

Financial Risk Management Via Evaluating Impacts of a Six Factor Model on LAF Stock Price – A Case in Export Processing Industry in Vietnam

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Abstract: Better management of listed firms will help them to attract more FDI investment capitals. There are many factors affecting business management including financial risk management.

This papers mainly uses quantitative analysis with OLS model, and qualitative analysis including synthesis, inductive and analytical methods.

OLS regression give us results that, in a 6 factors model, LAF stock price decrease are much affected by increase in CPI and lending rate with a significant effect, then increasing the exchange rate.

From that, we can have policy and management implications.

The limitation of research is that we can expand model for other industries and markets.

Keywords: Transparency, Bank stock price, GDP growth, Inflationary, Risk free rate, Market interest rate, Policy.

INTRODUCTION

Long An Export Processing Joint Stock Company (LAF stock code), previously Long An Export Processing Enterprise - a state-owned enterprise established in 1986 has performed well over years.

We see LAF business results in below chart: 1304 b VND revenues in 2017.

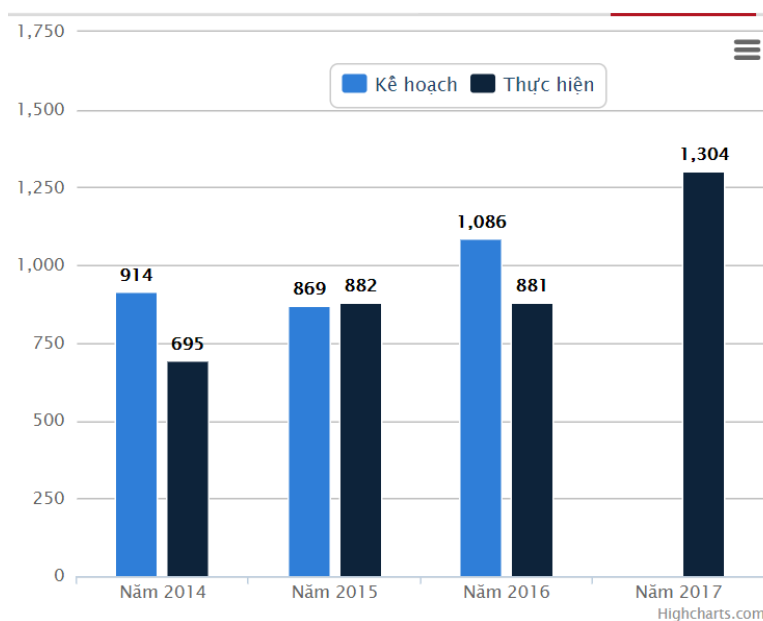


Chart 1: LAF revenues planned and real

Below chart shows us LAF stock price moves in the same trend with VN Index and GDP growth, although it fluctuates in a smaller range.

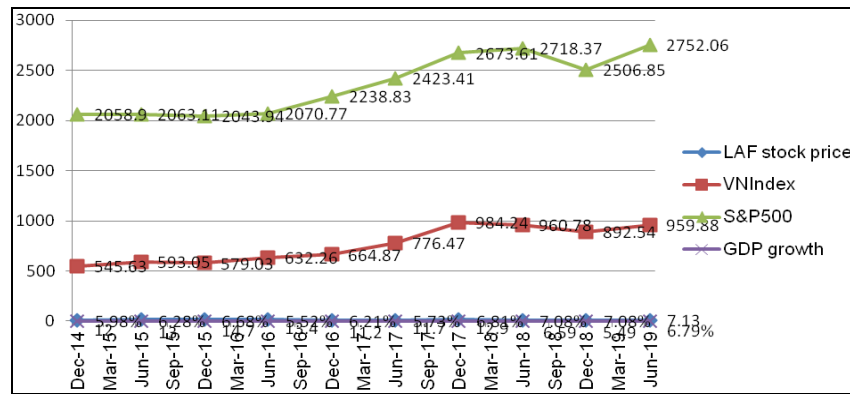


Chart 2: Movement of LAF stock price

The paper is organized with introduction, literature review, methodology, main results, discussion and conclusion.

