Stress Role and Dysfunctional Behavior on The Performance of Internal Auditor

Rieke Sri Rizki Asti Karini STIEPAR YAPARI AKTRIPA Bandung www.rsrak17@yahoo.com

Abstract

This study intends to show the relationship of stress role including role conflict and role ambiguity with dysfunctional behavior, and its effect on the performance of internal auditors at BO of BJB Bank. The research design is explanatory survey, with a population of internal auditors (internal controls) throughout BO of BJB Bank which is also a sample. The type of data is cross-section with a collection of questionnaires. The method used is path analysis. The analysis showed: 1) role conflict and role ambiguity did not have a positive effect on the dysfunctional behavior of internal auditor; 2) role conflict and role ambiguity did not adversely affect the performance of the internal auditor; and 5) dysfunctional behavior did not negatively affects the performance of the internal auditor. The reason is that the internal auditors have adequate skills and knowledge in every BO of BJB Bank, so they can control the condition of stress role experienced in low levels. Stressful conditions can serve as constructive stress that brings a positive impact that suppress the emergence of dysfunctional behavior and make stress as a spur to improve their performance.

Keywords:stress role, role conflict, role ambiguity, dysfunctional behavior, and internal auditor performance.

INTRODUCTION

Banking in West Java plays an important role in determining national economic life, based on the buffer zone of the capital city of Jakarta. The average share or the bank role in the area of West Java towards national banks is amounted to 7.49% during the period in 2014 (Table 1).

	Table 1. Marke	t Share West Ja	va Banking	g
N-	Main Indicator of	National	Wes	t Java
No	Banking	Total	Total	Percentage
1	Total Assets	Rp 5.6151,7 trilion	Rp 420.8 trilion	7,49 %
2	Depositors' Funds	Rp 4.009,818 trilion	Rp 332,5 trilion	0,8 %
3	Loans	Rp 3.707.916 trilion	Rp 305,2 trilion	0,08 %

Source: (Bank Indonesia, 2015: processed)

This potential market segment should be used as a driver for banks in West Java to develop their business. In particular, business development is pursued by *PT*. *Bank Pembangunan Daerah Jawa Barat dan Banten*, Tbk, or better known as BJB Bank.

"PT. Bank Pembangunan Daerah Jawa Barat dan

Banten, Tbk. known as BJB bank, is a commercial bank that is owned by the Provincial Government of West Java, Banten Provincial Government, municipality/ regency in West Java and Banten, and the public (BJB Bank Annual Report 2014, 2015: 37).

Until December 31, 2014, BJB bank already has 62 branch offices (BO), 312 Subsidiary Branch Office (SBO), 318 Cash Office, 133 Payment Points, 11 Cash Car Itinerants and 1,191 ATMs of BJB (Annual Report BJB 2014, 2015: 48) spread in the region of West Java, Banten, Jakarta, Sumatra, Kalimantan, Sulawesi and Bali. BJB's management realized the need for a strategy to confront the intense market competition between banks in different regions since the implementation of regional autonomy which has an impact on performance. It is meant to improve the BJB bank's performance through improving the effectiveness of the internal auditor's role in the Branch Office. Efforts which are made to carry out one of the five management policy in 2014, which is also to improve the internal audit's role as a strategic business partner for the management and the whole range of bank and risk-based audit planning (BJB bank's Annual Report 2014, 2015: 89).

The stabilization of management control and the ensure implementation of the principles of prudence in the management of PT Bank Jabar and meets the Regulation of Bank Indonesia No. 1/6/PBI/99 dated September 20,1999 on the assignment of Compliance Director and the application of the Internal Audit Standards for Commercial Banks, Bank Indonesia Regulation No. 13/2/PBI/2011 dated January 12, 2011 on the Implementation of Commercial Bank Compliance Function.

Based on Bank Indonesia Regulation Number 8/14/2006 concerning Amendment to Bank Indonesia Regulation No. 04.08.2006 on the Implementation of Good Corporate Governance for Banks, BJB bank has implemented a restructuring. The new organizational structure as shown in the BJB Bank Directors' Decree No. 667/SK/DIR-PS/2013 dated October 29, 2013 approved by the Decree of the Board of Commissioners BJB Bank No. 001/SK/DK/2014 dated January 22, 2014 has established the Internal Audit Division in the command line of Managing Director and Audit Committee (BJB bank Annual Report 2014, 2015: 462).

The task of the Audit Committee is supervising the bank's internal control system, so that banks can be managed with the principles of transparency, accountability, accountability, independence.

"BOC has established an Audit Committee. The Audit Committee is fittings of BOC whose function is to supervise the effectiveness of internal control systems, internal audit, financial reporting process, so that the Bank can be managed based on the principles of transparency, accountability, responsibility, independence (Annual Report BJB 2014, 2015: 400).

Internal auditors in BJB bank have a role with regard to internal audit. According to Buchanan and Huczynsky (2007: 276), "role is defined as a position that has expectations evolving from established norms". Basically, the role is a position that is expected to be executed in accordance with the norms that have been established.

This condition causes the internal auditor in the BJB bank required to provide the best services to stakeholders in accordance with the conditions and policies that have been outlined. Based on BJB bank Annual Report 2014 (2015: 404) stated that:

"In accordance with the guidelines for its work, the Audit Committee reviewed the financial statements and other financial information for the benefit of stakeholders, examining the achievement, effectiveness, and objectivity of the whole process of internal and external audits, evaluates the Bank's policies relating to compliance with regulations and legislation applied, and provide improvement recommendations of internal control system"

In addition, the BJB bank Annual Report 2014 (2015: 467) explained that:

"Satuan Kerja Audit Intern (SKAI) is a business partner of all work units which function is to provide assurance and consulting independent and objective in making added value recommendations and improve the operations of the organization. SKAI assist the organization in achieving its objectives by evaluating and improving the effectiveness of risk management, internal control and governance processes".

Internal auditors who are listed as members of Satuan Kerja Audit Intern (SKAI) in BO of BJB bank sometimes faced some conflicts of interest, both between individuals and departments within the company's work environment. Various pressures and conflicts faced by the internal auditoris because the limited amount of disproportionate to the scope of work for which they are responsible. The total of internal auditors in BO of BJB bank is as much as 2-3 personnels, including 1 Head of the SKAI and 1 or 2 Members of SKAI. This condition affects its function in a careful monitoring of the process of transactions in each work unit. The number of units in each BO of BJB bank consists of three units, namely credit, supervision, and loan salvage, and units of funds and services. Each BJB bank oversees Subsidiary Branch Office (SBO) or Cash Unit (CU) and some have Payment Point.

Various pressures and conflicts experienced by the internal auditor in BO of BJB bank will raise the stress role. According to Gregson, Wendell and Aono (2014:23) that:

"Stress role defined as a condition of where a natural individual of role conflict and of role ambiguity. Role conflict defined as a situation where there are unsuitable between expectation by what conducted by some side of activity from a work. While role ambiguity defined as a situation which individual executing a role in its work experience of lacking of information concerning activity which to must implementation of result of which expected from conducted work it".

In general, it indicates that the condition of experienced stress role of internal auditors is due to less optimal follow up on the results of the internal audit report provided to a unit at BO of BJB bank. Stress role conditions are exacerbated by the frequent occurrence of imbalances between the roles of internal auditors with working unit personnels in BO of BJB bank.

Stress role conditions which are in stress and in conflict will result in the emergence of dysfunctional behavior. According to Mondy, Sharplin and Premeaux (2009:489), the role conflict and role ambiguity at work leads to such a dysfunctional work-related behaviors as tension, job dissatisfaction, propensity to leave the organization and lowered commitment. Dysfunctional behavior can affect the performance of individuals and groups in carrying out its role in the organization. This is consistent with the statement of Gibson, Ivancevich and Donnelly Jr. (2009: 299) that dysfunctional conflict can have a negative impact on the performance of individuals, groups and organization. A variety of dysfunctional behavior can be demonstrated by their low morale, indiscipline work, job dissatisfaction, low organizational commitment, poor quality of work, the

tendency to leave the organization and low work ethic.

With the dysfunctional behavior caused by stress role, the stress role is basically one of the factors that could affect the performance of individuals and groups in carrying out its role in the organization. This is consistent with the statement of Barney and Griffin (2012:702) who stated that the stress experienced by individuals has direct consequences for organizations. Too much stress can lower employee performance. Home Office (HO) Management of BJB bank realizes the effects of stress role can affect the performance of internal auditors at the present time or in the future. In corelation with this, the management of Bank Jabar uses the service of Earns & Young Consulting affiliated with the Public Auditor Office Purwantono Suherman & Surja as external consultants by the decision of the RUPS of BJB bank dated March 26, 2014 and published in accordance with Letter of Directors No. 154/DIR-CS/2014 in the context of the examination on a test basis. It is proved as evidence supporting the amounts and disclosures in the financial statements 470 (BJB bank's Annual report 2014, 2015:470).

Based on a variety phenomenas and ideas described above, this study has two main central themes, (1) the effect of role conflict and role ambiguity to dysfunctional behavior, and (2) the effect of role conflict, role ambiguity and dysfunctional behavior on the performance of the internal auditor. Identifications of this study are: (1) Isstress role that includes role conflict and role ambiguity simultaneously and partially have positive effect on the internal auditor's dysfunctional behavior. Also (2) Isstress role that includes role conflict and role ambiguity and dysfunctional behaviors simultaneously and partially have negative effect on the performance of internal auditor.

