

# EMPIRICAL INVESTIGATION OF ORGANIC GROWTH, EVIDENCE FROM INDONESIAN PUBLIC LISTED COMPANIES

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## ABSTRACT

The main objective of this research is to examine Indonesian public listed companies with earnings generated organically rather than through earnings management, income manipulation, financial engineering, or through mergers and acquisitions. 70 samples were taken from Kompas 100 Stock Index from the period of 2004 to 2007 excluding banks, financial institutions, REITs and insurance companies. The authors applied the model of Organic Growth Index (OGI), developed by Hess (2007). The OGI model designed to illuminate value-creating companies that have consistently outperformed industry competition through organic growth. The test begins by selecting the best Economic Value Added and high growth companies. The result of our study shows that there are 10 percent of Indonesian public listed companies identified as OGI winners. These companies passed the core earnings test, income manipulation test and cash realization test, and thus indicated that those Indonesian public companies have a low level of earnings manipulation and low engagement in non-core earnings such as hedging activities.

**Keywords:** organic growth index, economic value added, core earnings, income manipulation.

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## INTRODUCTION

Superiority in business competition can be achieved through organic growth representing the growth for the core of the company. Organic growth is different from the company's growth acquiring from the earnings creation through financial engineering, takeovers, or mergers and acquisitions. According to KPMG, 83% of mergers fail to increase shareholder value and many actually destroy it, as stated in "Mergers and Acquisitions: Global Research Report 1999". Hay Group (2007) also found that 91% of merger and acquisitions are failed. These are evidence that the failure rate of external growth through merger and acquisitions are high. Therefore, the authors offer a different perspective by investigating internal or organic growth companies, focusing on underlying strength and vitality of the core business and core earnings, derived from entities' economic value added; strong, increasing sales; and cash flow from operations. The authors apply the model of Organic Growth Index (OGI) developed by Edward D. Hess to examine organically growth Indonesian companies listed in Indonesian Stock Exchange.

As to our knowledge, this model of Organic Growth Index has not yet been tested in Indonesian capital market so the result of this research would enrich the knowledge of organic growth studies especially for Indonesian public listed companies.

## THEORETICAL REVIEW

### **Growth**

Companies normally expand their businesses and grow. There are two basic approaches to explaining economic growth. The first approach, represented in the work of Solow (1956) and Swan (1956), has exogenous technical change as the source of economic growth. The second approach, which has received much attention recently, allows the source of economic growth to be endogenously determined.

The exogenous growth which is also called as inorganic growth is a growth in the operations of a business that arises from mergers or takeovers, rather than increase in the companies own business activities.

Firms chose to grow inorganically can gain access to new markets and fresh ideas that become available through successful mergers and acquisitions. It is seen often as a faster way for a company to grow when compared with organic growth.

Whereas, the endogenous growth, which is more common called as organic growth represents the true growth for the core of the company as it means the growth rate that a company can achieve by increasing output and enhancing sales, excludes any profits or growth acquired from takeovers, acquisitions or mergers. Although there are many literatures on growth via acquisition (Hitt, Harrison and Ireland 2001; Sirower 1997), there is little on organic growth. Most is captured within sub-questions related to product or service innovation (Kazanjian, Drazin and Glinn 2002) or geographic market expansion (Zook and Allen 2003).

However, Edward D. Hess (2006) argues that total corporate growth can result from four sources, which are (1) internal operations or organic growth, (2) acquisitive growth, (3) growth from investments, (4) growth that results from aggressive interpretations of Generally Accepted Accounting Principles (GAAP) and associated financial reporting practices. These four sources of growth are not only distinct, but are produced by separate organizational skills and processes.

Hess (2007) further designed the organic growth index (OGI) to illuminate companies with earnings generated organically rather than through earnings management or manipulation or through investment or financial engineering transactions (non-core) or acquisition. The reason for creating the OGI was multifaceted: (1) to expand the definition of growth to include both sales growth and growth in cash flow from operations (CFFO), (2) to normalize results across industries, negating high margins resulting solely from industry choice, (3) to include an accounting manipulations test to highlight potential income adjustments, and (4) to add a merger and acquisitions test to discriminate between serial acquirers who repeatedly purchased significant revenues from companies that grew internally or organically.

