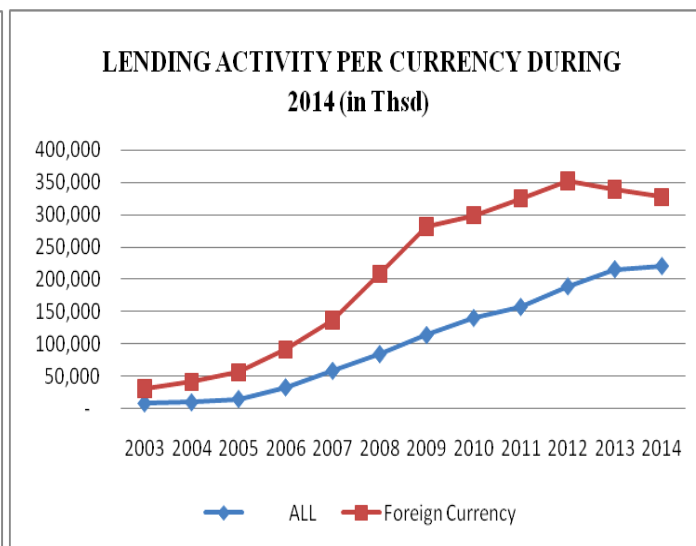
Simultaneously, the performance of the a/m loans is a serious obstacle for the development of the national economy. And on the other hand, during the last year the growing percentage of NPLs has had a negative impact in banks’ earnings, capitalizations and their ability to offer other loans in Albania (see Fig.9).

Figure 9: Lending Activity
During 2014 (in During Thsd All)



Source: Open Data Albania

Figure 10: Lending Activity Per Currency
During 2014 (In 2014 (in Thsd))



Source: Open Data Albania

Notwithstanding the high level of NPLs, the Albanian Bankruptcy Law from 2002 has scarcely been used because there is a consensus at the market that the insolvency proceedings envisaged by the law is very complex and burdensome because it takes 525 days to enforce a

contract following 39 procedures or 2 years to resolve insolvency—according to the latest Doing Business report.

If that is not enough, there are few qualified professionals to implement the legislation in Albania, and the lack of awareness among the business community and some of the key players, such as lawyers and judges. As a result, instead of seeking restructuring of loans payment, the companies simply stop paying their debts and close operations, without legal remedies. Consequently, creditors struggle to recover their funds. Unfortunately the only mechanism of recovery for each single commercial bank is via individual legal actions, which are hampered by a poor enforcement system in the courts and outdated civil procedure rules. The statistics confirm that the most affected sectors regarding non-performing loans are construction and trade and the concern grows taking into account the fact that these are two of the most vital sectors of Albanian economy being that a considerable part of active force was employed there during the last five years. And in respect of what was previously mentioned, Podpiera and Weill (2008) concluded that inefficiency is positively associated with future increases in non-performing loans. The authors argue that regulators should focus on managerial performance in order to improve the stability of the financial system and the same result was found by Louzis et al., (2010) in the case of Greek banks which also worth for the current one.

Worth also mentioned that in the same time Albania has a high public debt and the NPLs have increased along with the NPLs that public companies owe or budgetary entities owe to private companies. Under these circumstances commercial banks must collect NPLs, by not blocking new loans disbursement process while considering that even the latest isn't a guaranteed process in financial and ethical terms because the major part of NPLs have reached this status due to lending circumstances inappropriateness and the a/m issues becomes more complex.

RESEARCH METHODOLOGY

This paper empirically treats the quantitative panel-dataset collected from Albanian banking sector (pertaining to 16 second level banks on behalf of respective monthly report in Albanian Association of Banks) pertaining to trade and construction non-performing loans. Correspondently, the above mentioned data analyzed are: NPL (trade and construction)/Assets, Deposits/Assets, Placements/Assets and ROE ratios as well as country's GDP growth and basic interest rates. The dataset used refers to quarterly data pertaining to the time period Q3/2007-Q4/2014 which are analyzed with the support of weighted linear regression model toward ROE (in correspondence of the highest explanatory variables standard deviation) at 95%

confidence level by using SPSS-17 version aiming to identify the determinants factors of trade and construction non-performing loans trend in the a/m banking sector.

Trade and Construction's Non-Performing Loans Trend Determinant Factors

As previously mentioned the linear analysis of trade and construction NPL determinants in Albanian banking sector is weighted according to ROE which is the most fluctuant explanatory variable referring to the time period taken into consideration by also reflecting the impact of the financed sectors in the country's GDP growth.