METHOD

The object of the research consisted of three variables, namely: (1) an independent variable (X), the stress role consisting of two subvariables that are role conflict (X_1) and role ambiguity (X_2), (2) an intervening variable (Y), the dysfunctional behavior of internal auditor, and (3) the dependent variable (Z), the performance of the internal auditor.

The research design is explanatory survey with the population of internal auditor (Head of SKAI or KIC/Kontrol Internal Cabang) throughout BO of BJB bank in 2014. Every member of the population has an equal chance of being used as a sample, because everything is homogeneous. Random nature of the respondents assumed to have been represented by the random nature of the return of the questionnaire, so that all respondents who returned the questionnaire are considered to form a sample.

Operationalization of research variables as Table 2. Data used is cross-section, with primary data through questionnaires, interviews and observation. Secondary data were obtained through documentation. Indicators are measured by ordinal scale based of Likert scale. Testing methods of data are:

- a. Validity testing with the Pearson Product Moment Correlation technique. This testing can obtain the information about the value of validity (r) which shows the data included in the category of positive/ negative valid/invalid.
- b. Reliability testing with split testing techniques (splithalf) Spearman Brown (r tot) that displays the entire item in question tested included in the category of positive/negative and reliable/unreliable.

Path analysis was used by first converting ordinal data into interval through a method of successive intervals.

The designs of statistical hypotheses tested consist of:

1) Ho_1 : $Pyx_1 = Pyx_2 = 0$: Stress roles which include role conflict and role ambiguity simultaneously have no effect on the internal auditor's dysfunctional behavior.

Ha₁: At least one $Pyx_i \neq 0$, where: i = 1, 2. Stress role which include role conflict and role ambiguity simultaneously affect the dysfunctional behavior of internal auditors.

- 2) Ho₂: Pyx_i ≤ 0, where: i = 1, 2. Stress role which include role conflict and role ambiguity partially have no positive effect on the internal auditor's dysfunctional behavior. Ha₂: Pyx_i > 0, where:i = 1, 2. Stress role which include role conflict and role ambiguity partially
- have a positive effect on the internal auditor's dysfunctional behavior.
 Ho₃: Pzx₁ = Pzx₂ = Pzy = 0: Stress rolees which include role conflict and role ambiguity and dysfunctional behaviors simultaneously have no effect on the performance of the internal auditor. Ha₃: At least one Pzx₁ ≠ 0 atau Pzy ≠ 0, where:i = 1, 2. Stress role which include role conflict and role ambiguity and dysfunctional behaviors simultaneously affect the performance of the internal auditor.

Ha₃:At least one $Pzx_i \neq 0$ atau $Pzy \neq 0$, where: i = 1, 2.

4) Ho₄: Pzx_i \leq 0 or Pzy \leq 0, where: i = 1, 2. Stress role which include role conflict and role ambiguity and partially dysfunctional behavior does not negatively affect the performance of the internal auditor. Ha₄: Pzx_i > 0 or Pzy > 0, where: i = 1, 2. Stress role which include role conflict and role ambiguity and dysfunctional behavior partially negatively affect the performance of the internal auditor.

RESULT

Submission of a research questionnaire to the

respondents was carried out for about two months beginning in early January 2015 until the beginning of April 2015 (Table 3).

The author conducted tabulation of data by giving a score based on the Likert scale techniques. The test showed result data using "Pathcel Microsoft Excel-Windows 2000".

The result of the calculation to the correlation coefficient between the variables X_1, X_2 with a variable Y (Table 4) and the variable X_1, X_2, Y, Z (Table 5).

The result of the calculation to the correlation coefficient between the exogenous variables arranged in inverse correlation matrix (Table 6 & 7).

The results of calculations for path coefficients (Table 8 & 9).

The path coefficient which shows the relationship between variables (Figure 2 & 3).

Based on the simultaneous test results Table 12, it indicated that the value of $F_{count} = 0.4995$ is smaller than the $F_{table} = 3.3690$ at the significant level of 95% ($\alpha = 5\%$) and 2/26 degree of freedom (df= 2:29-2-1). Therefore, in accordance with the conditions of the test criteria, if $F_{count} < F_{table}$ then H_{01} is accepted or H_{a1} rejected, it means that a "stress role which include role conflict (X_1) and role ambiguity (X_2) simultaneously does not affect the internal auditor's dysfunctional behavior (Y).

The total value of the coefficient of determination $(R^2_{Y,X|X2})$ or the closeness of the relationship is by 3.70%, which means that the internal auditor's dysfunctional behavior (Y) is by 3.70% affected simultaneously by role conflict (X_1) and role ambiguity (X_2) . Referring to the total value of the coefficient of determination $(R^2_{Y,X|X2})$ or the closeness of the relationship by 3.70%, it can be concluded that the variables X_1 and X_2 have a degree of effect of "slight, a lost negligable relationship" to variable Y.

Based on the simultaneous test results Table 13, it indicates that the value of $F_{count} = 3.8395$ is greater than the $F_{table} = 2.9912$ at the significant level of 95% ($\alpha = 5\%$) and 3/25 degree of freedom (df = 3:29-3-1). Therefore, in accordance with the conditions of the test criteria, if $F_{count} > F_{table}$ then H_{a1} is accepted or H_{o1} is rejected, it means that "stress role which include role conflict (X_1) and role ambiguity (X_2) as well as the internal auditor's dysfunctional behavior (Y) simultaneously affect the performance of the internal auditor (Z).

The total value of the coefficient of determination $(R^2_{Z,X1X2Y})$ or the closeness of the relationship amounted to 31.54%, which means that the performance of the internal auditor (Z) by 31.54% affect simultaneously by role conflict (X_1) , role ambiguity (X_2) and internal auditor's dysfunctional behavior (Y). Refers to the total value of the coefficient of determination $(R^2_{Z,X1X2Y})$ or the closeness of the relationship by 31.54%, it can be concluded that the variables X_1, X_2 and Y have a degree of effect of "low correlation" to the variable Z.

Based on the partial test results Table 14 shown that the value of $t_{count} = 0.9637$ is smaller than $t_{table} = 1.7056$ at the significant level of 95% ($\alpha = 5\%$) and 26 degree of freedom (df = 29-2-1). Therefore, in accordance with the conditions of the test criteria, if $t_{count} < t_{table}$ then H_{o2} is accepted or H_{a2} is rejected, it means that role conflict (X_1) has no positive effect on the dysfunctional behavior of internal auditor (Y). The results of testing are to determine the effect of variable X_1 directly and indirectly to variable Y (Table 15).

Referring to the Table 15, it indicated that the direct effect of the variable X_1 to variable Y is of 3.48% and an indirect effect of variable X_1 through variable X_2 to variable Y is at - 0.14%. Based on the test results of direct and indirect effect, the total effect of variable X_1 to variable Y is by 3.34%. It can be concluded that the variable X_1 has a degree of effect of "slight, a lost negligable relationship" to variable Y.

Based on the partial test results Table 16 shown that the value of $t_{count} = 0.3638$ is smaller than $t_{table} = 1.7056$ at the significant level of 95% ($\alpha = 5\%$) and 26 degree of freedom (df = 29-2-1). Therefore, in accordance with the conditions of the test criteria, if $t_{count} < t_{table}$ then H_{o2} is accepted or H_{a2} is rejected, it means that role ambiguity (X_2) has no positive effect on the dysfunctional behavior of internal auditor (Y). The results of testing are to determine the effect of variable X_2 directly and indirectly to variable Y (Table 17).

Referring to the test results Table 17, it indicated that the direct effect of variable X₂ on variable Y is at 0.50% and the indirect effect of variable X₂ through variable X₁ to variable Y is -0.14%. Based on the test results of direct and indirect effect, then the total effect of variable X₂ to variable Y is 0.36%. It can be concluded that the X₂ has a degree of effect of "slight, a lost negligable relationship" to variable Y.

Based on the partial test results Table 18 shown that the value of $t_{count} = -0.4739$ is greater than $t_{table} = -1.7081$ at a significant level of 95% ($\alpha = 5\%$) and 25 degree of freedom (df = 29-3-1). Therefore, in accordance with the conditions of the test criteria, if $t_{count} > t_{table}$ then H_{o4} is accepted or H_{a4} is rejected, it means that role conflict (X_1) should not negatively affect the performance of internal auditor (Z).

Referring to Table 19, it indicated that the direct effect of the variable X_1 to variable Z is 0.64%, the indirect effect of variable X1through variable X_2 to variable Z is 0.43% and the indirect effect of variables X_1 variable through variable Y to variable Z is at -0.23%. Based on the test results of direct and indirect effect, the total effect of the variable X_1 to variable Z is by 0.84%. It can be concluded that the variable X_1 has a degree of effect of "slight, a lost negligable relationship" to variable Z.

Based on Table 20, it was shown that the value of $t_{count} = 3.1136$ is greater than $t_{table} = -1.7081$ at a significant level of 95% ($\alpha = 5\%$) and 25 degree of

freedom (df = 29-3-1). Therefore, in accordance with the conditions of the test criteria if $t_{count} > t_{table}$ then H_{o4} is accepted or H_{a4} is rejected, it means that role ambiguity (X₂) does not negatively affect the performance of internal auditor (Z).

