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INFLATION IN VIETNAM AND ITS EFFECTS ON SMALL AND MEDIUM-SIZED ENTERPRISES

Case: An Think Investment Private Company

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ABSTRACT

This study is concerned with one of the most important issues of any economy, the inflation matter. In recent years, inflation in Vietnam has been under an upward trend. Inflation threatened Vietnamese economy twice within a short four year period. Not only the people but also enterprises are anxious about possible disadvantages caused by inflation. Among businesses, small and medium-sized enterprises (SMEs) are believed to suffer most severely from the escalation of prices.

The biggest problem of SMEs is the serious lack of information about difficulties they may confront during an inflationary period. The main aim of this thesis is to clarify the potential effects of inflation on SMEs. In order to achieve this goal, theoretical background of inflation, current context of inflation in Vietnam and information about the Case Company are studied.

The method used in this thesis is qualitative, with an inductive approach. In the theoretical framework, data are collected mostly from published sources such as books, articles and relevant studies. In the empirical part, data are collected from personal observation, Vietnamese government publications, journals and interviews with the director of the Case Company.

In the conclusion, implications of the findings and recommendations for further research are given. There are also several suggestions that managers of SMEs may apply to their own cases, in order to prevent negative impacts of inflation and limit the losses that may occur.

Keywords: inflation, SMEs, effect, Vietnam, consumer price, capital source, monetary policy.

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GLOSSARY

| | |
|----------|---|
| \$ | U.S Dollar |
| CPI | Consumer Price Index |
| FDI | Foreign Direct Investment |
| FPI | Foreign Portfolio Investment |
| GDP | Gross Domestic Product |
| GSO | General Statistic Office |
| HSBC | Hong Kong and Shanghai Banking Corporation |
| ICOR | Incremental Capital Output Ratio |
| IMF | International Monetary Fund |
| ODA | Official Development Assistance |
| SMEs | Small and Medium-Sized Enterprises |
| SOEs | State-Owned Enterprises |
| U.S. | The United States of America |
| UK | The United Kingdom |
| USD | The United States' Dollar |
| VND | Vietnam Dong – Vietnam's currency |
| VN-Index | Vietnamese stock market price index |
| WTO | World Trade Organization |
| ICCI | Vietnamese Chamber of Commerce and Industry |

1 INTRODUCTION

1.1 Research background

In 1996, a research found that inflation was the term that appeared most frequently in the popular media. At that time, there were statistically 872,000 news stories which contained the word “inflation”. Unemployment ranked second in the frequency of appearance with 603,000 stories. The public interest seems to increase in step with the growth of inflation itself and related issues. Although economists may be hesitant about a certain extent to which inflation could endanger the economy, people tend to be anxious once the inflation rate exceeds 5 or 6 percent. In fact, inflation was named as public enemy number one, when it reached double-digit numbers in the U.S. in the 1970s. (Hellerstein 1997.)

Inflation became the most public concern in Vietnam when it rose above 20 percent last year, for the second time in three years. At that time Vietnam’s inflation rate ranked the third in the world, overtaken only in Ethiopia and Venezuela. The latest news reveals that the rate is currently the highest in the Asia, a fact which government censors have asked the local journalists to stop reporting. (Hero to zero, 2012; Doing battle against inflation 2011.) The authorities worry that a high level of public anxiety about inflation may lead to unpredictable consequences, such as the speculation. However, despite efforts of the government to ease public concern about consumer price escalation, inflationary pressures are still reflected in many aspects of the economy.

People tend to consider inflation as a negative factor, because it decreases the purchasing power of the money in their pockets. The higher the inflation rate, the more they have to pay for commodities. However, people are not the only ones who suffer from high inflation. Thousands of businesses have gone bankrupt since inflation happened, due to contractionary monetary policy and increasing input costs. Among those businesses, small and medium-sized enterprises (SMEs) are the main victims suffering the high levels of consumer prices.

“Taking bank loans is like drinking poison for SMEs” said Cao Si Kiem, the former central bank governor who is the chairman of the Small and Medium

Enterprises Association. This statement implies the complicated situation that SMEs are facing right now in Vietnam, in which high interest rates is only one of various disadvantages caused by high inflation. “Small businesses are being ambushed from ten sides” said Vu Kim Hanh, the director of the Business Studies and Assistance Centre. Indeed, there is more than one reason for a small business to be anxious.

However, the perception of SMEs as well as the people towards inflation is rather ambiguous. They have no experience and understanding to confront such context of high inflation. It could be read from thousand news stories that enterprises are facing many disadvantages, but specific impacts of inflation and their significance are not revealed, otherwise only superficially mentioned. Therefore, this thesis aims to provide readers the necessary knowledge to understand the nature of inflation and its relevant elements. Moreover, it clarifies the potential effects of high inflation on SMEs. Until entirely acknowledging existing difficulties, enterprises would still be indecisive in finding a way to survive during inflationary period. This thesis, therefore, may serve as a reference for managers of SMEs in developing the essential knowledge of their potential exposures under various inflation scenarios.

1.2 Research questions and research objectives

The research problem can be described as a phenomenon and the surrounding factors related to this phenomenon (Kananen 2011, 133). In this case, the main research object is inflation, which appears as a well-known economic phenomenon, and the problem that will be examined is effects of inflation on small and medium-sized enterprises. The examination of the research problem takes place in a particular country which is Vietnam. It is expected for the research problem to happen in reality, which means the existence of effects of inflation on SMEs in Vietnam, at a certain level of significance, at which the research is worthwhile to study. The research problem, therefore, is converted into these research questions:

- What is inflation?
- What is the situation of inflation in Vietnam recently?
- Is there any effect of inflation on SMEs in Vietnam? What are these effects? How is their significance?
- What should SMEs be aware of to survive in such situation of inflation?

By answering those questions, the thesis accomplishes its objective to solve the research problem. It should be noticed that the research problem is to clarify the influence of inflation on companies, not to find the solution for either inflation or SMEs. It could be criticized that the research problem would not be actually solved if there is not a solution. However, the purpose of this study is to provide executives of enterprises with the understanding of disadvantages brought by the situation of high inflation. Executives will be supported of the base knowledge to find their own solutions in specific situation of each company. The problem exists here is that executives have to face with the unpredictable inflation with ambiguous awareness of the method of self-protection. The solution of the research problem, therefore, is the exploration of the phenomenon and its impacts, which are the foundation for appropriate business decisions in such situation. Nevertheless, in the conclusion section, there are general recommendations for several effects of inflation based on the author's observation. Managers could, therefore, apply the recommendations to their own cases if similarities are discerned.

The research method, which will be discussed in the next part, is one of the factors considered to form research questions. The research object can be studied from several different angles (Kananen 2011, 16). In this case inflation is analyzed from the managerial perspective of SMEs in Vietnam, in others to provide executives of SMEs necessary general knowledge. Subsequent parts of this chapter discuss the research method, the research's scopes and limitations, as well as the thesis structure.

