# Decision of Cooperative Capital Structure, Profitability and Firm Value

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Keywords: Decision of cooperative capital structure, profitability, firm value.

Capital structure theory explained by combination of capital sources are still rarely implemented in Abstract: cooperatives enterprises especially in Indonesia, also cooperative financial managers have not been aware if this theory very importance. The purpose of this study is to investigate decision of cooperative capital structure and its impact on profitability and firm value. This research use statistical approach by using path analysis so that it can be known magnitude of direct and indirect impact between independent and dependent variables, this model is applied to test the panel threshold impact of cooperative capital structure on profitability and firm value from 2011 to 2015 with sample size 52 cooperatives in West Java using the simple random sampling technique. In this study, cooperative capital structure described by Debt to Asset Ratio (DAR), Profitability is described by Return on Equity (ROE) and Firm value described by ratio of cooperative permanent capital or capital allowance plus grant to total equity. The results of this study, decision of cooperative capital structure has a significant impact on profitability, and cooperative capital structure and profitability have impact on firm value either directly or indirectly, means capital structure theory also applicable on cooperative enterprises that have certain characteristics. Implication of this research, indicate that profitability and firm value can be improved by decision of cooperative capital structure through increasing debt capital sources, cooperative profitability and firm value can be leveraged by decision of capital structure.

# **1** INTRODUCTION

Cooperatives as one of the economic actors in Indonesia still face many challenges related to business development, which began by difficulty of cooperatives in raising capital. Like other business entities, cooperative capital source also comes from internal and external capital. The internal capital is capital allowance derived from non-shared surplus, while external capital sources come from member's savings as an equity capital and debt from other parties including banks, other financial institutions, members and other cooperatives.

The cooperative enterprise has a self-help principle that is to help their members, cooperative should be established from member's idea, and a business development must be capitalized and managed by members, in order to provide economic benefits for members. In fact, most of Indonesia's cooperative capital source is still depend on debt capital. It is shown that during last 5 years on average equal to 47.69% cooperative capital source from debt. A comparison between debt and equity capital development of cooperatives in Indonesia, see figure 1



Figure 1: Capital structure development of cooperative in Indonesia.

Source: Financial Report of Ministry of Cooperative and SME's Of Indonesia

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Based on figure 1, shows that source of cooperative capital is still highly depend on debt capital, in 2011 more than 53% cooperative capital requirement still filled by debt capital and then decline only 41% in 2015. This condition indicated that cooperative capital requirement has not been fully fulfilled from member's capital contribution that has not been sufficient for a cooperative business development this condition indicates that member participation in capital contribution still needs to be improved. Cooperative equity capital not only sources from member's saving but also from capital investment, capital allowance and other party's grant. This condition is in accordance with statement that "the capital function in a cooperative is handicapped, that the capital is not depend on its capital contribution but on its patronage of the cooperative" (Röpke J, 2002). This opinion is also supported by the statement that cooperatives are less attractive to members. members' candidate and other stakeholders, who would like to be a member caused by excess capital. (Sugiyanto, 2007).

Limitations of capital contribution from members, because capital contribution are made in stages and there are still many members who are not active. The cooperative surplus is still limited, so cooperative surplus set aside for capital allowance also limited. Based on these conditions, the prime of cooperative capital sources are still come from debt capital.

Cooperative performance can be indicated by development of cooperative profitability as measured by return on equity (ROE) (see figure 2):



Figure 2: Return on equity of cooperative in Indonesia. Source: Financial Report of Ministry of Cooperative and SME's Of Indonesia.

Figure 2 describe that ROE of Indonesia's cooperative over last 5 years is still fluctuating growth, in 2011 ROE of 17,7%, 2012 decline equal to 12,95% and 2013 to 9.05%, 2014 increased to 14,08% and 12,14% in 2015. But, ability of cooperatives to obtaining profitability as measured by ROE is still under the standard set by government, i.e. 21%.

In the financial perspective many factors impact on ability of cooperatives to obtain return, such as business effectiveness, liquidity, and also from leverage is ability to raise capital, especially debt capital that is usually measured by capital structure.