Referring to Table 21, it indicated that the direct effect of variable X_2 to variable Z is 26.97%, the indirect effect of variable X_2 through variable X_1 to variable Z is 0.43% and the indirect effect of variable X_2 through variable Y to variable Z is 0.43%. Based on the test results of direct and indirect effect, the total effect of X_2 to variable Z is at 27.84% (positive). It can be concluded that the variable X_2 has a degree of effect of "low correlation" to variable Z.

The partial test results of variableY to variable Z are as followed:

Based on Table 22, it was shown that the value of $t_{count} = 0.9681$ is greater than $t_{table} = -1.7081$ at a significant level of 95% ($\alpha = 5$ %) and 25 degree of freedom (df = 29-3-1). Therefore, in accordance with the conditions of the test criteria, if $t_{count} > t_{tabel}$ then H_{o4} is accepted or H_{a4} is ejected. It means that "dysfunctional behavior (Y) does not negatively affect the performance of the internal auditor (Z)". The results of testing are to determine the effect of variable Y directly and indirectly to variable Z, as followed:

Referring to Table 23, it indicated that the direct effect of variable Y towards variable Z is 2.66%, the indirect effect of variable Y through variable X_1 towards variable Z is at -0.23%, and the indirect effect of variable Y through variable X_2 towards variable Z is 0.43%. Based on the test results of direct and indirect effect, the total effect of the variable Y towards variable Z is 2.86% (positive). It can be concluded that the variable Y has a degree of effect of slight, a lost negligable relationship towards the variable Z.

The results of testing showed that these hypotheses as a whole are in accordance with the simultaneous and partial testings Table 24 & 25.

CONCLUSIONS

The results of data analysis and hypothesis testing showed several things, including: 1) role conflict has "no positive effect" on the dysfunctional behavior of internal auditors; 2) role ambiguity has "no positive effect" on the dysfunctional behavior of internal auditors; 3) role conflict has "no negative effect" on the performance of internal auditor; 4) role ambiguity has "no negative effect" on the performance of internal auditor; and 5) dysfunctional behavior has "no negative effect" on the performance of internal auditor.

These are because the internal auditors have already had adequate skills and knowledge for their role in every BO of BJB bank, so they can control the stress role conditions experienced in low level. Thus, the stress condition can be used as a constructive stress to have a positive impact that suppress the emergence of dysfunctional behavior and can make stress as a driving force to improve its performance.

Rationality and various scientific conditions revealed that, based on one of several studies, the theory used in this study that in some cases, stress may actually result in a positive impact on individual performance and organizational goals. Thus, the internal auditor in the case of BO of BJB bank that is the subject of this study is one of several cases which prove that the condition of stress can contribute to enhance individual performance and achievement of corporate goals.

The usefulness of the results of this research effort could provide two main benefits, namely for the internal auditor in BO of BJB bank that is the subject of research, for more effective performance and to encourage the achievement of objectives in the future; and for other researchers who have one mission and vision to develop Economics, in particular science associated with Internal Auditor Behavioral Auditing.

REFERENCES

- Arens, Alvin A and James K Loebbecke. 2003. Auditing: An Integrated Approach. New Jersey Prentice Hall Inc..
- Bamber, E Michael, Doud Snowball and Richard M Tubbs. 1989. "Audit Structure and Its Relation to Role Conflict and Role Ambiguity: An Empirical Investigation". The Accounting Review. Vol LXIV. No 2. April. Pp 285 – 299.
- Bank Indonesia, 1999. Peraturan Bank Indonesia Nomor I/6/PBI/1999 tanggal 20 September 1999 tentang Penugasan Direktur Kepatuhan (Compliance Director) dan Penerapan Standar Pelaksanaan Fungsi Audit Intern Bank Umum.
- Bank Indonesia, 2006. Peraturan Bank Indonesia Nomor 8/4/PBI/2006 tanggal 30 Januari 2006 tentang Pelaksanaan Good Governance bagi bank umum.
- Bank Indonesia, 2006. Peraturan Bank Indonesia Nomor 8/14/PBI/2006 tanggal 5 Oktober 2006 tentang Perubahan Peraturan Bank Indonesia Nomor 8/4/PBI/2006 tanggal 30 Januari 2006.
- Bank Indonesia, 2011. Peraturan Bank Indonesia Nomor 13/2/PBI/2011 tanggal 12 Januari 2011 tentang Pelaksanaan Fungsi Kepatuhan Bank Umum.
- Bank Jabar, 2009. Surat Keputusan Direksi PT. Bank Jabar No. 657/SK/DIR-DAI/2009 tanggal 30 Juni 2009 tentang Piagam Internal Audit Charter PT Bank Jabar Banten.
- Bank Jabar, 2013. Surat Keputusan Direksi PT. Bank Jabar No. 667/SK/DIR-PS/2013 tanggal 29 Oktober 2013 tentang Struktur Organisasi PT Bank Pembangunan Daerah Jawa Barat dan Banten, Tbk Divisi Audit Internal berada dalam garis komando Direktur Utama dan Garis Koordinasi Komite Audit.
- Bank Jabar, 2013. Surat Keputusan Komisaris bank

bjb No. 001/SK/DK /2014 tanggal 22 Januari 2014 tentang Struktur Organisasi PT Bank Pembangunan Daerah Jawa Barat dan Banten, Tbk Divisi Audit Internal berada dalam garis komando Direktur Utama dan Garis Koordinasi Komite Audit.

- Bank Indonesia. 2015. *Kajian Ekonomi dan Keuangan Regional Provinsi Jawa Barat Triwulan IV 2014.* Bandung. Bank Indonesia.
- Bank Indonesia. 2015. Laporan Perekonomian Indonesia 2014. Jakarta. Bank Indonesia
- Bank Jabar. 2015. Laporan Tahunan bjb 2014. Bandung. Kantor Pusat bank bjb.
- Barney, Jay B. and Ricky W Griffin. 1992. The Management of Organizations: Strategy, Structure and Behavior. Boston.Houghton Mifflin Co.
- Barlow, Stephen. 1995. The Business Approach to Internal Auditing. Johannesburg. Juta & Co. Ltd..
- Buchanan, David and Andrzej Huczynsky. 1997. Organizational Behaviour: An Introduction Text. New Delhi.Prentice Hall.
- Chambers, Andrew D. 1981. Internal Auditing: Theory and Practice. London. Pitman Publishing.
- Davis, Keith and John J Newstrom. 1995. Human Behaviour at Work: Organizational Behaviour. Mc Graw Hill.
- Fogarty Timothy J., Jagdip Singh, Gary K. Rhoads and Ronald K. Moore. 2000. "Antecedents and Consequences of Burnout in Accounting: Beyond the Role Stress Model". Behavioral Research in Accounting. Vol 12. Printed in USA. Pp 31 – 67.
- Frederick, Robert L. 1999. Internal Auditing. London. Pitman Publishing.
- George, Jennifer W, and Jones, Gareth R. 2002. Understanding and Managing Organizational Behavior. New Jersey. USA. Pearson Education, Inc. Upper saddle River.
- Gibson, James L, John M Ivancevich and James H Donnelly Jr. 1999. Organizations: Behaviour, Stucture, Processess. USA. Richard D Irwin Inc.
- Gregson, Terry, John Wendell and June Aono. 1994.
 "Role Ambiguity, Role Conflict, and Perceived Environmental Uncertainty: Are the Scales Measuring Separate Constructs for Accountants?". Behavioral Research in Accounting. Vol 6. Printed in USA. Pp 144 – 159.
- Guilford, J.P. 1956. Foundamental Statistics in Physichology and Education. New York. McGraw-Hill Inc.
- Hay's, William L. 1969. Quantification in Psychology. New Delhi. Prentice Hall.
- Hiro Tugiman. 2000. Pengaruh Peran Auditor Internal Serta Faktor-Faktor Pendukungnya Terhadap Peningkatan Pengendalian Intern dan Kinerja Perusahaan. Disertasi. Pascasarjana Universitas Padjadjaran. Bandung.
- Hellriege, Don. Slocumi, John W and Woodman, Richard W. 2002. Organizational Behavior. Ohio.

South-Western College Publishing Cincinnati.