1.3 Research method and data collection

An overview of this thesis' methodology is presented in Figure 1:

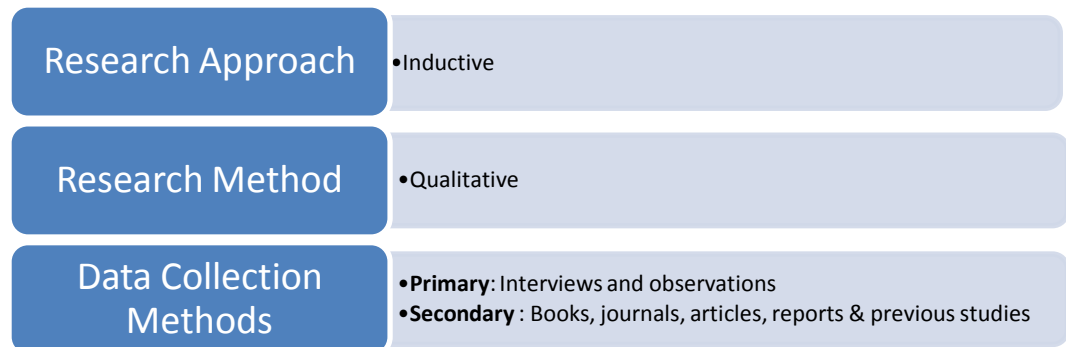


FIGURE 1. Research methodology.

As mentioned in the previous part, the preferred method of this research is entirely qualitative. It is the most suitable approach which is selected based on the nature of the research. The qualitative method could be applied when there is no knowledge, theories or research results available or the phenomenon requires deep understanding (Kananen 2011, 41). In this case, the phenomenon, which is effects of inflation on Vietnamese SMEs, has been mentioned in various sources of information, but there is no study that particularly clarifies these effects, as observed by the author. Since high inflation has just occurred in Vietnam in recent years, after a long period of moderate inflation, there is not much previously public material on the subject. Qualitative research supports the understanding of high inflation as a phenomenon and the hypothesis of its causes. It is only after understanding the nature of inflation that the quantitative research can be applied to accurately measure the significance level of inflationary pressure. Therefore, the quantitative approach would be suggested for further research, but not applied within the framework of this thesis.

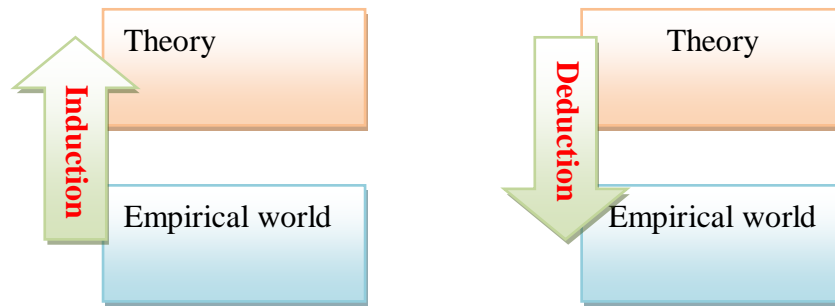


FIGURE 2. Direction of reasoning in induction and deduction (Kananen 2011, 40).

According to Burney (2008), deductive and inductive approaches are two main methods of reasoning. The difference between those methods is the direction of reasoning. This direction is from specific to general in induction, while the direction in deduction is from general to specific (Kananen 2011, 40). The nature of the research decides the choice of research approach. As a result, this thesis will employ the inductive research approach of which the process is indicated in Figure 3. The author collects observations data on impacts of inflation on SMEs and analyzes them to conduct the findings. The reasoning process starts from the research materials, which are available as journals, articles and previous studies on relevant subjects. The collected data is combined with understanding from interviews with the director of the Case Company and company's reports to develop the assumption of inflationary effects on SMEs.

Case study is applied as the research method. A case study is defined as an empirical enquiry that explores a contemporary phenomenon within its actual context, especially when the borders between phenomenon and context are not apparent (Yin 2003, 13-14).

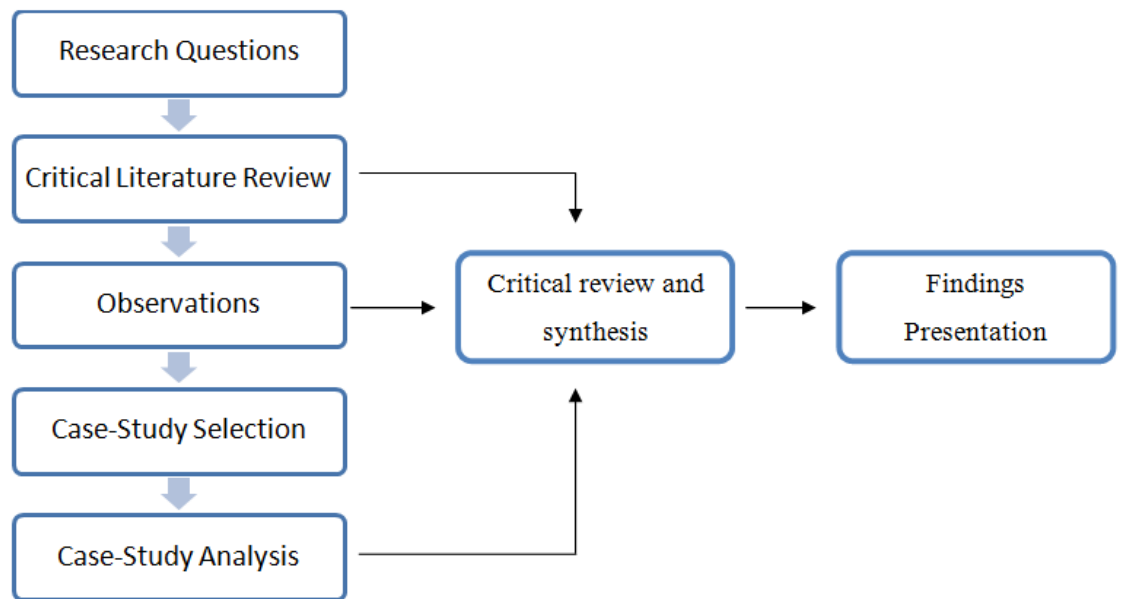


FIGURE 3. Inductive approach model.

Moreover, to obtain adequate information as well as to understand a phenomenon comprehensively, it is necessary to utilize different sources of data collection method, since each method may have its own advantages and disadvantages (Swanson 2007, 167-168). Accordingly, this study involves the collecting of both primary and secondary data.

Most of the data used in the theoretical framework is secondary data, such as books, journals, articles and early research. In the empirical section, data may be collected from primary sources such as interviews and observations. Additionally, certain secondary sources, for instance newspaper articles, company's reports and previous studies are expected to be exploited. It should also be noted that the research is mostly done as a desk research.