### **Value Creation**

Senior management's most important job is to maximize their firm's current market value instead of only increasing the shareholder value as a quest for value directs scarce resources to their most promising uses and most productive users. The more effectively resources are deployed and managed, the more robust economic growth. Not only that, by maximizing the firm's value, it also create wealth for shareholders and stakeholders as shareholders and stakeholders, have the right to receive a fair return based on the results of a firm. Many senior executives believe that the market wants earnings, despite the fact that accounting measures of performance are not the primary movers and shakers of stock prices. Whereas, what truly determine stock prices is the cash, adjusted for time and risk, that investor can expect to get back over the life of the business. Therefore, management should focus on maximizing a measure called economic value added (EVA<sup>®</sup>). It will increase if operating profits can be made to grow without trying up any more capital, if new capital can be invested in projects that will earn more than the full cost of the capital and if capital can be diverted or liquidated from business activities that do not provide adequate returns (Bennett 1991). In other words, EVA<sup>®</sup> is the only performance measure that is entirely consistent with the standard capital budgeting rules: Accept all positive and reject all negative net present value investments. Whereas, earning per share, on the other hand, will increase so long as new capital investments earns anything more than the after-tax cost of borrowing, which is hardly an acceptable return.

### **Core Earnings**

Horngren (2002) described reported earnings or net income as the famous "bottom line" in an income statement – the remainders after all expenses have been deducted from revenues. While it indicates the profitability of the company, it also reflects the return to equity holders for the period under consideration, and the line items of the statement detail how earnings are determined. Furthermore, Reimers (2007) also stated that net income as the difference between revenues and expenses when revenues exceed expenses for a specific period of time.

However, Standard & Poor's (2001) proposed Core Earnings that refers to the after-tax earnings generated from a corporation's principal business or businesses. Given that the general understanding of what is included in as

reported earnings, the definition of Core Earnings begins with reported earnings and then makes a series of adjustments. It concentrates on a company's ongoing operations hence it should include all revenues and costs associated with those operations and exclude revenues or costs that arise in other parts of the business (Blitzer, Friedman and Silverblatt 2001).

## METHODS

We conducted an investigation of 100 Indonesian public companies listed in Indonesia Stock Exchange, particularly KOMPAS 100 Composite Index because its frequencies and transaction values represent 70-80 percent of the total market in Indonesian stock exchange. Excluding banks, diversified financial firms, real estate investment trust (REITs), and insurance companies, only 70 companies were eligible for entering the next phase.

The research applied the six tests of Organic Growth Index by Edward D. Hess. The first two tests were to identify high growth companies generating true economic profit. The next three tests were to identify companies generating their earnings from the core business and not from income manipulation. The final test was to eliminate companies growing externally such as through mergers and acquisitions.

The six tests of Organic Growth started with the economic value creation using Economic Value Added (EVA<sup>®</sup>) model. Each company was ranked based on the ratio of EVA / invested capital and select the above average companies whose eligible for the next test.

The second test was to find high growth companies by analyzing both the top line and bottom line growth which are sales growth and cash flow from operation (CFFO) growth. CFFO was used as it was less likely to be manipulated compares to financially reported net income. Companies with positive average z-statistics were proceeding to next phase.

The following test was to investigate company's core earnings, that is to identify income associated with a company's ongoing operations and

exclude revenues or expenses that arise from investment or non-operating activities. The minimum passing level was determined at 90 percent which means that if a company's reported average net income deviated from the average core earnings by more than 10% for the time period then those particular companies were eliminated.