- HS Hadibroto. 1993. Peranan Fungsi Pengawasan Dalam Manajemen. Forum Komunikasi Satuan Pengawasan Intern BUMN dan BUMD. Medan.
- Ikatan Akuntan Indonesia. 2002. Standar Profesional Akuntan Publik. Yogyakarta. Bagian Penerbitan Sekolah Tinggi Ilmu Ekonomi YKPN.
- Indriantoro dan Bambang Supomo. 1999. *Metodologi Penelitian Bisnis: Untuk Akuntansi dan Manajemen.* Yogyakarta. BPFE.
- Kell, Walter G, William C, Bayutan and Richard E. 1996. Modern Auditing. Singapore. John Willey and Son.
- Kelley, T and Margheim. 1990. The Impact of Time Budget Pressure, Personality and Leadership variables On Dysfunctional auditor Behavior Auditor. "Auditing: A Journal of practice and Theory. Spring. Pp 21-42.
- Kinicki, Angelo. Kreitner, Robert. 2003. Organizational behaviour: Key Concepts, Skills and Best Practice. New York. Mc Graw Hill, Co, Inc.
- Krogstrad Cs. 1999. "Where We're Going: How the New Definition of internal Auditing Impact the Profession's Evolution". Journal Institute of Internal Auditors. October. Vol LVI:V. Pp 27-33.
- Luthan, Fred. 2002. Organizational Behaviour. Singapore. Mc Graw Hill Book Co.
- Mallone, F and Robins, Robin W. 1996. "Factors Associated With the Incidence of Reduced Audit Quality Behaviors. "Auditing: A Journal of practice and Theory. Fall.. Pp 49-64.
- Masri Singarimbun dan Sofyan Effendi. 1995. *Metode Penelitian Survai*. Jakarta. LP3ES.
- Messier, William F. 2003. Auditoring and Assurance Services. New York. McGraw-Hill/ Irwin Inc.
- Moeller, Robert, and Witt, N Herbett. 1999. Modern Internal Auditing. New York. Ronald Press Publication.
- Mondy R W, A Sharplin, Shane R. Premeaux, and Judith Gordon. 1999. Management and Organizational Behaviour. Allyn & Bacon.
- Moorhead, Greggory and Ricky W Grifffin. 1995. Organizational Behavior – Managing People and Organization. Houghton Mifflin Co.
- Mueller, Daniel J. 1986. Measuring Social Attitude: A Handbook for Researchers and Practioners. New York. Teacher College Press.
- Nirwana S K Sitepu. 1994. Analisis Jalur (Path Analysis). Unit Pelayanan Universitas Padjadjaran Bandung. Statistika Jurusan Statistika FMIPA.
- Nurmadi H Sumarta. 2000. "Evaluasi Kinerja Perusahaan Perbankan yang terdaftar di Bursa Efek Jakarta dan Thailand". Perspektif: Jurnal Ilmu Ekonomi, Manajemen dan Akuntansi. Vol 5, No 2. Desember. Hal 49 – 60.
- Pei, Buck K W and Frederick G. Davis. 1989."The Impact of Organizational Structure an Internal

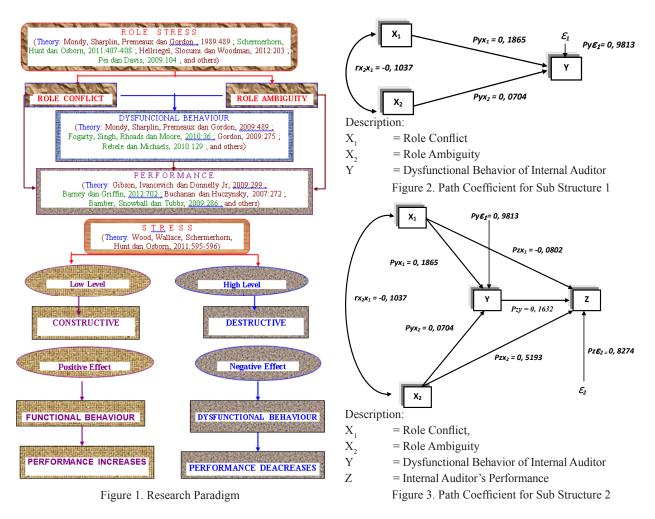
Auditor Organizational Professional Conflict and Role Stress: An Exploration of Linkages". Journal of Practice and Theory. Vol 8, No 2. Spring. Pp 101 – 113.

- Pierce, Jon L, and gardner, Donald G with Dunham, Randall B. 2002. Management Organization Behavior: An Integrated Perpective. New York. McGraw-Hill/ Irwin Inc.
- Rebele, James E and Ronald E Michaels. 1990.
 "Independent Auditors's Role Stress: Antecedent, Outcome and Moderating Variables". Behavioral Research in Accounting. Vol 2. Printed in USA. Pp 124 – 153.
- Robbins, Stephen P. 1998. Organizational Behavior: Concepts, Controversies and Applications. New Jersey. Prentice-Hall International, Inc. Upper Saddle River.
- Sawyer, B Lawrence, Dittenhofer A Mortimer. 1996. Internal Auditing. Florida. The Institute of Internal Auditors.
- Schemerhorn, John R. 1999. Management for Productivity. Singapore. John Wiley & Son, Inc.
- James G, Hunt and Richard N Osborn. 2001. Managing Organizational Behaviour. Singapore. John Wiley

& Son, Inc.

- Sugiyono. 2001. *Metode Penelitian Bisnis*. Bandung. CV Alfabeta.
- The Institute of Chartered Accountant in England & Wales. 1994. Internal Control Guidance for Directors on Combined Code. London.
- The Institute of Internal Auditors. 1995. Standards For The Professional Practice of Internal Auditing. Florida.
- Tjukria P. Tawaf. 1999. Audit Intern Bank: Suatu Penelaahan serta Petunjuk Pelaksanaannya Mengacu pada SPFAIB. Buku Satu. Jakarta. Salemba Empat.
- Wayne, Holmes. 1999. Internal Auditing. Behavioral Accounting. Ohio. South-Western Publishing Co. Cincinnati.
- Wood, William; Wallace, Zeffane; Schermerhorn, John R; Hunt, James G, and Osborn, Richard N 2001. Organizational Behavior: A Global Perspective. Australia. John Wiley & Sons.
- YPIA. 1999. Manajemen Internal Audit. Makalah Ilmiah. Jakarta.
- Ziegenfuss. 2000. "Measuring Performance". Journal Institute of Internal Auditors. February. Vol LVII:1. Pp 36-44.

