

# The Degrees of Operating Leverage with Changes in Cash Flows from Operating Activities

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**Abstract:** The study population consisted business units listed in the Tehran Stock Exchange in the period from 1383 to 1388. In order to investigate the relationship between the degree of operating leverage and changes in cash flows from operating activities test Solidarity and the Durbin-Watson statistic is used. The results show that the changes in cash flow from operating activities and operating leverage, there is no correlation at 95 percent. But the 90 percent confidence level and have a significant negative relationship. To answer the next assumptions, the degree of operating leverage is divided into 5 floors and operating cash flow positive and negative changes are considered. When operating cash positive change is intended to increase the degree of operating leverage, stability factor is negative. This means that the positive changes in cash from operating activities and high operating leverage significant negative relationship at 90 percent. As well as the negative changes in cash from operating activities and low operating leverage significant negative relationship at 90 percent.

**Keywords:** Leverage, Operations, Operational Activities, Accrual Basis, Cash Basis

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## 1. Introduction

In this study, the relationship between the degrees of operating leverage with changes in cash from operating activities aimed to offer a more convenient way to provide more accurate and more relevant information to obtain management decisions.

### Statement of the problem

Financial statements on extracts of all activities and financial events over a period of time, usually a year is located, Balance sheet for the financial stability of an institution's financial situation at a given date and Income Statement Financial losses of the entity's performance using the accrual basis states. Given that this reflects the cash flows of the entity's reporting capabilities if you do not have the supply of cash flows to meet this goal is essential. [20], [1]. Operational activities are the main activities of the entity generating revenue. Cash flows from operating activities primarily include cash flows associated with the activities of

the entrance and exit is.

An important method for the analysis of the operational income statement is used to calculate the impact of changes in the level of sales the earnings before interest and taxes (EBIT) is. One way to do this is to calculate the operational leverage as a "percentage change in earnings before interest and taxes (EBIT) divided by the percent change in sales" is defined. Basically, the importance of operating leverage is because small changes in the level of sales, more severe changes in earnings before interest and taxes (EBIT) as well, After Christmas, 1385, 143-139.

Operating leverage is calculated based on the accrual basis and cash flows from operating activities are based on a cash basis. Under cash basis accounting, revenue, receipt and expenditures, as soon as payments are identified and recorded. At the same time cash revenue and costs related or not. (Y blur Verdi, financial accounting, Vol. I, 1385, and 12-11) in other words Volatility measures are based on the accrual basis and cash basis are examined in this study.

Financial statements are interrelated components together, because they reflect different aspects of transactions or other events are the same. Although each of the financial statements provide information that is different to the other is likely only serve a purpose if not none, or all of the information necessary for the specific needs of users does not provide.

When analyzing liquidity, cash flow information is Atka'tr of balance sheet information and the benefits and dis benefits. Data Static balance sheet and a single point of time is measured, the income statement, include the optional large number of non-cash allocation that can be stored, for example, redundancy and depreciation named. However, the cash flow statement and report changes in other forms of art bookkeeping by focusing on what the shareholders really are concerned - the cash available for investment operations - summarized it. (Journal of [2], [ 3] The relationship between debt ratios, leverage and liquidity with operating cash flow of the business units [5, 6] The relationship between working capital management and operating cash flow and company performance [10], [11], [12] comprehensive mathematical analysis to measure the degree of operating leverage gains traction income using linear and nonlinear functions, and nonlinear functions operating costs [18], [17] Evaluation of operating leverage at different levels of expected returns [19], [21], the relationship between debt ratios and studied the components of the statement of cash flows. The study population includes firms listed in the Tehran Stock Exchange during the period from 1382 to 1386. The results reveal that the current debt-to-equity ratio, current liabilities to total assets, long-term debt to equity, long term debt to total assets, total liabilities to total assets, total debt to rights financing.

## 2. Explore Importance of the Problem

Financial statements on extracts of all financial activities and events over a period of time, usually one year are located. An important method for analyzing operating segment income statement is used to calculate the impact of changes in the level of production and selling on the earnings before interest and taxes (EBIT) is. One way to do this is to calculate the degree of operating leverage. Operating leverage is calculated based on the accrual basis and cash flows from operating activities are based on a cash basis. The financial crisis of 2007–2009, like many previous financial crises, was blamed in part on "excessive leverage".

- (1) Consumers in the United States and many other developed countries had high levels of debt relative to their wages, and relative to the value of collateral assets. When home prices fell, and debt interest rates reset higher, and business lay off employees, borrowers could no longer afford debt payments, and lenders could not recover their principal by selling collateral.
- (2) Financial institutions were highly levered. Lehman Brothers, for example, in its last annual financial statements, showed accounting leverage of 31.4 times

(\$691 billion in assets divided by \$22 billion in stockholders' equity). [22] Bankruptcy examiner Anton R. Valukas determined that the true accounting leverage was higher: it had been understated due to dubious accounting treatments including the so-called repo 105 (allowed by Ernst & Young). [23]

- (3) Banks' notional leverage was more than twice as high, due to off-balance sheet transactions. At the end of 2007, Lehman had \$738 billion of notional derivatives in addition to the assets above, plus significant off-balance sheet exposures to special purpose entities, structured investment vehicles and conduits, plus various lending commitments, contractual payments and contingent obligations. [22]
- (4) On the other hand, almost half of Lehman's balance sheet consisted of closely offsetting positions and very-low-risk assets, such as regulatory deposits. The company emphasized "net leverage", which excluded these assets. On that basis, Lehman held \$373 billion of "net assets" and a "net leverage ratio" of 16.1. [22] This is not a standardized computation, but it probably corresponds more closely to what most people think of when they hear of a leverage ratio. Levering has come to be known as "leveraging", in financial communities; this may have originally been a slang adaptation, since leverage was a noun. However, modern dictionaries (such as *Random House Dictionary* and *Merriam-Webster's Dictionary of Law* [24]) refer to its use as a verb, as well. [25] It was first adopted for use as a verb in American English in 1957. [26] Among the megabuyouts completed during the 2006 to 2007 boom were: Equity Office Properties, HCA, [25] Alliance Boots [26] and TXU. [27]
- (5) In July 2007, turmoil that had been affecting the mortgage markets spilled over into the leveraged finance and high-yield debt markets. [28]