The next test focused on aggressive accrual of income as a measure of growth. It was done by comparing the growth rate of accounts receivables with the growth rate of sales. If accounts receivable were growing at a rate much faster than sales, it was a sign of aggressive accounting to boost sales revenue. If the average annual growth rate of receivables grew more than 10% of the annual average growth rate in sales, the company failed to continue. We then looked at the relative size of accounts receivable versus sales. Companies with overall accounts receivable were less than 5 percent of sales continue to the next test.

The fifth test was cash realization test which means that it compared the companies' reporting financial net incomes with its cash flow from operations as the closer the numbers the less likely a company has participated in earnings manipulation. If the ratio of CFFO / net income was less than 90 percent, companies were not eligible to continue to the next phase.

The final test was to eliminate companies that had acquired their increase in market value during the 4-years period by incorporating mergers and acquisitions. As the constraints of the availability of the mergers and acquisition data then we looked at the company's annual reports and their notes to find out whether there were mergers and/or acquisitions made by a company during the applicable time periods.

## **RESULTS**

Despite of using the actual value of the companies' economic value added (EVA), this research used the ratio of economic value added as a percentage of its invested capital in order to normalize the results across the different size of companies from different industries. Table 1 shows the number of companies passing the test one in each applicable period. It explained that companies moving to the next phase were increasing from 2004 to 2007, however, the trend was not so promising if further value

creation was not made. As indicated in Table 2, average economic value added was still negative even though net operating profit after taxes was rising. Out of 70 companies, it turns out that 65 companies were eligible to continue to the next phase.

**Table 1.** Number of companies entering and exiting test one

Year	Entering #	Exiting #
2004	31	39
2005	38	32
2006	36	34
2007	35	35

In Test two, from 65 companies, 26 companies from 7 industries passed the test. It indicates that 40 percent of those companies are high growth companies. Of these 26 companies, 2 were from agriculture, 7 mining, 2 consumer goods, 2 property, 5 infrastructure, 7 trade services, and 1 miscellaneous industry, while no companies from basic industry and chemicals sector passed this test.

From 26 companies, 20 companies passed test three. It indicates that almost 30 percent of the sample are companies most likely growing organically and not by creating one-time nonrecurring earnings. This is supported by the percentage of their core earnings that builds up 90 percent of their net income.

**Table 2.** Average NOPAT, EVA, Invested Capital and WACC

	2004	2005	2006	2007
Net operating profit after taxes (NOPAT)	485,104	631,753	785,043	1,228,664
Economic Value Added (EVA)	(525,043)	29,822	(851,857)	(652,776)
Invested Capital	4,962,221	5,685,733	6,002,787	7,243,012
Weighted Average Cost of Capital (WACC)	21.1%	12.6%	30.3%	29.9%

The next test resulted in 15 companies as test four winners. These companies are less likely involved in income manipulation as the growth

of their receivables are not outpace the sales growth and the relative size of their receivables are less than 5 percent of sales. The comparison between the receivables growth with the sales growth is necessary in identifying which companies involve in income manipulation, as the higher the gap between the receivables growth and the sales growth, the higher the likelihood of those companies engaging in aggressive sales by giving more credit to their customers without considering their customers ability to pay back the debts.

80 percent of the test four winners passed the fifth test. These 12 companies showed that 90 percent or above of their reported net income were actually realized into their cash flow from operations and thus significantly reduced the possibility of earning management applied in these companies.

The final test was to eliminate inorganic growth companies. Companies engaged in mergers and acquisitions (M&A) during the applicable period from 2004 to 2007 were eliminated. However, M&A conducted before and after the applicable period was not considered to be eliminated as this is not as part of this research scope. The final result shows that from the remaining 12 companies, there are 7 companies survived such exhaustive tests. This finding has resulted in 10 percent Organic Growth Index for the Indonesian public companies listed in Kompas 100 Composite Index. Table 3 summarizes the findings from all of the six tests Organic Growth Index.