1.4 Scope and limitations

Firstly, the major concern of this study is to define the possible effects of inflation on SMEs. As the research problem is the clarification of an economic phenomenon, within the scope of this bachelor thesis, the author do not provide any solution for either inflation context in Vietnam or a specific case of any

enterprise. Among different categories of businesses, the subject of the research is also limited to small and medium-sized enterprises, which suffer most severely when inflation happens. Relevant knowledge is explained in order to understand the empirical section. Only relevant theories are stated in the theoretical framework, to reserve the consistency of the thesis.

Secondly, the study is conducted from the managerial perspective. The purpose of this thesis is to provide executives of companies a potential reference for making decisions during inflationary periods. Therefore, approaches from other perspectives could be considered as unnecessary.

Thirdly, within the time and available conditions, the author was not allowed to approach many companies, although it is realized that the reliability of the research may be improved if more enterprises are examined. Similarly, a quantitative research approach or a methodological triangulation that combines quantitative and qualitative methods is recommended for further research in order to improve the validity and reliability.

Finally, there is also the limitation in the period of time in which the research examines inflation. The studied period is from 2007 until present, especially in the previous year when inflation reached its peak the second time in three years.

1.5 Thesis structure

The thesis consists of two parts: the theoretical framework and the empirical study. Figure 4 demonstrates briefly the structure of this thesis:

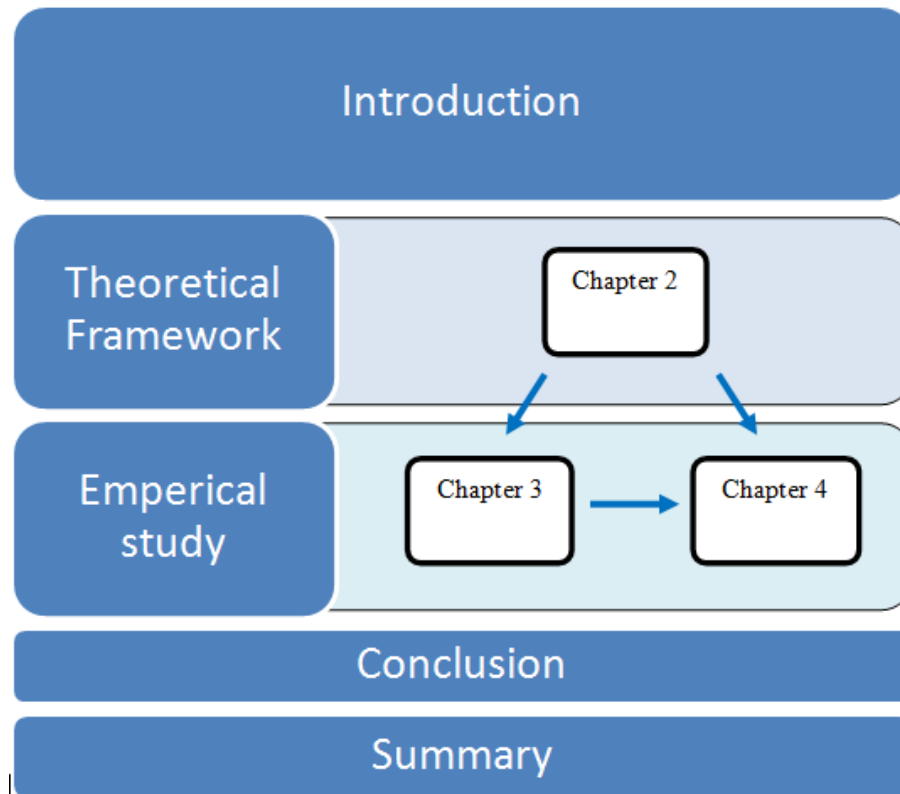


FIGURE 4. Thesis structure.

The study starts with the introduction in Chapter 1, where the motivations and objectives of the research are stated together with research methodology and research structure. The research problem is also defined in this chapter by asking reasonable research questions. Next, Chapter 2 encompasses the theoretical framework. The definition of inflation and relevant concepts are presented in this chapter. This theoretical framework serves as essential understandings for conducting the empirical part.

The empirical section is explained in Chapter 3 and Chapter 4 of the thesis. Chapter 3 describes the current situation of inflation in Vietnam and its

consequences. The history of inflation and comparison to inflation in other countries are also presented. Chapter 4 presents the definition of SMEs in Vietnam, the Case Company and empirical findings on the research problem from observations and interviews. Therefore, the outlook of inflation context in Chapter 3 is also critical for investigating inflationary effects in chapter 4. A phenomenon may not be examined thoroughly without the circumstance in which it occurs. The arrow between Chapter 3 and Chapter 4 illustrates this argument.

Subsequently, Chapter 5 pinpoints some strategic remarks after making conclusion about answers for the research problem. Finally, Chapter 6 summarizes main ideas of the whole thesis.

1.6 Validity and Reliability

The substantiation of reliability and validity is exceedingly significant in scientific research (Kananen 2011, 66). Validity and reliability should be emphasized while planning the thesis structure, analyzing the outcomes and judging the quality of the study (Patton 2002, 20; Golafshani 2003, 597-607). Validity refers to the degree to which a study precisely reflects or evaluates how well a specific research method measures what it claims to measure. Reliability is defined as the consistency of the research result, which means that data collection method or analysis process returns the same result on repeated examinations. (Chisnall 1997, 12; Yin 2003, 37; Saunders, et al. 2009, 157). However, because the nature of validity and reliability measures originated in natural sciences, the verification of validity and reliability in qualitative research is much more difficult than in quantitative research. The object of qualitative research, which is an individual or a group of individuals, does not always respond in a logical and rational way, and randomness is observed as an inherent characteristic of the human being. (Kananen 2011, 66.) Applying the qualitative method as the main approach to the research object, this research requires various attempts of the author to demonstrate its validity and reliability. Figure 5 presents the criteria of the reliability and validity in the quantitative and qualitative research.

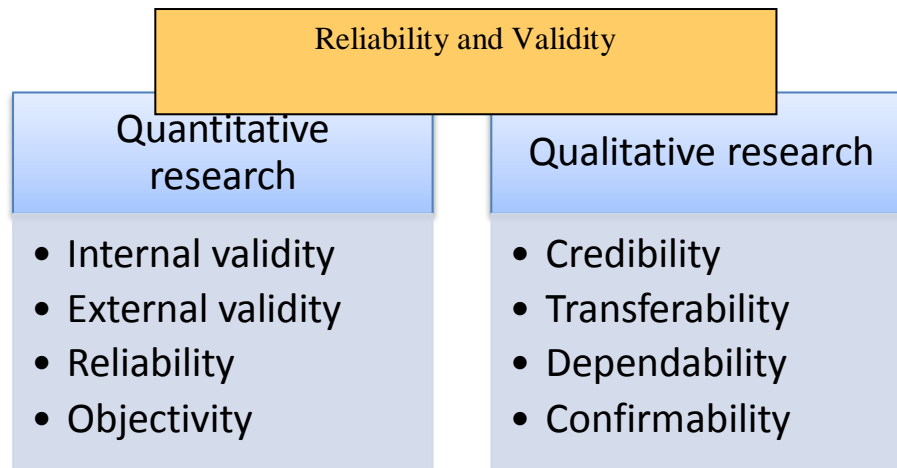


FIGURE 5. Reliability and validity criteria in quantitative and qualitative research (Kananen 2011, 68, according to Guba & Lincoln 1981).