In reality, financial managers have not yet implemented capital structure approaches and their impact on cooperative returns. Almost never realized that cost of capital, as a consequences of capital source have an impact on the results of surplus. Cooperative managers almost never consider that capital structure in funding decisions is very important and its impact on the acquisition of business results, usually only consideration how cooperative can obtain capital source quickly.

The source of debt capital or financial leverage has three important implications, one of which is: If the firm obtains a greater return on investment that financed by debt than interest payments then the return on equity will be greater, or leveraged (Brigham E. F, 1999). Still quoted from the same author, states that Modigliani and Miller conclude that leverage will increase firm value because interest of debt reduces taxable income. In general, cost of debt is cheaper than cost of equity so that company gets a 'savings' when a company diverts equity financing to debt financing.

Many studies on other business entities stating that the capital structure has an impact on profitability that measured by return on assets (ROA) or return on equity (ROE). Capital structure positively leverage on profitability even also has an impact on the firm value, but the others research indicate that capital structure unleveraged on profitability even also has no impact on firm value. The discussion of firm value in cooperative until now is still very rarely done.

Based on the previous research indicates that there is inconsistent results related to impact of capital structure on profitability and firm value. Quang, Do Xuan, et al (2015), mention that there are different relations between capital structure and financial performance at different thresholds. In the range of (0.040; 0.703), capital structure is positively related to financial performance, outside that range, the relation is negative.

Several researches state that capital structure has a significant effect on profitability (Necib, Redjem, et al, 2014; and Pontoh, Winston, et al, 2013). While research conducted by Vătavu, Sorana, (2015); Sultan, Ayad Shaker, et al, (2015); and Salawu, Rafiu Oyesola, et al, (2009) states that the capital structure has a negative effect on profitability.

While research related to impact of capital structure to firm value also has different result

conclusion. According to research conducted by Masidonda, Jaelani La, et al (2013), states that capital structure has a positive effect on firm value.

Effects of capital structure and profitability on firm value with company size as the moderating variable, the results show that independent variables have simultaneous significant influence on the corporate value (Mahdaleta, Ela, et al, 2016). In addition, capital structure and profitability also have impact the value of the company (LAWAL, Adedoyin Isola, 2014).

Based on this description, the objective of this study to examine the decision of cooperative capital structure and impact on profitability, and the decision of cooperative capital structure and profitability on firm value, that is in practice almost does not discuss these variables in cooperative financing decision making.

### 2 LITERATURE REVIEW

### 2.1 Decision of Cooperative Capital Structure

Cooperatives as a people economic movement based on the principle of brotherhood that has an important role in growing and developing the economic potential of an equitable and prosperous society. The cooperative is seen as an enterprises conducting economic activities as well as other business entities, as stated by Arifin, Ramudi (2003) "Cooperative is a economic enterprises that demands modern conceptual and rational thinking because the cooperative lives in a dynamic economic environment and keep moving forward, getting more globalizing and creating increasingly open, competition ".

Cooperative activities based on the values and principles of cooperative, the values of cooperative is a standard of morality and ethics agreed on a basis of the traditions of its founders who became foundation of cooperative ideology in achieving its goals. The values of cooperatives are: (1) Self-help and solidarity through togetherness or join action, (2) Responsibility cooperative management, (3) Based on equality of members; (4) Justice; and (5) Solidarity, collective interests of their members.

Cooperative principle is a working guideline for cooperatives in doing every effort it does. Cooperative principles are essentially a more operational translation of the cooperative values. In Indonesia, Cooperative principles of are contained in Indonesian Act No. 25 / 1992 / Cooperatives, Article 5. Where such principles include: (a) voluntary and open membership, (b) management is democratically, (c) the distribution of the surplus as a result of operations is done fairly in proportion to the size of business services of each member, (d) provision of limited remuneration of capital, (e) independence, (f) cooperative education, (g) collaboration between cooperative.

Such as the other business entity, cooperative needs supporting capital from debt and equity sources. Capital structure decision is the second topic of financial management after investment decisions, often referred to as financing decisions for a company. Capital structure is usually analogous to the amount of debt. The capital structure is a balance of the amount of permanent short-term debt, long-term debt, with equity (Brigham, E. F, 1999).