CONTENTS

Research questions

- Question 1: What are the relationship among many economic factors and stock price of LAF?
- Question 2: What are the suggestions for financial risk management?

Literature review

We summarize relating studies in below table:

Table 1: Previous studies summary

Authors	Year	Results, contents
Lina	2012	Between bank stock return and exchange rate there is positive correlation.
Gunaratha	2016	Between financial risk and leverage, there is positive correlation.
Hami	2017	Between CPI in Iran and depth of finance there is negative correlation.
Kantos and Batolomeo	2020	Prefer “alpha” more than “beta” to outperform benchmark of market.

METHODOLOGY AND DATA

This research paper establishes correlation among macro economic factors by using an econometric model to analyze impacts of six) macro economic factors in Vietnam such as: GDP growth, inflation, interest rate, exchange rate,... on LAF stock price.

MAIN RESULTS

General data analysis

From below charts we recognize: between Y (stock price of LAF) and GDP growth, and VNIndex there is negative correlation, while positive correlation with lending rate and risk free rate.

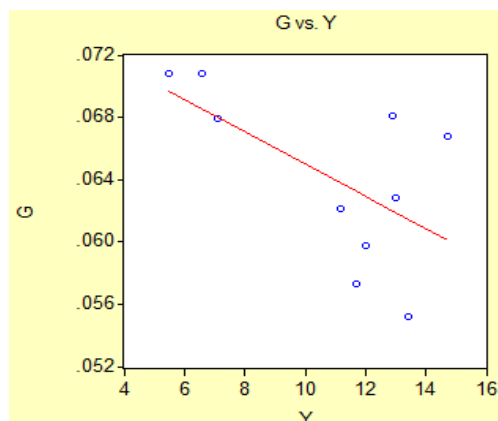


Chart 3: LAF stock price (Y) vs. GDP growth in Vietnam (G)

Next we find out that, based on the below scatter chart, Y (LAF stock price) has negative correlation with inflation (CPI).

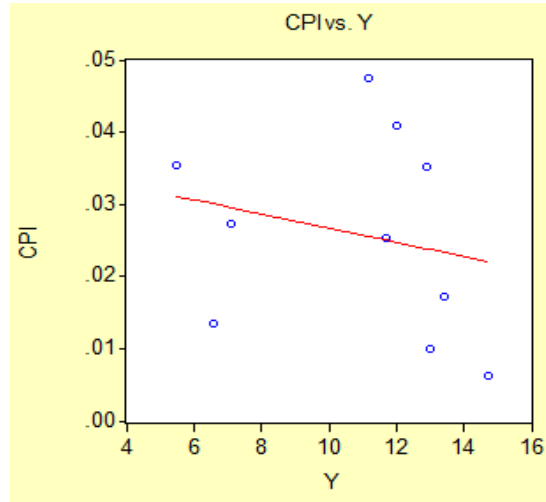


Chart 4: LAF stock price (Y) vs. Inflation (CPI)