APPENDIX



	Sub Variable		Dimension			Indica	tor		Scale
Stress role (X)	Role Conflict (X ₁)	role with the kn auditors.	v between the demand owledge and skills of n, Wendell & Aono (2	internal	a. b. c. d.	The role of interna The demands tow internal auditor. Capabilities and sur internal auditor. Deviations behavio	ards the role	ledge as	Ordinal
	Role Ambiguity (X ₂)	powers and resp internal auditors	ity about the functions consibilities expected 3. n, Wendell & Aono (2	of	a. b.	Functions, authoritie of internal auditors A person's / group the role of auditors	's expectatio		Ordinal
Dysfunctional Behavior of Internal Auditor (Y)		Affective, a b. Work motiv	nents of attitude: Cog and Conative vation & Michaels (2010: 12		a. b. c. d. e. f. g.	Low morale Job indiscipline Job dissatisfaction Low organizationa Low quality of wor Tendency to leave Work motivation	rk		Ordinal
Internal Auditor Performance (Z)			al audit by: <i>Standar</i> Ingsi Audit Intern Ban 3 (2009)	nk²	a. b. c. d. e. f.	Independency Profession capabili Audit scope Audit conducting Audit reporting Audit follow-up Audit of managem			Ordinal
					g.	Audit of managem			
	Table 3	3. Questionnaire		Т	-	7. Inverse Correlation		o Structur	e 2
	aire Submissio		rch Questionnaires		-			o Structur	e 2 Y
Tec	aire Submissio hniques		Received Back	Vari	able 7	7. Inverse Correlation	n Matrix Sub		
Tec	aire Submissio hniques irectly	n Total Resea Submitted 30 Copies	Received Back 18 Copies	Vari X	able 7	7. Inverse Correlation X ₁	n Matrix Sub X ₂	-0.	Y
Tec D Indirectly	hire Submissio hniques irectly y (via PT Pos)	n Total Resea Submitted 30 Copies 32 Copies	Received Back 18 Copies 11 Copies	Vari	able 7 iabel	7. Inverse Correlation X_1 1.0470	n Matrix Sub X_2 0.1185	-0. -0.	Y .1936
Tec D Indirectly	aire Submissio hniques irectly	n Total Resea Submitted 30 Copies	Received Back 18 Copies 11 Copies	Vari	able 7 iabel K ₁ K ₂	7. Inverse Correlation X ₁ 1.0470 0.1185 -0.1936	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731	-0. -0. 1.	Y .1936 .0731
Tec D Indirectly	nire Submissio hniques irectly y (via PT Pos) Total	n Total Resea Submitted 30 Copies 32 Copies	Received Back 18 Copies 11 Copies 29 Copies	Vari	Table 7	7. Inverse Correlation X ₁ 1.0470 0.1185 -0.1936 able 8. Path Coefficie	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru	-0. -0. 1. icture 1	Y 1936 .0731 0384
Tec D Indirectly	nire Submissio hniques irectly y (via PT Pos) Total	n Total Resea Submitted 30 Copies 32 Copies 62 Copies	Received Back 18 Copies 11 Copies 29 Copies	Vari X X Path c	Transition	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁	-0. -0. 1. icture 1	Y .1936 .0731 0384
Tec D Indirectly Tab	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati	n Total Resea Submitted 30 Copies 32 Copies 62 Copies ion Matrix Sub St X ₂	Received Back 18 Copies 11 Copies 29 Copies	Vari X X Path c	Transition	7. Inverse Correlation X ₁ 1.0470 0.1185 -0.1936 able 8. Path Coefficie	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru	-0. -0. 1. icture 1	Y 1936 .0731 0384
Tec D Indirectly Tab Variable	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000 -0.1037	Total Resea Submitted 30 Copies 32 Copies 62 Copies ion Matrix Sub St X2 -0.1037 7 1.0000	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511	Vari X X Path c	Table 7 iabel (1 (2)) (2) (() () () () () () () (7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂	-0. -0. 1. neture 1 0 0	Y .1936 .0731 0384
Tec D Indirectly Tab Variable X ₁	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000	Total Resea Submitted 30 Copies 32 Copies 62 Copies ion Matrix Sub St X2 -0.1037 7 1.0000	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792	Vari X X Path c Path c	Table 7 iabel K_1 K_2 Y Table 7 K_2 Y Table 7 K_2 Y Table 7 K_2 Y Table 7 K_2 Y Table 7 K_2 Y Table 7 K_2 Y Table 7 K_2 Y Table 7 K_2 K_2 Y Table 7 K_2 K_2 K_2 K_3 K_2 K_3 K_3 K_4 K_2 K_3 K_4 K_2 K_3 K_4 K_4 K_2 K_3 K_4 K_4 K_4 K_5 K_4 K_5	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂	-0. -0. 1. ucture 1 0 0 0 ucture 2	Y .1936 .0731 0384
Tec D Indirectly Tab Variable X ₁ X ₂ Y	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000 -0.1037 0.1792	n Total Resea Submitted 30 Copies 32 Copies 62 Copies tion Matrix Sub St X_2 -0.1037 7 1.0000 0.0511	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000	Vari X Y Path c Path c	Table 7 iabel ζ_1 ζ_2 Y Table Table Tab	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂ ents Sub Stru	-0. -0. 1. icture 1 0 0 0 icture 2 -0	Y 1936 .0731 0384 .1865 .0704
Tec D Indirectly Tab Variable X ₁ X ₂ Y Tab	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000 -0.1037 0.1792 le 5. Correlati	n <u>Total Resea</u> <u>Submitted</u> 30 Copies 32 Copies 62 Copies ion Matrix Sub St <u>X</u> -0.1037 1.0000 0.0511 ion Matrix Sub St	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000	Vari X Y Path c Path c Path c	iable 7 iabel X ₁ X ₂ Y Ta tooeffic tooeffic tooeffic tooeffic tooeffic	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z	n Matrix Sub X_2 0.1185 1.0160 -0.0731 ents Sub Stru $pY.X_1$ $pY.X_2$ ents Sub Stru $pZ.X_1$	-0. -0. 1. icture 1 0 0 0 icture 2 -0 0.	Y 1936 .0731 0384 .1865 .0704 .0802
Tec D Indirectly Tab Variable X ₁ X ₂ Y Tab	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000 -0.1037 0.1792	n Total Resea Submitted 30 Copies 32 Copies 62 Copies ion Matrix Sub St X_2 -0.1037 7 1.0000 0.0511 ion Matrix Sub St X_2	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000	Vari X Y Path c Path c Path c	Taitable 7 iable 7 ζ_1 ζ_2 Y Taitable ζ_1 ζ_2 Y Taitable ζ_1 ζ_2 Y Taitable ζ_1 ζ_2 Y	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient X_2 towards Z	n Matrix Sub X_2 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂ ents Sub Stru pZ.X ₁ pZ.X ₁ pZ.X ₂ pZ.Y	-0. -0. 1. icture 1 0 0 0 icture 2 -0 0. 0.	Y 1936 0731 0384 .1865 .0704 .0802 5193