**Table 3.** The Summary of the Six Tests Organic Growth Index

	Enter	Exit	Pass
Test 1: Economic value added	70	5	65
Test 2: High growth companies	65	39	26
Test 3: Core earnings	26	6	20
Test 4: Income manipulation	20	5	15
Test 5: Cash realization	15	3	12
Test 6: Mergers & acquisitions	12	5	7



## DISCUSSION

In the step-one analysis as described in Table 2, it is shown evidence of a high growth period within Indonesian public companies from 2004 to 2007. Invested capital rose up almost 50 percent while net operating profits after taxes increased by 150 percent during that period. The increment of invested capital indicates that Indonesian public listed companies are optimistic to expand their businesses after the significant downturn during the 1998 financial crisis. Not only that, the increment of net operating profits also boosts the confidence of investors towards those companies. By being able to generate more profits, those companies would be able to meet investors' required rate of return, which then resulted to higher opportunities for those companies to gain more invested capital to expand the companies' businesses.

Despite such promising trend, most of Indonesian public companies have still experienced negative EVA. It implies that investors are more interested in accounting profits rather than economic profits. One difficulty in generating positive economic value added is that the weighted average cost of capital increased from time to time and rose by almost 10 percent during the applicable period. This tells us that even though the Indonesian macro economics have improved but at the micro level the lending rate was hardly decline making it more difficult for companies to access to a cheaper fund.

In step-two analysis, we found that the average sales growth is much higher than the average growth of cash flow from operation (CFFO). Most companies failed to pass this test was mainly due to its low growth level of cash flow from operation. It implies that there is a possibility of inefficiency of working capital or working capital mismanagement as CFFO is also influenced by the changes in companies' current assets and current liabilities. Furthermore, low CFFO growth could be resulted from the companies' high fixed operating expenses. In accordance with the test-one results, the increase in invested capital would lead to a company's higher fixed operating expenses.

Having investigated the difference between the company's core earnings and the net income, we found the average of adjustment from the reported

net income and the core earnings was less than 5 percent which is considered low. It can be said that hedging activities conducted by Indonesian public companies are relatively low. Hedging is not the main source of earnings in the companies.

Furthermore, learning from the previous currency crisis experience, nowadays Indonesian public companies are more aware of the impact of the foreign exchange rate. After changing from the managed floating exchange regime to a free-floating exchange rate arrangement in August 1997 (IMF, 1998), it becomes more difficult to predict the currency movements; as in a free-floating exchange rate system, the value of a nation's currency is allowed to "float" up and down in response to the market forces (Gerber, 2005). Therefore companies become more reluctant to highly involved in a speculative foreign exchange transaction. This indicates that after having such a severe financial crisis in 1998, Indonesian public companies become more prudent in doing their businesses and thus more focus on the core and on-going operations. This could also explain why most Indonesian public companies are not significantly hit by the recent global crisis triggered by sub-prime mortgage in the U.S.

The result for income manipulation test showed that the majority of the remaining companies are not involved in earnings manipulation as the growth of their receivables are not outpace the sales growth and the relative size of their receivables are even less than 5 percent of their sales. Moreover, above 90 percent of the remaining companies' reported net income was actually realized into their cash flow from operations and thus significantly reduced the possibility of engaging in income manipulation.

Having eliminated inorganic growth companies engaged in mergers and acquisitions during the applicable periods from 2004 to 2007, we found 7 organic growth companies from 3 industries. These companies are the OGI winners, they are: PT Nickel Indonesia Tbk and PT Tambang Batubara Bukit Asam Tbk (Mining); PT Indosat Tbk, PT Perusahaan Gas Negara (Persero) Tbk and PT Pelayaran Tempuran Emas Tbk (Infrastructure, Utilities and Transportation); PT Multipolar Tbk and PT Matahari Putra Prima Tbk (Trade, Services and Investment).

## CONCLUSION

We conclude that 10 percent of Indonesian public listed companies from non-financial sectors in Kompas 100 as Organic Growth Index (OGI) winners. Our finding is higher than Hess (2007) who found less than 5 percent of organic growth companies in the U.S. These OGI winners are organic growth companies with above average economic value added where their earnings mainly generated from the core and on-going operations without income or earnings manipulation and have high cash realized net income.

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