The analysis results are satisfactory in terms of R square determinant coefficient, because the latest confirms that the 98.4% of NPL/Assets variability (refer to Tab.1) can be explained from the a/m explanatory variables. Additional positive results in terms of overall model significance displays also ANOVA table data (refer to Tab.2) as Fisher's statistic (154.32) is higher than its critical value 3,808 (6-variables and 30-data) by leading to the understanding of trade and construction NPL determinants in Albanian banking sector.

The coefficients correlation between macroeconomic and banking system specific explanatory variables are low except for the relationship between NPL and growth rate of GDP and the interest rate with (0,871) and (0.938) respectively (see Tab.3) at 95% confidence level. And the multivariate muticollinearity test conducted demonstrates the absence of the problem between the explanatory variables because all the VIF estimated values are more than 4 [the threshold cited by Fox (1991)] except of ROE which is the weighted one. In parallel to this the Haussmann's test results indicate that the fixed effect is preferred to the random one.

Table 1: Weighted Linear Regression summary

Model Summary	
Multiple R	.974
R Square	.984
Adjusted R Square	.962
Std. Error of the Estimate	.005
Log-likelihood Function Value	96.640

Table 2: ANOVA Table

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.015	5	.003	154.323	.000
Residual	.000	22	.000		
Total	.015	27			

Table 3: Pearson correlation coefficients

		NPL	DPA	LNAS	PLCASS	ROE	GDP	INT
Pearson Correlation	NPL	1.000	-.135	.159	.304	-.194	-.871	-.938
	DPA	-.135	1.000	-.471	.335	.348	.210	.156
	LNAS	.159	-.471	1.000	-.801	-.359	-.317	.053
	PLCASS	.304	.335	-.801	1.000	.281	-.061	-.455
	ROE	-.194	.348	-.359	.281	1.000	.260	.065
	GDP	-.871	.210	-.317	-.061	.260	1.000	.804
	INT	-.938	.156	.053	-.455	.065	.804	1.000
Sig. (1-tailed)	NPL	.	.238	.200	.051	.152	.000	.000
	DPA	.238	.	.004	.035	.030	.133	.206
	LNAS	.200	.004	.	.000	.026	.044	.391
	PLCASS	.051	.035	.000	.	.066	.374	.006
	ROE	.152	.030	.026	.066	.	.083	.366
	GDP	.000	.133	.044	.374	.083	.	.000
	INT	.000	.206	.391	.006	.366	.000	.

CONCLUSIVE REMARKS

Even why this study has several limitations related to research data sample, country banking characteristics, etc it should be highlighted the importance of the above mentioned analysis results on determining the factors affecting trade and construction non-performing loans trend in Albanian banking sector pertaining to some important European banks. As evidenced the factors that statistically affect trade and construction non-performing loans trend at 95% confidence level result (see Tab.4) to be: deposits/assets, loans/assets and placements/assets ratios as well as interest rate (which demonstrates the highest statistical impact than the other explanatory variables taken into consideration).

Table 4: Weighted Linear Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	-.767	.305			-2.315	.020
DPA	.825	.268	.187	.069	2.205	.013
LNAS	1.267	.232	.499	.107	4.884	.000
PLCASS	.523	.283	.194	.088	2.321	.038
GDP	-.153	.349	-.046	.106	-.438	.666
INT	-6.365	.696	-.877	.115	-7.692	.000

And the loans/assets ratio represents the second highest statistical impact on trade and construction non-performing loans trend. In other words, this means that Albanian economy GDP slowdown trend isn't a crucial factor in non-performing loans trend in the market in question and vice-versa. Correspondingly to this, in general terms the issue seems to be an unethical approach on behalf of banking sales managers risk moral issues or just their negative choices which as a consequence, don't imply only obstacles for loan repayment and credit deterioration but also increase the credit provisioning in both standards (NUS and IFRS) by transmitting troubles in the banking profitability, capital adequacy and ultimately threaten the entire lending process. Subsequently, under these circumstances the a/m system should resize its lending process under an alternative approach, the ethical one, in parallel accordance with customer care, lending evolution prospective and future strategic goals by implementing the advanced measurement approaches on behalf of risk profile nature but in compliance within respective Head-Offices guidelines which from the other side must be frequently validated under the strong surveillance of Central Bank of Albania Supervision department. Meanwhile the business itself must develop alternative financing strategies pertaining to short, medium and long term period by creating chances to go ahead which for the time being represent a double challenge for them.