Tec D Indirectly Tab Variable X ₁ Y Tab Variable X ₁	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000 -0.1037 0.1792 le 5. Correlati X ₁	n Total Resea Submitted 30 Copies 32 Copies 62 Copies ion Matrix Sub St X_2 -0.1037 7 1.0000 0.0511 ion Matrix Sub St X_2	Received Back 18 Copies 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000 ructure 2 Y 792	Vari X Path c Path c Path c Path c	iable 7 iabel (iabel)	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient Y towards Z ble 10. Total Coefficient	n Matrix Sub X_2 0.1185 1.0160 -0.0731 ents Sub Stru $pY.X_1$ $pY.X_2$ ents Sub Stru $pZ.X_1$ $pZ.X_2$ pZ.Y eitent Sub Stru	-0. -0. 1. icture 1 0 0 0 icture 2 -0 0. 0. 0. 0. 0. 0. 0.	Y 1936 0731 0384 .1865 .0704 .0802 5193 1632
Tec D Indirectly Tab Variable X ₁ X ₂ Y Tab	nire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X ₁ 1.0000 -0.1037 0.1792 le 5. Correlati X ₁ 1.0000	$\begin{array}{c c} \textbf{n} & \hline \textbf{Total Resea} \\ \hline \textbf{Submitted} \\ \hline \textbf{30 Copies} \\ \hline \textbf{32 Copies} \\ \hline \textbf{62 Copies} \\ \hline 6$	Received Back 18 Copies 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000 ructure 2 Y 792	Vari X Y Path c Path c Path c Path c Path c Multip	able 7 $able 7$	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient X_2 towards Z cient Y towards Z ble 10. Total Coefficient efficient of Determining	n Matrix Sub X_2 0.1185 1.0160 -0.0731 ents Sub Stru $pY.X_1$ $pY.X_2$ ents Sub Stru $pZ.X_1$ $pZ.X_2$ pZ.Y either Sub Stru pZ.Y	-0. -0. 1. icture 1 0 0 0 icture 2 -0 0. 0. 0. ucture 1 R ² _{Y,X1X2}	Y 1936 .0731 0384 .1865 .0704 .0802 5193 1632 0.0370
Tec D Indirectly Tab Variable X ₁ X ₂ Y Tab Variable X ₁ X ₂	hire Submissio hniques irectly y (via PT Pos) Total le 4. Correlati X_1 1.0000 -0.1037 le 5. Correlati X_1 1.0000 -0.1037	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Keceived Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000 ructure 2 Y 29	Vari X Y Path c Path c Path c Path c Path c Multip Multip	iable 7 iabel ζ_1 ζ_2 Y Ta coeffic coeffic coeffic Ta le Co le Co	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient Y towards Z ble 10. Total Coeffic efficient of Determining rrelation Coefficient	n Matrix Sub X_2 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂ ents Sub Stru pZ.X ₁ pZ.X ₁ pZ.X ₂ pZ.Y eient Sub Stru hation	-0. -0. 1. icture 1 0 0 0 icture 2 -0 0. 0. 0. 0. 0. ucture 1 R ² _{Y,X1X2}	Y 1936 .0731 0384 .1865 .0704 .0802 5193 1632 0.0370 0.1924
Tec D Indirectly Tab Variable X ₁ X ₂ Y Tab Variable X ₁ X ₂ Y Z	xire Submission hniques irectly y (via PT Pos) Total le 4. Correlati X_1 1.0000 -0.1037 0.1792 le 5. Correlati X_1 1.0000 -0.1037 0.1792 -0.1037 0.1792	$\begin{tabular}{ c c c c c } \hline Total Reseat \\ \hline Submitted \\ \hline 30 Copies \\ 32 Copies \\ 62 Copies \\ 63 Cop$	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000 ructure 2 Y Z 792 -0.1049 511 0.5360 000 0.1754 754 1.0000	Vari X X Path c Path c Path c Path c Path c Path c Multip Multip Coeffic	able 7 $abel$ ab	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient X_2 towards Z cient Y towards Z ble 10. Total Coefficient efficient of Determining	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂ ents Sub Stru pZ.X ₁ pZ.X ₂ pZ.Y eient Sub Stru nation	$\begin{array}{c} -0. \\ -0. \\ 1. \\ \hline 0. \hline 0.$	Y 1936 .0731 0384 .1865 .0704 .0802 5193 1632 0.0370
Tec D Indirectly Tab Variable X1 X2 Y Tab Variable X1 X2 Y Tab Variable X1 X2 Y Tab Variable X2 Y Tab Tab Tab Tab Tab Tab	Xire Submission hniques irectly y (via PT Pos) Total le 4. Correlati X1 1.0000 -0.1037 0.1792 le 5. Correlati X1 1.0000 -0.1037 0.1792 le 5. Correlati X1 1.0000 -0.1037 0.1792 -0.1049 Inverse Corr	Total Resea Submitted 30 Copies 32 Copies 62 Copies ion Matrix Sub St X_2 -0.1037 1.0000 0.0511 ion Matrix Sub St X_2 -0.1037 0.0511 ion Matrix Sub St X_2 -0.1037 0.1 0.000 0.0 0.0511 1.0 0.05360 0.1 relation Matrix Su Su	Keceived Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000 ructure 2 Y Z 792 -0.1049 511 0.5360 000 0.1754 754 1.0000	Vari X X Path c Path c Path c Path c Path c Path c Multip Multip Coeffic	able 7 $abel$ ab	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient Y towards Z ble 10. Total Coeffic efficient of Determining rrelation Coefficient f Determination of oth	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂ ents Sub Stru pZ.X ₁ pZ.X ₂ pZ.Y eient Sub Stru nation	-0. -0. 1. icture 1 0 0 0 icture 2 -0 0. 0. 0. 0. 0. ucture 1 R ² _{Y,X1X2}	Y 1936 0731 0384 .1865 .0704 .0802 5193 1632 0.0370 0.1924 0.9630
Tec D Indirectly Tab Variable X ₁ X ₂ Y Tab Variable X ₁ X ₂ Y Z	Xire Submission hniques irectly y (via PT Pos) Total le 4. Correlati X1 1.0000 -0.1037 0.1792 le 5. Correlati X1 1.0000 -0.1037 0.1792 le 5. Correlati X1 1.0000 -0.1037 0.1792 -0.1049 Inverse Corr	$\begin{tabular}{ c c c c c } \hline Total Reseat \\ \hline Submitted \\ \hline 30 Copies \\ 32 Copies \\ 62 Copies \\ 63 Cop$	Received Back 18 Copies 11 Copies 29 Copies ructure 1 Y 0.1792 0.0511 1.0000 ructure 2 Y Z 792 -0.1049 511 0.5360 000 0.1754 754 1.0000	Vari X X Path c Path c Path c Path c Path c Path c Multip Multip Coeffic	able 7 $abel$ ab	7. Inverse Correlation X_1 1.0470 0.1185 -0.1936 able 8. Path Coefficient cient X_1 towards Y cient X_2 towards Y able 9. Path Coefficient cient X_1 towards Z cient X_2 towards Z cient Y towards Z ble 10. Total Coeffic efficient of Determining rrelation Coefficient f Determination of oth	n Matrix Sub X ₂ 0.1185 1.0160 -0.0731 ents Sub Stru pY.X ₁ pY.X ₂ ents Sub Stru pZ.X ₁ pZ.X ₂ pZ.Y eient Sub Stru nation	$\begin{array}{c} -0. \\ -0. \\ 1. \\ \hline 0. \hline 0.$	Y 1936 0731 0384 .1865 .0704 .0802 5193 1632 0.0370 0.1924 0.9630