The confirmation of a person involved in the research may be the simplest way to ensure the reliability and validity of the research (Kananen 2011, 68). The informant in this case is Mr. Vu Hung Son, the executive of the Case Company, who is also the main object of the interviews and the provider of the company's information related to the research issue. The supplied data, including interview records and the financial statements, is, therefore, verified by the informant as reliable and valuable. The result of the study will be sent to the informant after the publication, to serve as an evidence of validity as well as a managerial reference for the managerial staff of the Case Company.

Another way to increase the reliability of the research is triangulation, of which data triangulation is one of the effective methods. Data triangulation is defined as the utilization of diverse research data related to the phenomenon. (Kanane 2011, 70.) the data in this research is collected from various sources, both primary and secondary. Primary sources of data can be listed as the interview information and the financial statistics, while secondary sources are gathered from books, journals and the internet.

2 THEORETICAL FRAMEWORK

Theoretical framework is concerned with theories, models and previous studies related to the research problem (Kananen 2011, 137). The theoretical section is a significant part of the thesis since it provides readers essential knowledge to understand the empirical section. This chapter presents the definition of inflation and relevant concepts, such as types of inflation, its causes and effects and the calculation method. Moreover, it introduces different schools of theories on causes of inflation. The last section describes popular measures that governments use to control inflation. All of the theories presented in this chapter are the foundation to understand research findings stated in next chapters.

2.1 Definition of inflation

Inflation is defined as an increase in the overall level of prices in the economy. It is not because goods become more valuable but otherwise because the money becomes less valuable. In other words, a same amount of money at a certain time can purchase fewer goods or services than at the previous time. Alternatively, inflation can be described as a decrease in the value, or the purchasing power, of money. (Mankiw 2011, 643.)

Mankiw (2011, 643) illustrated this phenomenon by a vivid example: In the United States today, an ice-cream cone costs few dollars, but in 1930s, the price of a similar ice-cream cone was three cents. The increase in the price of an ice-cream cone as well as in the overall level of prices over time is called inflation. To be more specific, suppose that the price of a cone is 2 dollars, consequently the value of a dollar is half a cone. If the price of this cone increases to 3 dollars, the value of a dollar declines to a third of a cone. Table 1.1 presents changes in the value of money. There are various goods and services in the market, whose prices are reflected in the Consumer Price Index (CPI), but they all follow a rule: the value of money decreases when the general level of prices increases.

TABLE 1. Changes in the value of money when the price increases.

| | | | |
|----------------------------|----------|----------|----------|
| Price of an Ice-cream Cone | 2\$ | 3\$ | 4\$ |
| Value of a Dollar | 1/2 Cone | 1/3 Cone | 1/4 Cone |

The inflation rate is used to measure the level of inflation. It is a percentage rate of change in the price level over time, usually over one year. Thus the inflation rate of a certain year shows how many percent the overall prices of goods and services in that year have increased since the previous year. Normally, the inflation rate is calculated by the rate of the increase in the CPI.

There is still a debate over causes of inflation. However, most economists consider the excess of money supply as the main cause of high inflation and hyperinflation (Barro & Grilli 1994). In the long run, a higher level of prices is determined primarily by an increase in the amount of money in the economic (Mankiw 2011, 16). In short-run time, inflation tends to be triggered by an excess of aggregate demand over the economy's ability to supply goods and services, which may be affected by various factors. When aggregate demand increases for some reason, the production capacity of the economy, however, cannot adapt quickly in a short time. The enlargement of production capacity requires a corresponding increase in the labor force, physical capital, technology and material resources. Therefore a higher demand for goods and services encourages prices to increase. The increase in the price level, in turn, leads to a rise in the inflation rate. (Mankiw 2011, 648)

People are most concerned that inflation may decrease their living standard, since their wages do not keep up with the escalation of prices (Hellerstein 1997). So far, inflation may have more effects on the society than just the imbalance between incomes and expenditures, both positive and negative, such as the hoarding, the rise of import prices, the lower national saving or the increase in economic investments. (Inflation - effects and how to survive it 2010).

Since inflation is costly but hardly being avoided, today most of policymakers favor a low, steady rate of inflation (Mankiw 2011, 15). In order to achieve such low rate inflation, the authorities use various methods to control the inflation, which will be described later in section 2.6.

Understanding effects of inflation is required in order to understand its costs. But these effects depend on what causes the inflation. The measurement method of inflation will be presented in the next section, followed by causes of inflation.

2.2 Consumer Price Index

The most common measure of the inflation is the Consumer Price Index (CPI), which is currently used in Vietnam and many countries (Mankiw 2002, 30). The price index could be imagined as a “basket” of goods and services such as food, clothing, electronics, holidays, fuels, housing and so on. Over years, the content of this basket stays the same; however, as prices of goods and services in the basket change, the cost of the whole basket changes as well. The CPI measures changes in the average price of this imagined basket over time. Each group in the CPI comprises many commodities in the same category. For example, the group “fruit” includes 15 different types of fruit which are selected to represent all types of fruit. Changes in prices of those 15 types of fruits are then combined to calculate the overall price movement of the group “fruit”. (Griffiths & Wall 2012, 460.)

Since changes in prices of some goods and services have a greater impact on households than the others, each item in the basket is given its own weight to reflect its importance in consumer expenditure, as indicated in Table 2 (Griffiths & Wall 2012, 460).

TABLE 2. CPI divisions and weights in the UK, 2000 and 2010 (Griffiths & Wall, 2012, according to The Office for National Statistics).

| Year | 2000 | 2010 |
|--|------|------|
| CPI (overall index) | 1000 | 1000 |
| Food and non-alcoholic beverages | 121 | 108 |
| Alcoholic beverages and tobacco | 57 | 40 |
| Clothing and footwear | 70 | 56 |
| Housing, water, electricity, gas and other fuels | 118 | 129 |
| Furniture, household equipment and maintenance | 78 | 64 |
| Health | 14 | 22 |
| Transport | 161 | 164 |
| Communications | 25 | 25 |
| Recreation and culture | 149 | 150 |
| Education | 13 | 19 |
| Restaurants and hotel | 137 | 126 |
| Miscellaneous goods and services | 57 | 97 |

The CPI is the price of the basket of goods and services in a certain year relative to the price of the same basket in a base year. The base year will be changed after several years, depends on each country. The base year in Vietnam is currently the year 2000 (International Monetary Fund 2012). For example, suppose that a typical consumer buys a pack of 6 beers and 2 pizzas. Then the basket of goods includes 6 beers and 2 pizzas, and the CPI is:

$$\text{CPI} = \frac{(6 \times \text{Current Price of a Beer}) + (2 \times \text{Current Price of a Pizza})}{(6 \times 2007 \text{ Price of a Beer}) + (2 \times 2007 \text{ Price of a Pizza})}$$

In this example, 2007 is the base year. The CPI demonstrates how much it costs today to buy the basket relative to how much it cost to buy the same basket in 2007 (Mankiw 2002, 30)

The inflation rate of a certain year is calculated by the CPI of that year divided by the CPI of previous year. For instance, the Vietnamese CPI in 2008 was 179.759 on average, and in 2009 it was 191.833. The formula for calculating the annual percentage rate of inflation in the Vietnamese CPI over the course of 2009 is:

$$\frac{191.833 - 179.759}{179.759} \times 100\% = 6.71\%$$

The resulting inflation rate for the CPI in this one year period is 6.71%, meaning the overall level of prices in Vietnam increased by approximately seven percent in 2009. (International Monetary Fund 2012.)