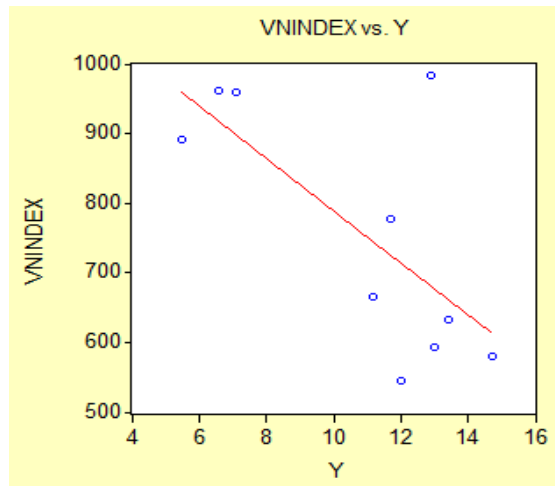


Chart 5: Y vs. VNIndex

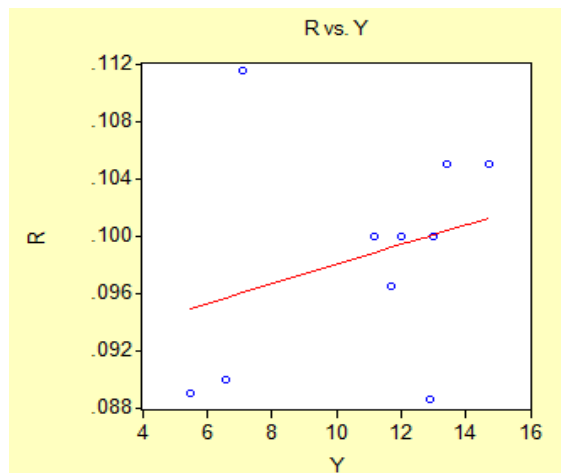


Chart 6: Y vs. Lending rate (r)

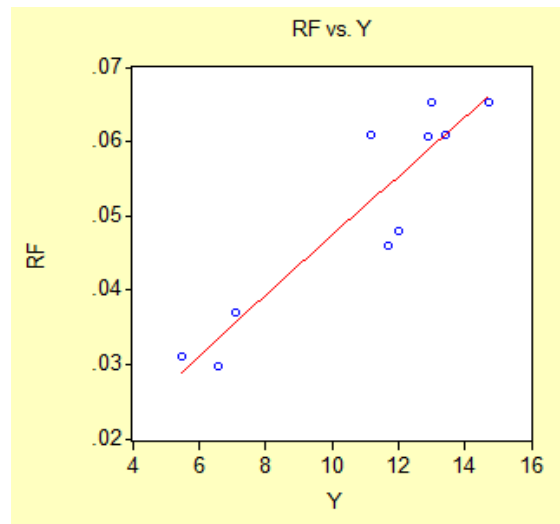


Chart 7: Y vs. Risk free rate (Rf)

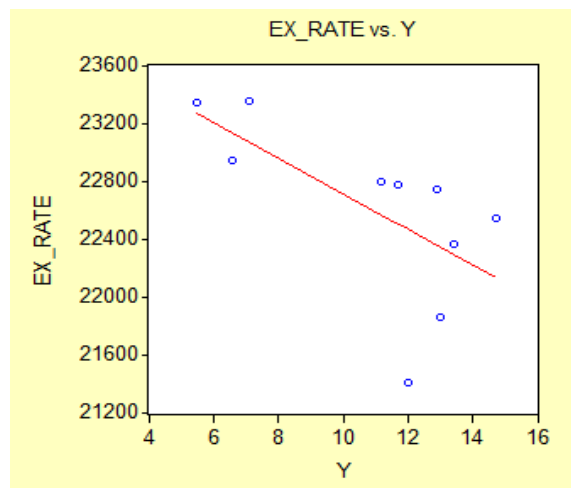


Chart 8: Y vs. Exchange rate (Ex_rate)

We recognize standard deviation of G is lowest wie that of USD/VND is highest.