Table 1	1. Tota	l Coefficient S	ub Structure	e 2
Multiple Coeff	icient o	of Determination	on R ² _{Z.X}	1X2Y 0.3154
Multiple Co	rrelatio	on Coefficient	R _{z.x}	0.5616 0.5616
Coefficient of Dete	erminat	tion of other var.	on Y p_{Z}^2	_{x2} 0.6846
Correlation Coef	fficient	of other var. o	n Y p _{z.}	0.8274
Table 1	2 Sim	ultaneous test s	ub structure	- 1
Simultenous test	2. 5111			
F 0.4995	<	F0.05;2;26	2 2600	p-value 0.6125
г 0.4993		г0.03,2,20	5.5090	0.0123
Decision	Non-	significant at th	ne 5% error	level
Conclusion	There	e is not any sign	ificant path	coefficients or
	X_1 and	d X_2 do not sin	nultaneously	affect the Y
Table 13	3. Simu	ıltaneous test S	ub Structur	e 2
Simultenous test				p-value
F 3.8395	<	F0.05;3;25	2.9912	0.0217
Desision	C	Constant 1 70	/	1
Decision Conclusion	-	ficant at the 5% minimum there		
Conclusion		icients or	, is a signifi	cant path
		X_2 , and Y affect	simultaneo	usly to Z
		2		
Tabl	e 14. P	artial test Sub	Structure 1	
Partial test				p-value
t _{y.X1} 0.9637	<	t _{0.05;26}	1.7056	0.1720
Decision Conclusion	X_1 ha	significant at th is no positive e	ffect on Y	
Conclusion Table 15	X ₁ ha	t & Indirect ef	ffect on Y fect X_1, X_2 t	to Y
Conclusion Table 15 Direct	X ₁ ha . Direc Ir	t & Indirect effect, t	ffect on Y fect X_1, X_2 through :	to Y Total
Conclusion Table 15 Direct Effect	X ₁ ha	t & Indirect ef direct Effect, t X ₂	ffect on Y fect X_1, X_2 through : Sub Total	to Y Total Effect
Conclusion Table 15 Direct	X ₁ ha . Direc Ir	t & Indirect effect, t	ffect on Y fect X_1, X_2 through :	to Y Total
Conclusion Table 15 Direct Effect X ₁ 3.48% + Table	X_1 ha . Direcc Ir X_1 -	t & Indirect ef direct Effect, t X ₂	ffect on Y fect X ₁ , X ₂ t hrough : Sub Total -0.14% -	Total Effect 3.34% +
$\begin{tabular}{c} \hline Conclusion \\ \hline Table 15 \\ \hline Direct \\ Effect \\ \hline X_1 3.48\% \ + \\ \hline Table \\ \hline Partial test \\ \hline \end{tabular}$	X_1 ha . Direcc Ir X_1 -	t & Indirect effect, t idirect Effect, t -0.14% -	ffect on Y fect X ₁ , X ₂ 1 hrough : Sub Total -0.14% - Structure 2	Total Effect 3.34% +
Conclusion Table 15 Direct Effect X ₁ 3.48% + Table	X_1 ha . Direcc Ir X_1 -	t & Indirect effect, t idirect Effect, t -0.14% -	ffect on Y fect X ₁ , X ₂ t hrough : Sub Total -0.14% -	Total Effect 3.34% +
$\begin{tabular}{c} \hline Conclusion \\ \hline Table 15 \\ \hline Direct \\ Effect \\ \hline X_1 & 3.48\% & + \\ \hline \hline Table \\ \hline \hline Partial test \\ \hline t_{Y,X2} & 0.3638 \\ \hline \end{tabular}$	X_1 ha . Direcc Ir X_1 - e 16. P <	t & Indirect effect, t direct Effect, t X_2 -0.14% - Partial test Sub $t_{0.05;26}$	ffect on Yfect X_1, X_2 through :Sub Total-0.14%-Structure 21.7056	to Y Total Effect 3.34% + p-value 0.3595
$\begin{tabular}{c} \hline Conclusion \\ \hline Table 15 \\ \hline Direct \\ Effect \\ \hline \hline X_1 3.48\% + \\ \hline Table \\ \hline Partial test \\ \hline \end{tabular}$	X_1 has Directory of the second	t & Indirect effect, t adirect Effect, t X_2 -0.14% - Partial test Sub $t_{0.05;26}$ significant at th	ffect on Y fect X_1 , X_2 through : Sub Total -0.14% - Structure 2 1.7056 ne 5% error	Total Effect 3.34% + p-value 0.3595 level
$\begin{tabular}{c} \hline Conclusion \\ \hline Table 15 \\ \hline Direct \\ Effect \\ \hline X_1 3.48\% + \\ \hline Table \\ \hline$	X_1 ha . Direcc Ir X_1 - e 16. P < Non- Conc	t & Indirect eff adirect Effect, t X_2 -0.14% - Partial test Sub $t_{0.05;26}$ significant at the lusion X_2 has r	ffect on Y fect X ₁ , X ₂ t hrough : Sub Total -0.14% - Structure 2 1.7056 ne 5% error to positive of	Total Effect 3.34% + p-value 0.3595 level effect on Y
$\begin{tabular}{c} \hline Conclusion \\ \hline Table 15 \\ \hline Direct \\ Effect \\ \hline X_1 3.48\% + \\ \hline Table \\ \hline$	X_1 ha . Direc Ir X_1 - e 16. P < Non- Conc . Direc	t & Indirect effect, t adirect Effect, t X_2 -0.14% - Partial test Sub $t_{0.05;26}$ significant at th	ffect on Y fect X ₁ , X ₂ 1 hrough : Sub Total -0.14% - Structure 2 1.7056 ne 5% error no positive of fect X ₁ , X ₂ 1	Total Effect 3.34% + p-value 0.3595 level effect on Y
$\begin{tabular}{c} \hline Conclusion \\ \hline Table 15 \\ \hline Direct \\ Effect \\ \hline X_1 & 3.48\% & + \\ \hline \hline Table \\ \hline \hline Table \\ \hline Table \\ \hline Table 17 \\ \hline \end{tabular}$	X ₁ ha . Direcc Ir X ₁ - e 16. P < Non- Conc . Direcc In	t & Indirect eff adirect Effect, t X_2 -0.14% - artial test Sub $t_{0.05;26}$ significant at th lusion X_2 has r t & Indirect eff direct Effect, th	ffect on Y fect X ₁ , X ₂ 1 hrough : Sub Total -0.14% - Structure 2 1.7056 ne 5% error no positive of fect X ₁ , X ₂ 1	To Y Total Effect 3.34% + p-value 0.3595 level effect on Y to Y
$\begin{tabular}{ c c c c c } \hline Conclusion & \hline Table 15 \\ \hline Direct & \\ Effect & \hline X_1 & 3.48\% & + \\ \hline \hline X_1 & 3.48\% & + \\ \hline \hline Table & \hline Table & \hline Table & \hline Table & 17 \\ \hline \hline Direct & \hline \hline \\ \hline \hline \hline \hline \\ \hline \hline \hline \hline \\ \hline \hline \hline \hline \\ \hline \hline \hline \hline \hline \\ \hline \hline$	X_1 ha . Direc Ir X_1 - e 16. P < Non- Conc . Direc	t & Indirect eff direct Effect, t X_2 -0.14% - Partial test Sub $t_{0.05;26}$ significant at the lusion X_2 has r t & Indirect eff direct Effect, the $1 X_2$	ffect on Y fect X_1 , X_2 t hrough : Sub Total -0.14% - Structure 2 1.7056 he 5% error to positive of fect X_1 , X_2 t rough:	Total Effect 3.34% + p-value 0.3595 level effect on Y to Y Total
$\begin{tabular}{ c c c c c } \hline Conclusion & \hline Table 15 \\ \hline Direct & Effect \\ \hline X_1 & 3.48\% & + \\ \hline \hline X_1 & 3.48\% & + \\ \hline \hline Table & \hline \hline Y_{Y,X2} & 0.3638 \\ \hline \hline Partial test & \hline t_{Y,X2} & 0.3638 \\ \hline Decision & \hline Conclusion & \hline \hline Table 17 & \hline Direct & \\ \hline Effect & \hline \hline X_2 & 0.50\% & + \\ \hline \hline \end{tabular}$	X_1 ha . Direcc Ir X_1 - e 16. P e 16. P < Non- Concc . Direcc In X - . Direcc	t & Indirect eff direct Effect, t X_2 -0.14% - Partial test Sub $t_{0.05;26}$ significant at the lusion X_2 has r t & Indirect eff direct Effect, the $1 X_2$	ffect on Y fect X_1, X_2 t hrough : Sub Total -0.14% -0.14% Structure 2 1.7056 no positive of fect X_1, X_2 t rough: SubTotal -0.14% - 0.14% -	Total Effect 3.34% + p-value 0.3595 level effect on Y to Y Total Effect
$\begin{tabular}{ c c c c c } \hline Conclusion & \hline Table 15 \\ \hline Direct & Effect \\ \hline X_1 & 3.48\% & + \\ \hline \hline X_1 & 3.48\% & + \\ \hline \hline Table & \hline \hline Y_{Y,X2} & 0.3638 \\ \hline \hline Partial test & \hline t_{Y,X2} & 0.3638 \\ \hline Decision & \hline Conclusion & \hline \hline Table 17 & \hline Direct & \\ \hline Effect & \hline \hline X_2 & 0.50\% & + \\ \hline \hline \end{tabular}$	X_1 ha . Direcc Ir X_1 - e 16. P e 16. P < Non- Concc . Direcc In X - . Direcc	as no positive e t & Indirect eff idirect Effect, t X_2 -0.14% - Partial test Sub t _{0.05;26} significant at th lusion X ₂ has r t & Indirect eff direct Effect, th $1 X_2$ X_2	ffect on Y fect X_1, X_2 t hrough : Sub Total -0.14% -0.14% Structure 2 1.7056 no positive of fect X_1, X_2 t rough: SubTotal -0.14% - 0.14% -	Total Effect 3.34% + p-value 0.3595 level effect on Y to Y Total Effect
$\begin{tabular}{ c c c c c } \hline Conclusion & \hline Table 15 \\ \hline Direct & Effect \\ \hline X_1 & 3.48\% & + \\ \hline Tabl. & \hline \\ \hline Partial test & \hline \\ t_{Y,X2} & 0.3638 \\ \hline Decision & \hline \\ Conclusion & \hline \\ \hline Table 17 & \hline \\ \hline Direct & \\ \hline Effect & \hline \\ \hline X_2 & 0.50\% & + \\ \hline \\ \hline \end{tabular}$	X_1 ha . Direcc $Ir X_1-e 16. P<Non-Conce. DireccInX-0.149Fable 1$	as no positive e t & Indirect effect, t adirect Effect, t X_2 -0.14% - Partial test Sub t _{0.05;26} significant at th lusion X_2 has r t & Indirect effect, th $1 X_2$ X_2 8. Partial test 2	ffect on Y fect X_1, X_2 t hrough : Sub Total -0.14% -0.14% Structure 2 1.7056 no positive of fect X_1, X_2 t rough: SubTotal -0.14% - 0.14% -	Total Effect 3.34% + p-value 0.3595 level effect on Y to Y Total Effect 0.36% +
$\begin{tabular}{ c c c c c } \hline Conclusion & \hline Table 15 \\ \hline Direct & Effect & \hline X_1 & 3.48\% & + & \hline Tabl. & \hline Partial test & \hline t_{Y,X2} & 0.3638 & \hline Decision & \hline Conclusion & \hline Table 17 & \hline Direct & Effect & \hline X_2 & 0.50\% & + & \hline & \hline Partial test & \hline t_{Z,X1} & -0.4739 & \hline \end{tabular}$	X_1 ha . Direcc Ir X_1 - e 16. P e 16. P < Non- Concc . Direcc In X - . Direcc In X - . Direcc Ir X_1 - - - - - - - - - - - - -	t & Indirect eff idirect Effect, t X_2 -0.14% - eartial test Sub $t_{0.05;26}$ significant at th lusion X_2 has r t & Indirect eff direct Effect, th $1 \qquad X_2$ % 8. Partial test 2 $-t_{0.05;25}$	ffect on Y fect X_1 , X_2 1 hrough : Sub Total -0.14% - Structure 2 1.7056 he 5% error ho positive of fect X_1 , X_2 1 rough: Sub Total -0.14% - X_1 to Y -1.7081	Total Effect 3.34% + p-value 0.3595 level effect on Y Total Effect 0.36% + p-value 0.3198
$\begin{tabular}{ c c c c c } \hline Conclusion & \hline Table 15 \\ \hline Direct & Effect \\ \hline X_1 & 3.48\% & + \\ \hline \hline X_1 & 3.48\% & + \\ \hline \hline Table & \hline \hline Y_{Y,X2} & 0.3638 \\ \hline \hline Partial test & \hline \hline t_{Y,X2} & 0.3638 \\ \hline \hline Decision & \hline \hline Conclusion & \hline \hline \\ \hline \hline Direct & Effect & \hline \hline X_2 & 0.50\% & + \\ \hline \hline \hline Partial test & \hline \hline \hline \\ \hline \hline Partial test & \hline \hline \hline \hline \end{array}$	X_1 ha . Direcc Ir X_1 - e 16. P < Non- Conce . Direcc In X -0.149 Fable 1 > Non-	as no positive e t & Indirect effect, t adirect Effect, t X_2 -0.14% - Partial test Sub t _{0.05;26} significant at th lusion X_2 has r t & Indirect effect, th $1 X_2$ X_2 8. Partial test 2	ffect on Y fect X_1 , X_2 t hrough : Sub Total -0.14% - Structure 2 1.7056 he 5% error to positive of fect X_1 , X_2 t rough: Sub Total -0.14% - X_1 to Y -1.7081 he 5% error	Total Effect 3.34% + p-value 0.3595 level effect on Y Total Effect 0.36% + p-value 0.3198