2.3 Types of inflation

Inflation can be categorized by its causes or by the level of inflation rate. Categorized by causes, there are three aspects of inflation: demand-pull, cost-push and built-in inflation, which will be discussed later. Classified by the rate of inflation, there are four levels of inflation:

Low inflation

Inflation is considered as low when the inflation rate fluctuates from 1% to 5%. When the rate is around zero, there is no inflation or so-called price stability. If the inflation rate falls below zero, the country faces deflation. (Piana 2011.)

Within the limit of this research, the deflation is not mentioned. The governments always attempt to maintain a low inflation, since it has positive effect on the economic growth (Nguyen, T.B.L 2011).

Moderate inflation

Because of differences in inflation history, there are various definitions of moderate inflation around the world. In general, one is considered as moderate inflation when its rate ranges from 5 to 25 percent. However, the higher part of this range could already be categorized as high inflation in some countries. (Piana 2011.)

High inflation

High inflation is regarded as inflation with high rate, from 30 to 50 percent. When the rate passes over 50 but below 100 percent, the extremely high inflation occurs. Since the stability of both kinds is unsure, the acceleration to hyperinflation could be expected. (Piana 2011.)

Hyper inflation

Hyper inflation is the most extreme type of inflation, with the annual prices increase to three-digit percentage points (Piana, 2011). For example, the price of a newspaper in Germany was 0.30 marks in January 1921. It increased to 70,000,000 marks in November 1922, less than a couple of years later. The prices of all other commodities in the market increased with approximately the same rate. (Mankiw 2011, 15.)

2.4 Causes of inflation

Historically, there has been a great concern of the economists on causes and effects of inflation. Causes of inflation have been a debate among various schools of economists. Generally, there were two major categories of opinions: quantity theories of inflation and quality theories of inflation. Currently, the quantity theory of inflation, which was introduced by Adam Smith, is broadly accepted as the model for inflation in the long-run. (Economics of Inflation 2010.)

In 1983, Robert J. Gordon introduced the Triangle Model which defines the causes of inflation. The model consists of three factors: demand-pull, cost-push and built-in inflation (Economics of Inflation 2010). Each of them is the basis for

various theoretical explanations of inflation (Bui 2008). These three factors of inflation will be examined in this chapter, of which the final intend is to look for contributing elements of inflation in Vietnam suggested by the theories. Figure 6 illustrates the relationships among those three factors and inflation.

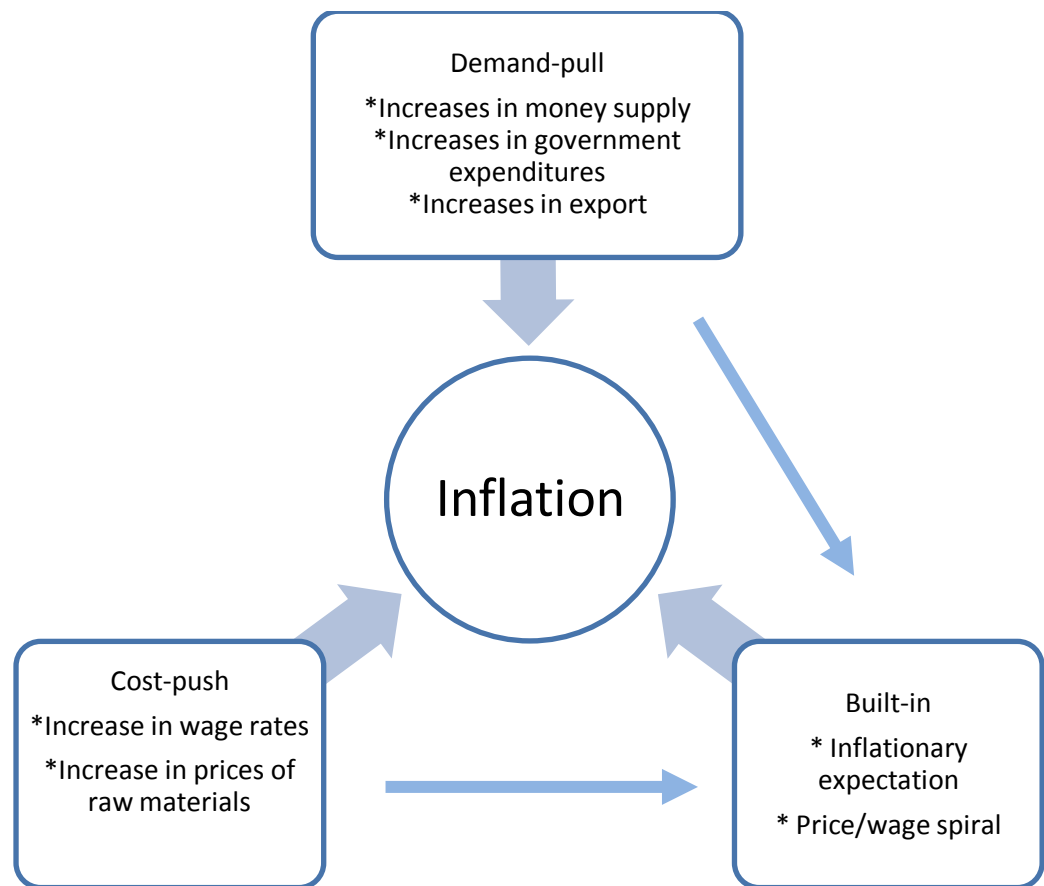


FIGURE 6. Triangle model of inflation's causes (Moffatt 2012; Built in Inflation 2010).

2.4.1 Demand-pull inflation

Demand-pull inflation is a result of constant rises in aggregate demand. When aggregate demand surpasses aggregate supply of goods and services, it pushes up prices, causing inflation. (Bui 2008.) Aggregate demand is calculated by the sum of all spending in the economy:

$$AD = C + I + G + (X-M)$$

In which:

- AD stands for Aggregate Demand
- C stands for consumer expenditures.
- I stands for investments.
- G stands for the government expenditures, which include all the consumption and investments of the government, such as salaries of government agents, pensions of retired government employees or investments in infrastructure, education, military and health care (Government expenditures 2010)
- X and M respectively stand for exports and imports. (Bui 2008.)