Capital structure shows the source of capital contribution from the owner and creditor. The change in capital structure occurs in line with the additional capital required by the cooperative either from debt or equity. Debt capital has two advantages: The first, paid interest can reduce tax, thus lowering effective cost of debt. Secondly, creditor will earn a fixed income, so a lender does not need to take part of profit when in prime cooperative condition, so income for the owner will increase. On the other hand debt capital has a weakness, higher debt is higher risk, and higher interest, for the business unit that financial difficulties and operating profit is not sufficient to pay interest then owner must cover the shortfall.

Cooperative capital structure shows the source of the cooperative capital or as a capital contribution of member and creditor. Hanel, A (1988) defines the member's financial contribution as equity or stock, formation of allowance and other deposits.

Other opinions about the theory of capital structure still continue. The Modigliani and Miller approach argues that leverage is independent of firm value, with assumptions of which one is no tax, so this approach is known as irrelevance theory. Based on this approach the value of a non-unleveraged firm is exactly the same as the firm using leverage. Unleveraged and leverage firm value (Siaw, 1999).

Leverage approach model with MM Proportion I model without tax. This proportion recognizes that firm value is not influenced by the financing strategy, but depends on the operationalization of the business run and not on the funds acquired. If the unleveraged firm value is equal to leverage firm value according to the MM approach without taxes often referred to as proposition 2, then the weighted average cost of capital (WACC) of both companies is identical.

According to Siaw (1999) the approach of MM without taxes: The addition of financing with debt will usually be followed by an increase in costs of capital such as interest expenses. In accordance with Proposition 1, changes in decision of capital structure will not impact the firm value. In other words, the owner is faced with an increased financial risk without compensation from rising firm value. The owner will ask for a higher return as a compensation for the increased risk, this is called the higher cost of equity capital for the leveraged company.

### 2.2 **Profitability of Cooperatives**

Profitability measures the ability of a business entity to generate profits, in a cooperative enterprise called as a business surplus at a certain level of sales, assets, or capital. Cornett, et al (2012) and Ross, Stephen A (2016) state that profitability of a business entity can be measured with profit margin which describes the ability to earn profit from sales, return on assets that describe the ability to earn a profit of all assets operationalized, and return on assets that illustrate the ability to earn on equity.

In this study, profitability will be measured by ROE to measure a company's ability to generate profits based on a certain level of equity capital (Hanafi, Mamduh, 2005). In the cooperative enterprises, profitability is assumed to be equal to the business surplus, according to Indonesian Act No. 25 / 1992 / Cooperatives, Article 45, states that the remaining surplus of the cooperative business represent the income of the cooperative obtained in one period minus expenses, depreciation, and other liabilities including taxes in the relevant fiscal year.

## 2.3 The Cooperative Firm Value

The cooperative firm value to be considered as an alternative to provide more value in improving the member's economic welfare. Increasing the cooperative firm value has not been considered as one of the objectives of cooperative enterprises, whereas it is realized or not the value must occur in every enterprises, for example from the higher value of assets owned, the undistributed business surplus that accumulate as a capital allowance in cooperative, highly prospective cooperative business, increasing human capital capability, systems that have been built so far and others.

Cooperatives are not go public yet, and then of course the cooperative firm value cannot be judged by the stock market price. Using a value prediction approach to be paid by prospective investors when a cooperative is sold will also make it difficult for the cooperative, since the first cooperative principle states that members can leave at any time when members want. A possible approach to use is the net wealth improvement approach. Components of net assets include members' deposit capital in the form of principal savings, mandatory savings, other deposits equivalent to mandatory savings, grants received by cooperatives, and capital allowance formed by business surplus.

Member's deposits indicating ownership are the rights of each member. Grants are accepted solely because of the existence of cooperative, and capital allowance are not shared to members, capital allowance are only used to bear the risk when cooperative suffers losses, so that magnitude of net wealth increase can be valued at the amount of capital allowance formed by business results, which can be formulated as follows:

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If we assume that cooperative firm value as an equity					
Cooperative firm = Equity					
value					
Net worth or equity in the form of members' deposits and capital participation not as permanent capital of the cooperative, because it must be paid back when the member out and divest the capital of participation					
Then					
Cooperative firm = Equity – nonpermanent					
value capital					
Then:					
Nonpermanent=Principalsaving+Capitalmandatorysaving +Otherdepositsequivalenttomandatorysavings +Capitalparticipation					
Then:					
Cooperative firm = Permanent capital					
value					
So:					
Cooperative firm = Capital Allowance + Grants value					