## 3. Research Hypotheses

- i. The change in cash flow from operating activities and operating leverage at companies listed on Tehran Stock Exchange there is a significant relationship.
- ii. Positive cash flow from operating activities and changes in firms with high operating leverage, there is a significant relationship. (Figure 1)

## 4. Data Description

### A. Sample Size, Power, and Precision

Along with the description of subjects, give the mended size of the sample and number of individuals meant to be in each condition if separate conditions were used. State whether the achieved sample differed in known ways from the target population. Conclusions and interpretations should not go beyond what the sample would warrant.

### B. Measures and Covariates

The method of collecting data needed for research Data

needed to calculate the variables, with direct reference to the Company's financial statements based on information available at the library of the Securities and Exchange archives and website management, development and Islamic studies Exchange Organization to address [www.rdis.ir](http://www.rdis.ir) mining is. Measuring and calculating variables after collecting the data that is needed to research, choose the right tools to calculate and analyze information about the variables, is very important. For the purpose of computing

the basic information needed research and data conversion software was used Excel.

### C. Research Design

Changes in cash from operating activities ( $\Delta\text{CFO}$ ): Changes in cash from operating activities in the year  $t$  i by differences Net Cash flow from operating activities in the year  $t$  and  $t-1$  divided by Net cash from operating activities is calculated year  $t-1$ .

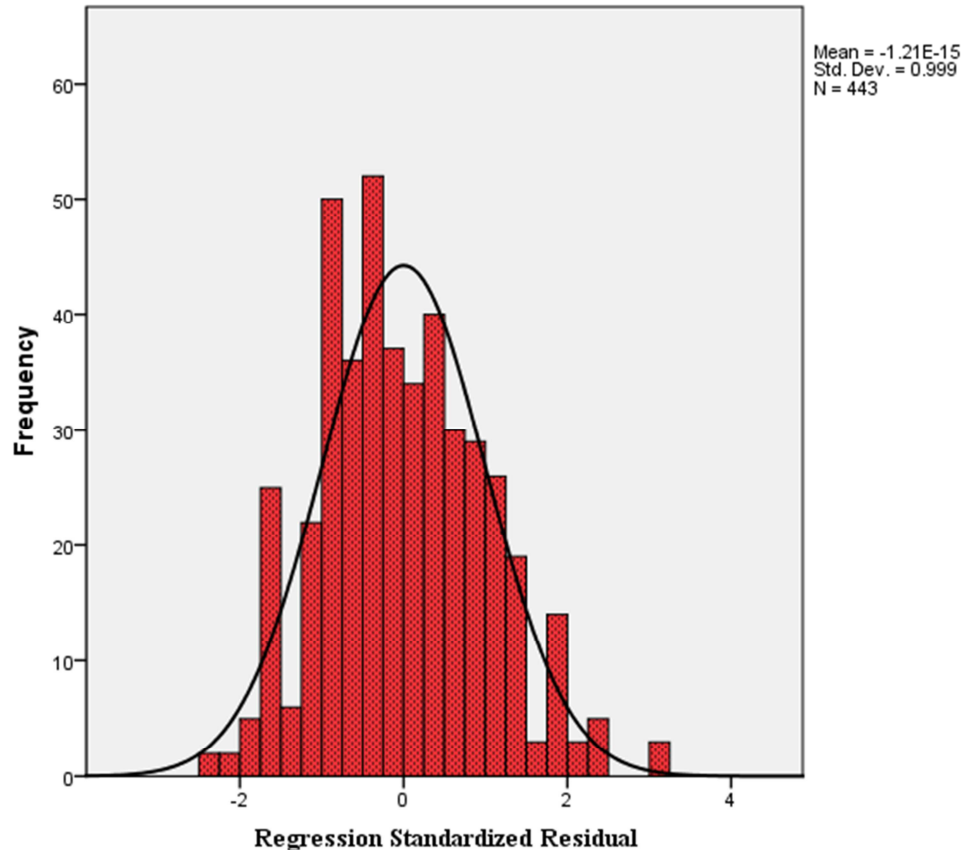


Figure 1. Positive cash flow from operating activities and changes in firms with high operating leverage.

## 5. Conclusion

The main R R: The degree of operating leverage and changes in cash flow from operating activities in companies listed on Tehran Stock Exchange there is a significant relationship. Normal distribution of errors Compare distribution histograms of errors and normal distribution graph shows the approximate mean zero and standard deviation of normal distribution of errors is approximate. Kolmogorov-Smirnov test result equal to  $(0/05 < 0/332P = 0/946 = Z = Ks)$  is a sign of normal distribution of errors is.

Sub-hypotheses 1 and 2: Among the high operating leverage and negative changes in cash flow from operating activities is a significant relationship. The low operating leverage and negative changes in cash from operating activities is a significant relationship. Normal distribution of errors Compare distribution histograms of errors and normal distribution graph shows the approximate mean zero and standard deviation of normal distribution of errors is approximate. Kolmogorov-

Smirnov test result equal to  $(0/05 < 0/431 P = 0/873 = Z = Ks)$  is a sign of normal distribution of errors.

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