Considering the above equation, an increase in aggregate demand can be caused by any individual factor, such as:

- Increases in the money supply
- Increases in government expenditures
- Increases in export. (Parkin, et al. 2005.)

Figure 7 presents the factors which can affect aggregate demand.

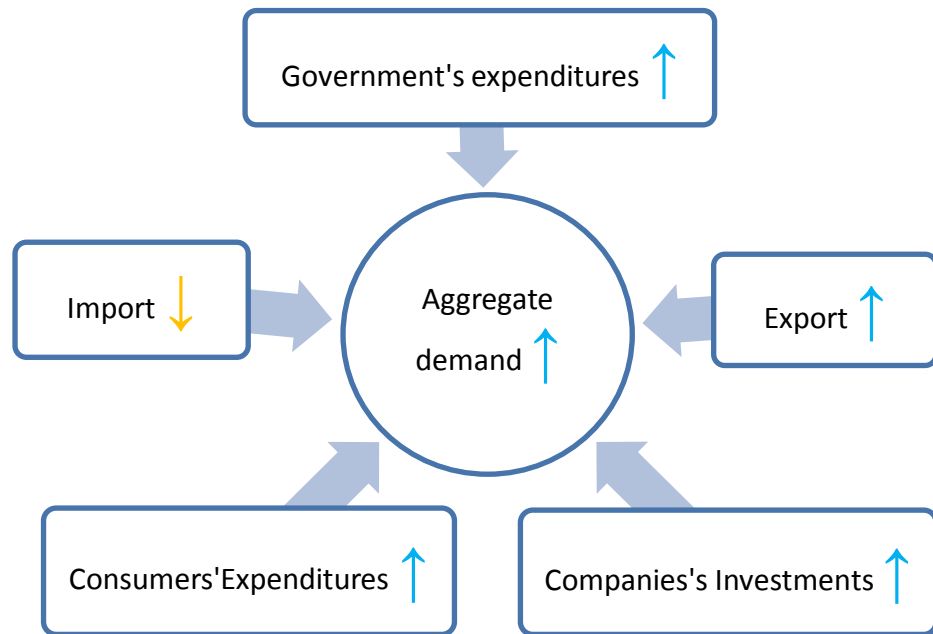


FIGURE 7. Causes of demand-pull inflation (Parkin, et al. 2005; Le T.T.H. 2011).

A decrease in interest rate or a decrease in taxation could be an indirect cause of an increase in aggregate demand, as people have more money to spend on products and services. A decrease in interest rate encourages consumers to save less and purchase more, while less taxation leads to extra money in their income. (Bui 2008.) Furthermore, aggregate demand could increase because firms raise their investments under the expectation of future economic growth. It could also be the government is boosting its expenditures on military defense, social health care or education. An increase in the total amount of money available in the economy could also be another reason. (Le T.T.H. 2011.)

A rise in the price level in the rest of the world could also leads to an increase in aggregate demand, as it promotes the export. Suppose that the price of beer in Sweden suddenly rises for any reason, it would be expected that less Finnish buy beers from Sweden and more Swedish purchase the cheaper beers from Finland. Therefore demand for beers in Finland will increase, causing a rise in the beer price. (Moffatt 2012.)

2.4.2 Cost-push inflation

Cost-push inflation is caused by the decrease in aggregate supply. Aggregate supply is defined as the total amount of goods and services produced in a country. There could be two main reasons for such decrease in aggregate supply:

- An increase in wage rates
- An increase in the prices of raw materials

On the other hand, the higher the cost of production, the smaller the amount of goods could be produced, as a result the higher prices of goods in the market (Moffatt 2012).

Contrary to demand-pull inflation, in cost-push inflation, the employment and production output tend to fall. There are various factors that can drive the costs, such as increases in international goods prices, monopolies raise their prices to increase their profits, or trade unions require raising wages. In recent years, cost-push pressures tend to decrease due to the trends of globalization and increased international competition (Sloman 2007, 320.)

2.4.3 Built-in inflation

Built-in inflation could also be called inertia inflation, since it is created by either constant demand-pull or large cost-push inflation in the past. The built-in inflation is constituted by two factors:

- The inflationary expectation: inflation may occur simply because of the obsession of persistent inflation from the past. Being anxious of inflation that may continue in the future, workers and employees rather increase the wages and prices today.
- The prices/ wages spiral: expecting of future inflation, workers require increasing their nominal incomes in order to protect their real wages. This expected inflation may originate from the experiences of inflation in the past. If they are successful, the employers face a potential increase in labor costs. To maintain the profit, firms have to shift the burden of higher costs to consumers by increasing their prices. The higher prices again strengthen

the determination of employees to push the bargain for higher wages. Accordingly, built-in inflation becomes an endless circle, in which inflation is both the cause and consequence. (Built-in Inflation 2010.)

2.5 Costs of inflation

People tend to have negative impression of inflation. They consider inflation as a cause of the increase in the prices, thus their money becomes less valuable. When prices rise, each dollar can be exchanged to fewer amounts of goods and services. Therefore the living standards seem to be reduced by inflation. (Mankiw 2011, 657.)

But the reality proves that this idea is incorrect. In fact, the inflation in prices at the same time causes inflation in incomes. When prices rise, consumers pay more for goods and services. Because most people receive their incomes for the services that they are selling, in most cases their labor, their incomes may increase at the same rate as inflation. (Mankiw 2011, 657.) However, this also depends on the wage policy of companies.

Since nominal incomes tend to rise at a same rate with inflation, inflation does not reduce consumers' real purchasing power. Instead, there are other costs of inflation which have been recognized by the economists. (Mankiw 2011, 657.) In fact, some economists argue that this cost of inflation is relative small in the economies which have moderate rates of inflation. (Mankiw 2002, 96.)

'Shoe leather' cost

This is a relative small cost at low rates of inflation but considerable cost in the economies having hyperinflation, such as Angola, where inflation rates exceed 100 percent in 2003. Higher inflation tend to go hand in hand with higher interest rate (Heather 2004, 325) Since money lose their value over time, such a high interest rate encourages people to keep less cash in their wallet, instead put money into their saving accounts at banks, where its loss in value is compensated by interest. Since people tend to keep less cash, more frequent trips to the banks are required. (Mankiw 2011, 657.)

Therefore, the cost of holding less money in hand is called the “shoe leather cost”, since your shoes will wear away more quickly by a number of visits to the bank. Of course it is described figuratively, the real impact remains practically on the costs of time and convenience of the trips to the banks. (Mankiw 2011, 657.) There is also a waste in transaction costs if people visit the banks various times for just a small amount of cash rather than fewer times for more (Heather 2004, 325)

The shoe leather cost may seem insignificant in developed countries which have moderate inflation rate. In fact, in countries which are facing with high inflation rate, especially in developing countries such as Vietnam, where people used to pay by cash rather than credit card, this cost is fairly magnified.