Source: Sugiyanto (2010)

Increasing the cooperative firm value is only valued at capital allowance derived from business surplus because it is not related to the rights / claims of members at the time of the cooperative membership out. We know that at any time members may be out of membership, then members will only be given a refund of principal savings, mandatory savings, other deposits equivalent to mandatory savings. This condition indicates that members of the cooperative do not get the added value of the paid-up capital if the person leaves the cooperative membership. The increase of the value of the cooperative enterprises which is valued from the capital allowance formed by undistributed business surplus is actually a part of the member's business surplus however, on basis of description, it is preferable that the capital allowance not be distributed to the member upon exit of the cooperative membership. This is in accordance with the Indonesian Act No 25 / 1992 / Cooperatives, Article 45 (2) The rest of the business surplus after deducting the capital allowance, distributed to members in proportion to the business services performed by each member to the cooperative, and other purposes of the cooperative, in accordance with the decision of the Member Meeting. From this statement can be interpreted that is divided for members limited to the surplus of the member's husiness

To support this study based on several previous researches indicated that the leverage ratio measured by debt to equity ratio has a positive effect on return on equity (Salim, Jihan, 2015). Other research indicates that firm's performance, which is measured by profitability ratio, is an influenced by the degree of capital structure (MOSCU, Raluca Georgiana, 2014).

The results of research conducted by Dewi, Inggi Rovita, et al (2014) concluded that there is partially and simultaneously significant influence of debt to assets ratio on firm value measured by Tobin's Qar var. The relationship between capital structure and firm value has a nonlinear relationship represents a convex Parapol shape, (Cuong, Nguyen Thanh, 2014).

### 2.4 Hypothesis

Based on the library review and previous researches, it can be formulated hypothesis: (1) There is impact of decision of cooperative capital structure decision to profitability, (2) There are impact either directly or indirectly of decision of cooperative capital structure and profitability on cooperative firm value.

## **3 METHODS**

This research conducted in West Java, Indonesia. The type of research is descriptive quantitative analysis, by using survey research the required data is secondary data from cooperative financial statements during 5 years, sample size 52 cooperatives using simple random sampling technique. Path analysis method used to explain the strength and direction of

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the impact of some independent variables to one dependent variable. Hypothesis test is done by using t - test.

# 4 RESULTS AND DISCUSSION

In accordance with the purpose of this study is to examine the impact of decision of cooperative capital structure on profitability and firm value, using path analysis with the SPSS program version 20, summary of analysis results can be presented in table 1 and figure 3:

No	Description	R	R Square (%)	Significantly
1	Impact of Decision of Cooperative Capital Structure on Profitability	0,235	5, 5	Significant
2	Impact of Profitability on Firm Value	0,448	20	Significant
3	Impact of Decision of Cooperative Capital Structure on Firm Value (Direct)	0,237	5,6	Significant
4	Impact of Decision of Cooperative Capital Structure on Firm Value Through Profitability (Indirect)	0,324	10,53	Significant
5	Total Impact		16,13	Significant

Source: Path Analysis Results

The results of the analysis can be described in figure 3:



Figure 3: The impact of decision of cooperative capital structure on profitability and firm value.

Based on the table 1 and figure 3, result of this study gradually can be explained as direct and indirect impacts.

# 4.1 Direct Impacts

### 4.1.1 Impact of Decision of Cooperative Capital Structure on Profitability

Decision of cooperative capital structure as measured by debt to asset ratio has an impact on profitability measured by return on equity. The magnitude of correlation coefficient (r) of 0.235 and significant, it shows that decision of cooperative capital structure that described by combination of debt capital and equity capital, and usually the decision of capital structure is emphasized on the acquisition of higher debt capital sources, mean that the higher assets financed by debt capital will impact on the return on equity. In other words the return for the member capital deposited in the cooperative will increase when the cooperative is increasingly using debt capital. Although the magnitude of the impact of capital structure on profitability described by determinant coefficient is only (r2) = 5.5%. This is in accordance with previous theory which states that decision of capital structure becomes leverage to return on equity.