Direct	e 19. Dire Ir	ndirect ef			2	Tota	ıl
Effect	X ₁	X,	Y		Total	Effe	ct
X ₁ 0.64% -		2	-0.23%	+ 0.200	% -	0.84%	-
	Table	20. Parti	al test 2	X_2 to Z			
Partial tes	st					p-val	ue
t _{z.x2} 3.1	136 >	-t _{0.05}	;25	1.7081		0.997	77
				=0 (
Decision Conclusion		i-significa loes not n				vel	
conclusion	<u> </u>		iegutiv				
Tabl	e 21. Dire	ect & Indi	rect eff	fect X ₁ , Y	X_2 to Y_2	Y	
Direct	Iı	ndirect ef	fect, th	rough :		Tota	1
Effect	X ₁	X2_	Y	SubT	otal	Effec	ct
X ₂ 16.97%	+ 0.43%	+	0.43%	+ 0.87%	,) -	27.84%	-
	Table	22. Parti	al test	Y to Z			
Partial tes	st					p-val	ue
t _{z.y} 0.9	681 >	-t _{0.05}	:25	1.7081		0.828	<u>89</u>
T_1-1							
Table	e 23. Dire	ect & Indi	irect eff	fect X ₁ , Y	X_2 to Z	Z	
Direct		ect & Indi ndirect ef			X_2 to Z	Tota	
Direct Effect	$\frac{I_1}{X_1}$	ndirect ef X	fect, th $\frac{1}{2}$	rough : Y Sub'	Total	Tota Effec	
Direct		ndirect ef	fect, th $\frac{1}{2}$	rough :	Total	Tota	
Direct Effect X ₁ 2.66% +	$\frac{I_1}{X_1}$	ndirect ef X - 0.43%	fect, th 52 6 +	rough : Y Sub 0.209	Total % -	Tota Effec	
Direct Effect X ₁ 2.66% +	$\frac{1}{X_1}$ -0.23%	ndirect ef X - 0.43%	fect, th $\frac{K_2}{6}$ + . ect Sub	rough : Y Sub' 0.209 Structure	Total % -	Tota Effec	
Direct Effect X ₁ 2.66% + T	$\frac{\text{In}}{X_1}$ -0.23% Fable 24. T	ndirect ef X - 0.43% Fotal Effe	fect, th $\frac{\zeta_2}{6}$ + ect Sub ect, three	rough : Y Sub' 0.209 Structure	Total % - e 1	Tota Effec 2.86%	
Direct Effect X ₁ 2.66% + T Direct	$\frac{\frac{1}{X_1}}{-0.23\%}$ Fable 24. The second	ndirect ef X - 0.43% Fotal Effe	fect, th $\frac{x_2}{6}$ + ect Sub ect, through the set is the	rough : Y Sub 0.209 Structure ough:	Total % - e 1 1	Tota Effec 2.86% Total	
Direct Effect X ₁ 2.66% + T Direct Effect	$\frac{1}{X_1}$ -0.23% Fable 24. T $\frac{1}{X_1}$	ndirect ef X - 0.43% Fotal Effe lirect Effe X	ffect, th $\frac{K_2}{6}$ +	rough : Y Sub' 0.209 Structure ough: Sub Tota	Total % - e 1 1 - 3	Tota Effec 2.86% Total Effect	
Direct Effect $X_1 = 2.66\% + T$ Direct Effect $X_1 = 3.48\% + T$	$\frac{\frac{1}{X_1}}{-0.23\%}$ Fable 24. T $\frac{1}{X_1}$ -0.14%	ndirect ef X - 0.43% Fotal Effe lirect Effe X -0.14%	fect, th $\frac{x_2}{6}$ +	rough : Y Sub 0.209 Structurr ough: Sub Tota 0.14%	Total % - e 1 1 - 3 - 0	Tota Effect 2.86% Total Effect 3.34%	+++
Direct Effect X_1 2.66% + T Direct Effect X_1 3.48% + X_2 0.50% + Total Effect of Effect of other	$\frac{In}{X_1}$ -0.23% Table 24. T $\frac{Ind}{X_1}$ -0.14%	ndirect eff X - 0.43% Fotal Effe lirect Effe X -0.14% - Z Z Z Z Z Z Z Z	fect, the $\frac{x_2}{6}$ + $\frac{x_2}{6}$ + x	rough : Y Sub 0.209 Structurr ough: Sub Tota 0.14%	Total % - e 1 1 - 3 - 0 3	Tota Effect 2.86% Total Effect 3.34%	+++
Direct Effect X_1 2.66% + T Direct Effect X_1 3.48% + X_2 0.50% + Total Effect of	$\frac{In}{X_1}$ -0.23% Table 24. T $\frac{Ind}{X_1}$ -0.14%	ndirect eff X - 0.43% Fotal Effe lirect Effe X -0.14% - Z Z Z Z Z Z Z Z	fect, the $\frac{x_2}{6}$ + $\frac{x_2}{6}$ + x	rough : Y Sub 0.209 Structurr ough: Sub Tota 0.14%	Total % - e 1 1 - 3 - 0 3 90	Tota Effec 2.86% Total Effect 3.34% 0.36%	+ + +
Direct Effect X_1 2.66% + Direct Effect X_1 3.48% + X_2 0.50% + Total Effect c Effect of othe Total	$\frac{In}{X_1}$ -0.23% Table 24. T $\frac{Ind}{X_1}$ -0.14%	ndirect eff X - 0.43% Fotal Effe lirect Effe X -0.14% e X_1 and Z e X_1 towa	fect, th $\frac{x_2}{6}$ +	rough : Y Sub 0.209 Structure ough: Sub Tota 0.14% 0.14% urds Y	Total <u>%</u> - e 1 <u>1</u> - 3 - 0 3 96 10	Total Effect 2.86% Total Effect 3.34% 0.36% 5.70% 6.30%	+++++++
Direct Effect X_1 2.66% + Direct Effect X_1 3.48% + X_2 0.50% + Total Effect of Effect of othe Total	$\frac{\text{In}}{X_1}$ -0.23% Table 24. T Table 24. T $\frac{\text{Ind}}{X_1}$ -0.14% of variable of variable Fable 25. T	ndirect eff X - 0.43% Fotal Effe lirect Effe X -0.14% e X_1 and Z e X_1 towa	fect, th $\frac{f_2}{f_2}$ $\frac{f_2}{f_$	rough : Y Sub O.209 Structure ough: Sub Tota 0.14% 0.14% urds Y Structure	Total <u>%</u> - e 1 <u>1</u> - 3 - 0 3 96 10	Tota Effect 2.86% Total Effect 3.34% 0.36% 6.30% 00.00%	+++++++++++++++++++++++++++++++++++++++
Direct Effect X_1 2.66% + Direct Effect X_1 3.48% + X_2 0.50% + Total Effect c Effect of othe Total	$\frac{1}{X_1}$ -0.23% Table 24. T Table 24. T Table 24. T -0.14% Total for the second se	ndirect eff X - 0.43% Fotal Effe lirect Effe X - 0.14% - 2 e X_1 and Z e X_1 towa Fotal Effe direct Effe	fect, th $\frac{f_2}{f_2}$ $\frac{f_2}{f_$	rough : Y Sub O.209 Structure Sub Tota 0.14% 0.14% urds Y Structure rough: S	Total % - e 1 1 - 3 96 10 e 2 ub	Tota Effec 2.86% Total Effect 3.34% 0.36% 6.30% 00.00%	+ + + +
Direct Effect X_1 2.66% + T Direct Effect X_1 3.48% + X_2 0.50% + Total Effect of Effect of other Total Total T Direct - Effect	$\frac{\text{In}}{X_1}$ -0.23% Table 24. T Table 24. T $\frac{\text{Ind}}{X_1}$ -0.14% of variable of variable Fable 25. T	ndirect eff X - 0.43% Fotal Effe lirect Effe X - 0.14% - 2 e X_1 and Σ e X_1 towa Fotal Effe direct Effe X_2	fect, th $\frac{f_2}{f_2}$ $\frac{f_2}{f_$	rough : Y Sub O.209 Structure ough: Sub Tota 0.14% o.14% o.14% ords Y Structure rough: Structure rough: Structure rough:	Total % - e 1 1 - 3 90 10 2 0 3 90 10 2 0 0 3 90 10 0 0 0 0 0 0 0 0 0 0 0 0 0	Tota Effec 2.86% Total Effect 3.34% 0.36% 6.30% 00.00% • Tota Effec	
Direct Effect X_1 2.66% + T Direct Effect X_1 3.48% + X_2 0.50% + Total Effect of Effect of other Total		ndirect eff X - 0.43% Fotal Effe lirect Effe X - 0.14% - 2 e X_1 and Z e X_1 towa Fotal Effe direct Effe	fect, th $\frac{1}{2}$ $\frac{1}{6}$ +	rough : Y Sub Ough: Structure Ough: Sub Tota 0.14% Unds Y Structure rough: Structure rough: Structure rough: Structure + 0.209	Total % - e 1 1 - 3 - 0 3 9 10 - 10 - 2 - - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - - 0 - - - 0 - - - - - - - - - - - - -	Total Effect 2.86% Total Effect 3.34% 0.36% 5.70% 6.30% 00.00% Tota Effect 0.84%	+ + + +
$\begin{array}{c c} & \text{Direct} \\ & \text{Effect} \end{array} \\ \hline X_1 & 2.66\% & + \\ \hline & & & & \\ \hline & & & \\ & & & \\ \hline \hline & & \\ \hline & \\ \hline & & \\ \hline & & \\ \hline & \\ \hline & & \\ \hline & \\ \hline & & \\ \hline & & \\ \hline \hline & & \\ \hline \hline \\ \hline & & \\ \hline \hline & & \\ \hline & & \\ \hline \hline \\ \hline & & \\ \hline \hline \\ \hline & & \\ \hline \hline \\ \hline \hline \\ \hline \hline \\ \hline \hline \\ \hline \\$	$\frac{1}{X_1}$ -0.23% Table 24. T Table 24. T Table 24. T -0.14% Table 25. T Table 25. T In X ₁ - 0.43% +	ndirect eff X - 0.43% Fotal Effe lirect Effe X -0.14% e X_1 and Z e X_1 towa Fotal Effe direct Effe X_2 0.43% -	fect, th $\frac{f_2}{f_2}$ $\frac{f_2}{f_$	rough : Y Sub O.209 Structure Sub Tota 0.14% 0.14% urds Y Structure rough: S Tc + 0.209 + 0.879	$ \begin{array}{r} \hline \text{Total} \\ \hline $	Total Effect 2.86% Total Effect 3.34% 0.36% 5.70% 6.30% 00.00% • Tota Effect 0.84% 27.84%	+ + + +
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \frac{In}{X_1} -0.23\% $ Fable 24. T Fable 24. T Fable 24. T Fable 24. T Fable 25. T Fable 25. T In X_1 - 0.43\% + -0.23\% -	ndirect eff X - 0.43% Fotal Effe lirect Effe X_1 and Z e X_1 and Z e X_1 towa Fotal Effe direct Effe X_2 0.43% - 0.43% +	fect, th $\frac{f_2}{f_2}$ $\frac{f_2}{f_$	rough : Y Sub 0.209 Structure ough: Sub Tota 0.14% 0.14% outhough outhough Structure rough: Structure rough: Structure outhough Structure Structure outhough Structure outhough Structure outhough Structure outhough Structure outhough Structure outhough Structure Struc	$ \begin{array}{r} \hline \text{Total} \\ \hline $	Tota Effec 2.86% Total Effect 3.34% 0.36% 5.70% 6.30% 00.00% Cota Effec 0.84% 2.86%	+ + + +
$\begin{array}{c c} & \text{Direct} \\ & \text{Effect} \end{array} \\ \hline X_1 & 2.66\% & + \\ \hline & & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ \hline & & & \\ \hline X_1 & 3.48\% & + \\ \hline X_2 & 0.50\% & + \\ \hline \hline & \\ \hline & & \\ \hline \\ \hline$		ndirect eff X - 0.43% Fotal Effe lirect Effe X_1 -0.14% - 0.14% - 2 X_1 and Z X_2 0.43% - 4 0.43% + - 2 0.43% +	fect, th $\frac{1}{2}$ $\frac{1}{6}$ +	rough : Y Sub 0.209 Structure ough: Sub Tota 0.14% 0.14% outhough outhough Structure rough: Structure rough: Structure outhough Structure Structure outhough Structure outhough Structure outhough Structure outhough Structure outhough Structure outhough Structure Struc	$ \begin{array}{r} \hline \text{Total} \\ \hline $	Total Effect 2.86% Total Effect 3.34% 0.36% 5.70% 6.30% 00.00% • Tota Effect 0.84% 27.84%	