In the same time this research has also some limitations which by the way give opportunity for other improvements in the future such as: additional macroeconomic variables consideration (i.e. real exchange rate, etc), together with other bank specific variables (i.e. size or liquidity, market share), etc. to extend and enrich it, where NPL can be treated as an indicator of the a/m banking distress.

REFERENCES

- Barr, R., Siems, T. (1994). Predicting Bank Failure using DEA to quantify management quality. Federal Reserve Bank of Dallas, Financial industry Studies Working papers N°94.
- Beck, T., Demircuc-Kunt, A., and Levine, R. (2005). Bank concentration and Fragility: Impact and Mechanics", National Bureau of Economic Research Inc, NBER Working papers N° 11500.
- Corsetti, G., Kuester, K., Meier, A., and Muller, G. J. (2012). Sovereign risk, fiscal policy, and macroeconomic stability, IMF Working paper N° 12/33.
- Demirgüç-Kunt, A. (1989). Deposit-institution failures: a review of empirical literature. Economic Review, Federal Reserve Bank of Cleveland, 4, 2-18.
- Doing Business Report Albania (2015). NPL trend in Albania. Retrieved May 15, 2015, from <http://www.doingbusiness.org/~media/giawb/doing%20business/documents/profiles/country/ALB.pdf>
- Fox, J. (1991). Regression diagnostics: an introduction. Newbury Park, CA: Sage.
- Garcia-Marco, T., Robles-Fernandez, M. D. (2008). Risk-taking Behavior and Ownership in the Banking Industry: The Spanish Evidence. Journal of Economics and Business, 60(4), 332-354.

Gourinchas, P.O., Landerretche, O. and Valdés, R., (2001). Lending Booms: Latin America and the World. *Economia*, 1(2), 47-99.

Hou, Y. (2007). The Non-performing Loans: Some Bank-level Evidences. *The 4th Advances in Applied Financial Economics, the Quantitative and Qualitative Analysis in Social Sciences Conferences*, 59-68.

Hughes, J.P., Lang, W., Mester, L.J. and Moon C.-G., (2000). Recovering risky technologies using the almost ideal demand system: an application to U.S. banking. *Journal of Financial Services Research*, 18, 5-27.

Kassim, A. J., (2002). Risk Asset Management In Financial Institutions: Banks Experience. *Union Digest*, Vol. 7, No. 1 & 2. December (Lagos: Union Bank of Nigeria Plc).

Keeton, W. R., (1999). Does Faster Loan Growth Lead to Higher Loan Losses?. *Federal Reserve Bank of Kansas City. Economic Review*, Second Quarter.

Keeton, W., and Morris, C. S., (1987). Why Do Banks' Loan Losses Differ?. *Federal Reserve Bank of Kansas City. Economic Review*, 3-21.

Kwan, S. and Eisenbeis, R.A., (1996). An Analysis of Inefficiencies in Banking: A Stochastic Frontier Approach. *Federal Reserve Bank of San Francisco*.

Jimenez, G., and Saurina, J., (2005). Credit cycles, credit risk, and prudential regulation. *Banco de Espana* January.

Louzis, D.P., Vouldis, A.T., Metaxas, V.L. (2010). Macroeconomic and bank-specific determinants of non-performing loans in Greece: a comparative study of mortgage, business and consumer loan portfolios, *Bank of Greece, Working Paper No.118*.

Minsky, H.P., (1992). The Financial Instability Hypothesis. Working paper No. 74. The Jerome Levy Economics Institute of Bard College, New York, published in Resti A. and Sawyer M. (1993) eds. *Handbook of Radical Political Economy*, Aldershot: Edward Elgar.

Podpiera, J., Weill, L. (2008). Bad Luck or Bad Management"? Emerging Banking Market Experience. *Journal of Financial Stability*, 4(2), 135-148.

Resti.A.,(1995). La scienza delle banche italiane: risultati dell'applicazione comparata di tecniche econometriche e matematiche. *Banca Impresa e Società*, vol. XIV(3), 399-430.

Salas, V., and Saurina, J., (2002). Credit Risk in Two Institutional Regimes: Spanish Commercial and Savings Banks. *Journal of Financial Services Research*, 22(3), 203-224.

Schall, C. D. and Halley, C. (1980). *Introduction to Financial Management*. New York: McGraw Hill Book Company, 494.

Stiglitz J., and Edlin, A.,(1995). Discouraging Rivals: Managerial Rent-Seeking and Economic Inefficiencies. *American Economic Review*, 85(5), 1301-12.

Wheelock, D. C. and Wilson, P. W. (2001). New evidence on returns to scale and product-Mix among U.S. commercial banks. *Journal of Monetary Economics*, 47, 653-674.