#### **4.1.2 Impact of Profitability on Firm Value**

In this study also examines the impact of profitability as measured by return on equity on cooperative firm value are measured by the ratio of permanent capital to total equity capital. The permanent capital of the cooperative consists of capital allowance and grants, it means that cooperative capital which will basically be in the cooperative during the cooperative are still running. The result of analysis shows that there is impact of profitability to cooperative firm value with correlation coefficient (r) equal to 0,448 and have a significant impact. It is indicates that increasing of cooperative profitability will impact on the development of permanent capital especially related to the development of allowance capital, the reality in the field shows that the higher the business surplus obtained by the cooperative will have an impact on the allowance of the business surplus used to cultivate the allowance capital. The magnitude of the impact of profitability on the cooperative firm value measured by the determinant coefficient  $(r_2) = 20.0\%$ . It is consistent with the results of previous research on various types of business entities, means that theory also applies to cooperative enterprises.

### 4.1.3 The Impact of Decision of Cooperative Capital Structure on Firm Value

The impact of decision of cooperative capital structure on cooperative firm value indicate that, magnitude of correlation coefficient of the impact of decision of cooperative capital structure on firm value of r = 0.237, significant. This result indicates that there will be an increase in the cooperative firm value when the debt to assets ratio also increase, it means that if the source of capital derived from the debt is increased will have a positive impact on the increase in the cooperative firm value is assessed by the ratio of permanent capital to equity capital. The magnitude

of the impact of decision of cooperative capital structure on cooperative firm value as measured by the determinant coefficient (r2) = 5.6%. The results of this study in line with previous studies which states that one of the factors that impact cooperative firm value is the decision of cooperative capital structure.

# 4.2 Indirect Impact of Decision of Cooperative Capital Structure on Firm Value through Profitability

The magnitude of indirect impact of decision of cooperative capital structure on cooperative firm value through profitability of correlation coefficient (r) = 0.324, significant. This coefficient shows that the impact of decision of cooperative capital structure to the cooperative firm value through profitability has a greater impact than the direct impact of decision of cooperative capital structure on the cooperative firm value of r = 0.237. It shows that the fact that has a greater impact in determining the cooperative firm value is profitability. It can be shown by the magnitude of the impact of profitability on the cooperative firm value with a correlation coefficient (r) of 0.448, because the change in the cooperative firm value described by the ratio of permanent capital to equity is depend on the size of cooperative business surplus, because some business surplus should be set aside to foster capital allowance as one element of cooperative permanent capital.

When combined with the direct impact of decision of cooperative capital structure on firm value and indirectly from the decision of cooperative capital structure to firm value through profitability as intervening variable then the overall magnitude of the capital structure impact on cooperative firm value of r2 = 16.13%.

### 5 CONCLUSIONS

Based on this study, we can draw some conclusions: (1) Decision of cooperative capital structure as an illustration of the size of the cooperative debt used to finance the asset has a significant impact on cooperative profitability, thus there is a leverage on cooperative profitability; (2) Profitability has a significant impact on cooperative firm value, thus the development of the cooperative firm value influenced by cooperative profitability; (3) The decision of cooperative capital structure directly also impact on the cooperative firm value, it shows that the larger debt used to finance the assets of the cooperative will have an impact on the cooperative firm value; (4) The decision of cooperative capital structure indirectly impact on cooperative firm value through profitability as intervening variables, it shows that decision of cooperative capital structure impact on firm value through profitability greater than direct impact of decision of cooperative capital structure on firm value; (5) Overall, it can be concluded that decision of cooperative capital structure and profitability become the determinant of increasing cooperative firm value.

Based on the above conclusions, it can be suggested that cooperatives should also be able to utilize the source of capital derived from debt, because the source of debt capital becomes leverage to the profitability of the cooperative. The cooperative profitability and firm value as an impact of decision of cooperative capital structure should be basis for financing management policy.

### REFERENCES

Ariffin, R., 2003. Ekonomi Koperasi. Bandung: Ikopin.