‘Menu’ cost

Menu cost is a term derived from the expense of a restaurant owner on modifying the prices in his menu. Practically, it involves firms ‘expenditures of changing their product prices. Menu costs comprise cost of deciding new prices, cost of printing new prices and related catalogs and brochures, cost of sending new price lists to customers, cost of announcing new prices, and even cost of processing complains of customers over price changes. Inflation increases the frequency of changes in prices of goods and services thus increase the menu costs that firms must spend. The higher the rate of inflation the more frequently the prices need to be adjusted. (Mankiw 2011, 658.)

The problem becomes even more considerable since it involves in the reduction of essential information. When prices stabilize for a long time, firms usually keep the information of their product prices in the advertisements. However, this information tends to be concealed during inflationary times. (Heather 2004, 324-325.)

Misallocation and waste of resources

The differences in the quality and prices are usually a determinant of the purchase of any goods and services. Consumers compare prices of commodities to make their purchasing decisions. Similarly, manufacturers rely on the variation of prices

to allocate their resources in production. Because of inflation, relative prices increase abnormally, confusing buyers and distorting their decisions to allocate resources. (Mankiw 2011.) For instance, a baker usually decides the number of strawberry cakes and apple cakes made every day by the prices of strawberries and apples. Inflation may increase the prices of the fruits and confuse him in calculating the number needed for each kind of cake.

The labor force is also considered as a kind of scarce resource. It is possible that employees may bargain for higher wages due to high inflation, which could lead to a strike. The higher the inflation rate, the more possible the chance for a strike happening. This causes a waste of labor resource since employees do not work during the strike. Figure 8 demonstrates that a positive correlation between waste of lost working days and inflation rates exists in most of developed economies. (Heather 2004, 321-322.)

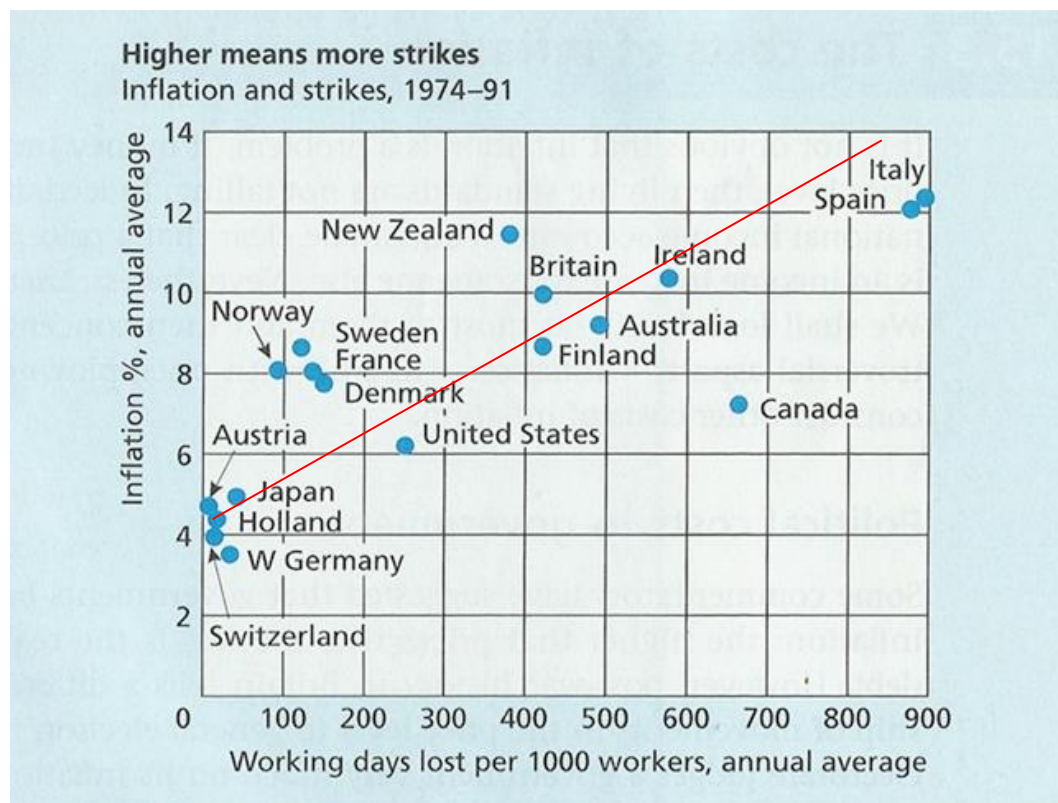


FIGURE 8. Correlation between strikes and inflation rate (Heather 2004, 324).

2.6 Controlling inflation

Controlling inflation may be one of the challenges of governments in all countries. A variety of methods have been used to control inflation.

2.6.1 Monetary policy

One of the most favorite instruments of economists to control inflation is monetary policy. Monetary policy affects the aggregate demand and adjusts the money supply by increasing the rate of interest (Sloman 2007). The economy would be expected to respond to the policy in the following ways:

- A rise in interest rate limits the amount of money circulating in the market. It is expected that both companies and households would be discouraged to borrow from the bank and instead, increase the numbers in their saving accounts. The more money they save, the less money they spend on commodities, thereby demand for goods and services decreases.
- A higher nominal interest rate also means a higher payment for mortgage interest. An increase in the mortgage costs would force households to reduce their spending to compensate for the lesser income, as a result a fall in aggregate demand. Moreover, a high mortgage interest may also decrease the demand for houses.
- With a possible increase in the debit, many potential business projects may become unprofitable. The suspension of these investments will decrease the aggregate demand. (Controlling inflation 2010.)

However, the policies may make companies, which lack of capital and ability to pay loans with high interest, face more difficulties and go bankrupt. Decrease in the number of manufacturers leads to a shortage of production, as a result an increase in commodity prices. This issue will be discussed more in chapter V. (Phan tich va danh gia chi so gia tieu dung cua Viet Nam giai doan 2008 - 6 thang dau nam 2010 2010.)

2.6.2 Fiscal policy

There are several following types of fiscal policies:

- Reducing the government's expenditures
- Reducing the public loans
- Increasing direct taxes, leading to a fall in nominal incomes, as a result lesser demand for goods and services.

The main idea of fiscal policy is the prevention of circular income flow in the economy. This tends to be effective to demand-pull inflation, at the same time impulses unemployment and delays the economic growth. (Controlling inflation 2010.)

2.6.3 Fixed exchange rate

A fluctuation exchange rate may be both direct and indirect disadvantages for the efforts of controlling inflation. Suppose that the domestic currency depreciates, on other words loses its value against other currencies, then the imported goods such as oil and electronics immediately become more expensive. An increase in the prices of imported goods and services will increase the inflationary pressure, as a direct affect. Moreover, the depreciation of domestic currency also makes domestic commodities become cheaper than those of other countries, encouraging the export of goods and services. Such an increase in demand for domestic goods and services contributes to an increase in inflation rate. (Monetary policy and inflation 2012.)