Table 2: Statistics for macro economic factors

Unit: %

	LAF stock price	GDP growth	Inflation (CPI)	VN Index	Lending rate	Risk free rate	USD/VN D rate
Mean	10.81	0.06416	0.02588	758.875	0.09856	0.050485	22611.7
Median	11.85	0.0648	0.0264	720.67	0.1	0.05435	22757.5
Maximum	14.7	0.0708	0.0474	984.24	0.1115	0.06535	23350
Minimum	5.49	0.0552	0.0063	545.63	0.0886	0.0297	21405
Standard dev.	3.215	0.005549	0.013884	176.4835	0.007636	0.014066	610.2313

Regression model and main findings

- Scenario 1: Regression model with 1-6 variables: analyzing impact of GDP growth (G) on LAF stock price (Y)
Note: C: constant

Table 3: OLS results with Eviews

	Coefficients					
	1 variable	2 variables	3 variables	4 variables	5 variables	6 variables
G	-349.6	-357.2	-359.9	-197	-139.2	-121.7
CPI		-60.1	-60.8	-45.7	-29.9	-28.5

Rf					179.7	177.9
VNIndex				-0.008	-0.0009	0.002
R			-4.8	-40.9	-39.5	-17.3
Ex_rate						-0.001

The above table result shows us that:

Between LAF stock price (Y) and inflation, GDP growth and lending rate, there is negative relationship while it has positive correlation with Rf and VNINDEX.

DISCUSSION AND FURTHER RESEARCHES

LAFOOCO (LAF) was established in 1985 as Long An Export Processing Enterprise. The company was equitized in 1995 and its current charter capital is 133 billion dong. The company operates mainly in the business of processing agricultural products of all kinds for export, with the main products being products from cashew kernel and exported frozen shrimp. LAFOOCO is currently the national leader in cashew nut purchasing, processing and export. Cashew kernel products have been accepted in foreign markets, currently accounting for 20% of the export market share of the whole cashew processing industry in Long An province. From the above OLS regression results we find out: LAF stock price increases when CPI and lending rate decrease with significant impact then affected by an increase in risk free rate, and next is reduction in exchange rate.

CONCLUSION AND POLICY SUGGESTION

Basically the inflation policy need to applied meaning Government and agencies need to control inflation well for specific economic stages.

Management implications

Management Board of LAF need to build risk model to estimate impacts macro effects on firm stock price.

Limitation of research

The research model can be applied for other industries and other emerging markets. We also can add more variables into OLS model.

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Exhibit

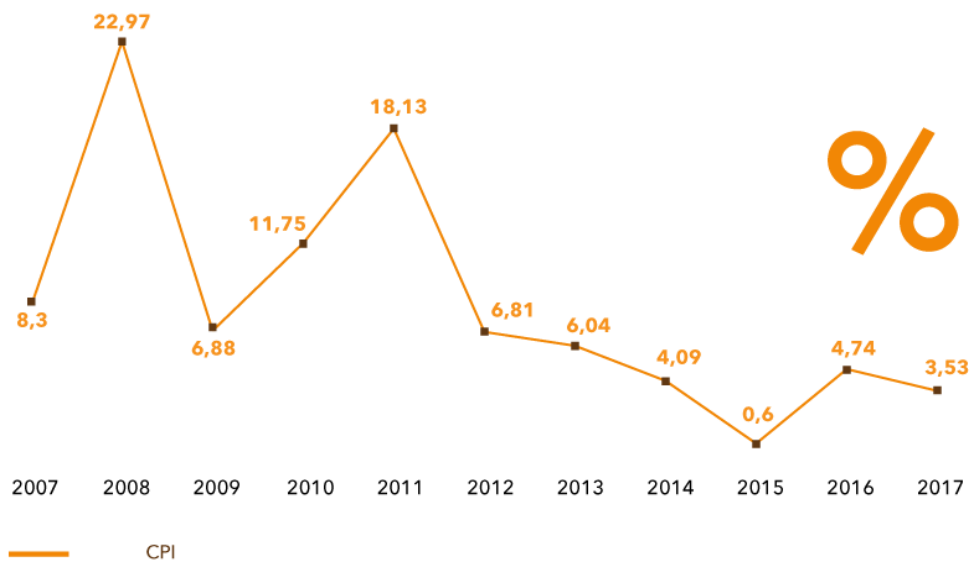


Exhibit 1: Inflation, CPI over past 10 years (2007-2017) in Vietnam