- Brigham E F, et al. 1999. Intermediate Financial Management, Sixth Edition. Tokyo: The Dryden Press.
- Cornet, and et al. 2012. *Finance, Application & theory*, New York: Mc Graww Hill.
- Cuong, N. T., et al. 2012. The Effect of Capital Structure on Firm Value for Vietnam's Seafood Processing Enterprises, *International Research Journal of Finance and Economics* ISSN 1450-2887 Issue 89 (2012).
- Dewi, I. R., et al. 2014. Pengaruh Struktur Modal Terhadap Nilai Perusahaan, Jurnal Administrasi Bisnis (JAB) [Vol. 17.
- Hanafi, M. M., 2005. *Manajemen Keuangan*. Yogyakarta: BPFE UGM.
- Hanel, A., 1988. Organisasi Koperasi, Pokok-pokok Pikiran mengenai Organisasi Koperasi dan Kebijakan Pengembangan di Negara-negara Berkembang. Bandung: Universitas Padjadjaran.
- LAWAL, A. I., 2014. Capital structure and the value of the firm: evidence from the Nigeria banking industry. *JAM* vol. 4, No 1.
- Mahdaleta, E., et al. 2016. Effects of Capital Structure and Profitability on Corporate Value with Company Size as the Moderating Variable of Manufacturing Companies Listed on Indonesia Stock Exchange. *Academic Journal* of Economic Studies Vol. 2, No.3, September 2016, pp. 30–43 ISSN 2393-4913, ISSN On-line 2457-5836.
- Masidonda, J. L., et al. 2013. Determinants of Capital Structure and Impact Capital Structure on Firm Value. IOSR *Journal of Business and Management* (IOSR-JBM) e-ISSN: 2278-487X. Volume 7, Issue 3 (Jan. -Feb. 2013), PP 23-30.
- Ministry of Cooperative and SME's of Indonesia. 2001. Indonesia Act No.25/1992/Cooperatives.

. 2016. Financial Report Cooperative

- MOSCU, R. G., 2014. Capital Structure and Corporate Performance of Romanian Listed Companies. International Journal of Academic Research in Accounting, Finance and Management Sciences Vol. 4, No.1, pp. 287–292 E-ISSN: 2225-8329, P-ISSN: 2308-0337.
- Necib, R., et al. 2014. The Impact of Capital Structure and Profitability on the Growth of Private Companies in Algeria, International Journal Economics & Strategic Management of Business Process 2nd International Conference on Business, Economics, Marketing & Management Research, Vol.4.
- Pontoh, W., et al. 2013. Determinant Capital Structure and Profitability Impact, *Research Journal of Finance and* Accounting ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.15, 2013.
- Quang, D. X., et al. 2015. Measuring Impact of Capital Structure on Financial Performance of Vietnamese Soes. *Innovative Journal of Business and Management* 4:6 November – December (2015) 114 – 117.
- Ropke, J., 2002. Entrepreneurship Training for Cooperative Leader and Official, Training Material, Jatinangor-Bandung.
- Ross, S. A., et al. 2016. *Fundamental of Corporate Finance, second edition.* New York: Mc Graw Hill Education.
- Salawu, R. O., et al. 2009. The Effect of Capital Structure on Profitability: An Empirical Analysis of Listed Firms in Nigeria, *the International Journal of Business and Finance Research*, Volume 3 Number 2, 2009.
- Salim, J., 2015. Pengaruh Leverage (Dar, Der, Dan Tier) Terhadap Roe Perusahaan Properti Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2014, Perbanas Review Volume 1.
- Sugiyanto. 2007. Pengaruh Kompetensi dan Komitmen Manajemen terhadap Kinerja Keuangan, Promosi Ekonomi Anggota dan Perubahan Struktur Modal, Manajemen Usahawan Indonesia, No 10/Th. XXXVI Oktober 2007.

. 2010. Indonesia Bangkit Untuk Kesejahteraan Rakyat. Jatinangor: IKOPIN Press.

- Siaw, P. W., 1999. Corporate Finance: Capital Structure Decision, *Working Paper*, University of Illinois at Urbana-Champaign, 1-28.
- Sultan, A. S., et al. 2015. The Effect of Capital Structure on Profitability: An Empirical Analysis of Listed Firms in Iraq, European Journal of Accounting, Auditing and Finance Research Vol.3, No.2, pp.61-78, December 2015.
- Vătavu, S., 2015. The impact of capital structure on financial performance in Romanian listed companies. *Procedia Economics and Finance* 32 (2015) 1314 132.