Therefore, fixed exchange rate or pegging value of domestic currency to a large, low inflation country is one of the strategies to reduce inflation. This strategy was observed to be used successfully in the history. For example, the inflation rate of the UK was reduced from 10 to 3 percent, after the country pegged its currency to the German mark in 1990. (Mishkin 1997.)

2.6.4 Income policy

Incomes policies loosen the demand pressure by setting limits to wages growth rate. Theoretically, this action may have effect on cost-push inflation. However, all previous attempts to control inflation by income policies have been observed to be a failure. (Begg, et al. 2000.)

3 INFLATION IN VIETNAM

From the first months of 2011, inflation, together with exchange rate management, trade deficit and budget deficit, have become the most important issues related to macroeconomic stability in Vietnam. Looking at the Vietnamese economic reform process over two previous decades, inflation, especially decisive factors of inflation and inflation volatility, are the most popular topics on the news, since inflation has always been one of the persistent problems that cause the most painful damage to Vietnam's economy. Vietnam experienced a long time of hyperinflation in the 1980s and early of the 1990s when the first economic changes emerged. Except for the period from 2000 to 2003 when the inflation rate was below 5 percent, Vietnamese inflation rate was usually higher, last longer and fluctuate stronger than those of neighboring countries. It is critical to understand the causes and consequences of inflation in Vietnam before assessing impacts of inflation on businesses. (Nguyen T.T.H & Nguyen, D.T 2011.)

3.1 Overview of Vietnam's economy

2011 was probably not an easy year for Vietnam's economy. The quandary was reflected in various indicators. The economic growth rate was 5.8 percent, lower than the proposed target of 7.5 percent. The inflation rate was even worse when it reached 18.7 percent, of which expectation was 7 percent, although the government has introduced various methods to control the currency and reduce public spending to curb inflation. (Nguyen, H. 2011.)

High inflation pushed up interest rate, encouraging people's saving and preventing companies from approaching the capital. People's consumption fell to very low level, significantly raising inventories of products and placing companies in difficult circumstances. It was estimated that 48,000 companies had gone bankrupt. (Nguyen, H. 2011.)

The real estate market has been frozen due to credit-tightening policies and unstable investor sentiment. The stock exchange shared the same situation when VN-Index (Vietnamese stock market price index) has continuously declined from the beginning of the year. (Nguyen, H. 2011.) The stock market, which was an

important capital source of firms, together with the real estate market became the final options for investors when deciding the channel to spend their idle money on.

On the contrary, the gold market became very crowded since the gold price continuously set new records. Because of the speculation, the price of a gold piece (37.5 grams) was observed to be approximately 240 U.S dollars more expensive than that of the world at some times. (Nguyen, H. 2011.)

The level of long-term debt confidence of the country's currency was degraded by Standards& Poors, from BB to negative BB. The level of Vietnam's credit rating was also considered to be potentially negative. (Viet 2012.)

However, according to a recent report by HSBC, Vietnam's economic growth rate was still impressive in a context of the global economic downturn. Because of strong exports and emergent domestic demand, the growth rate in the 4th quarter of 2011 increased by 6.1 percent over the corresponding period of 2010. The government's efforts to tighten fiscal and monetary policies achieved several positive records, the budget deficit dropped from 5.7 to 4.9 percent of the GDP over a year. Expected to have an average GDP per capita of \$4,335 in 2050, Vietnam is considered as one of 26 fast growing economies of the world. (BTA 2012.) Table 3 lists some necessary information of the country.

TABLE 3. Vital stats of Vietnam (Overheated economy 2008, CIA Factbook 2012).

| | |
|-----------------------------|--|
| Population | 91.52 million (2012) |
| GDP | \$299.2 billion (2011) |
| Exchange rate | 1\$ U.S = 20,833 VND (10 April 2012) |
| Physical size | Slightly larger than New Mexico |
| Median age | 26.9 years |
| Official/ National language | Vietnamese. English becoming more common |
| Labor force | 46.5 million (2011) |
| Literacy rate | 90.3% |
| Religious | 80.8% not religious, 9.3% Buddhist |
| Ethnicity | 86.2% Vietnamese, 1.9% Tay |
| Legal system | Based on communist legal theory and French civil law |

3.2 Vietnamse inflationary challenges

From the early months of 2011, controlling inflation has remained the top priority of economic policies in Vietnam. High inflation is an inevitable status for an economy with such a rapid growth rate as Vietnam. Fighting against inflation, Vietnamese economy detects two problems: structural problem and macroeconomic problem. Structurally, the economy is facing a serious problem in resource utilization. Using resources inefficiently leads to waste of capital, human and natural resources. A high ICOR of 5.2, shows that the economy has the least efficient investment and the lowest competitiveness in the region. One of its consequences is the worsened trade deficit, which climbed to 14.4 billion USD just in the first five months of 2008. Moreover, the budget deficit is maintained at 5 percent for many years, as a result the inflation rate increases constantly. However, solving the structural problem requires a long-term process, along with very high political determination. (Nguyen T.B.L 2011.)

In macroeconomic operation, problems are being encountered in fiscal policy and monetary policy. If the objective of fiscal policy is to maintain the budget deficit at 5 percent of the GDP, continued in the long run, goals of controlling inflation and stabilizing macro economy would be hardly achieved. Budget balance target should be directed from now. The anti-inflation efforts must firstly be expressed by a commitment from the government, specified by the budget-saving actions, such as streamlining the bureaucracy, saving public expenditures and reducing public investment. All of these solutions will help to utilize the national resources more efficiently and encourage domestic and foreign investments, even in areas requiring large capital, such as infrastructure construction. A balanced budget will have positive effects on two aspects: reducing the inflation rate and increasing the effectiveness of utilization of resources. (Nguyen T.B.L 2011.)

Regarding monetary policy, government is indecisive in solving problems of interest rate and exchange rate. This confusion causes difficulties for the banking system and businesses. What matters more is that it undermines the confidence and sentiment that domestic and foreign investors had previously. A year ago, optimistic expectations motivated investments and the growth in various markets, such as labor markets, commodity markets, real estate markets and the stock markets. Over optimistic sentiment may cause the bubble growth in some markets, however, a positive attitude is always necessary to maintain not only the economic growth but also the economic stability. (Nguyen T.B.L 2011.)

3.3 History of inflation in Vietnam

It is always useful to look at the historical data of a phenomenon in order to understand its nature and predict its trend in the future. An overall outlook of Vietnam's inflation by the time will be presented in this part.

Firstly, a little background knowledge of the economic history is necessary. After gaining its independence in 1975, Vietnam maintained a centralized and closed economy, along with a subsidy mechanism, in which the government collected and distributed all products in the market. However, prices were still unstable despite such a strict control on commodities and wages. A so-called parallel

market, a free trade market which was illegal, coexisted with the country's planned market. (Le T.T.H. 2011.)

Based on the fluctuation of inflation and the economic transformation, the history of inflation can be divided into four periods: from 1980 to 1984, from 1985 to 1989, from 1990 to 2007 and from 2007 until present. Figure 9 demonstrates the variation of inflation over those periods.

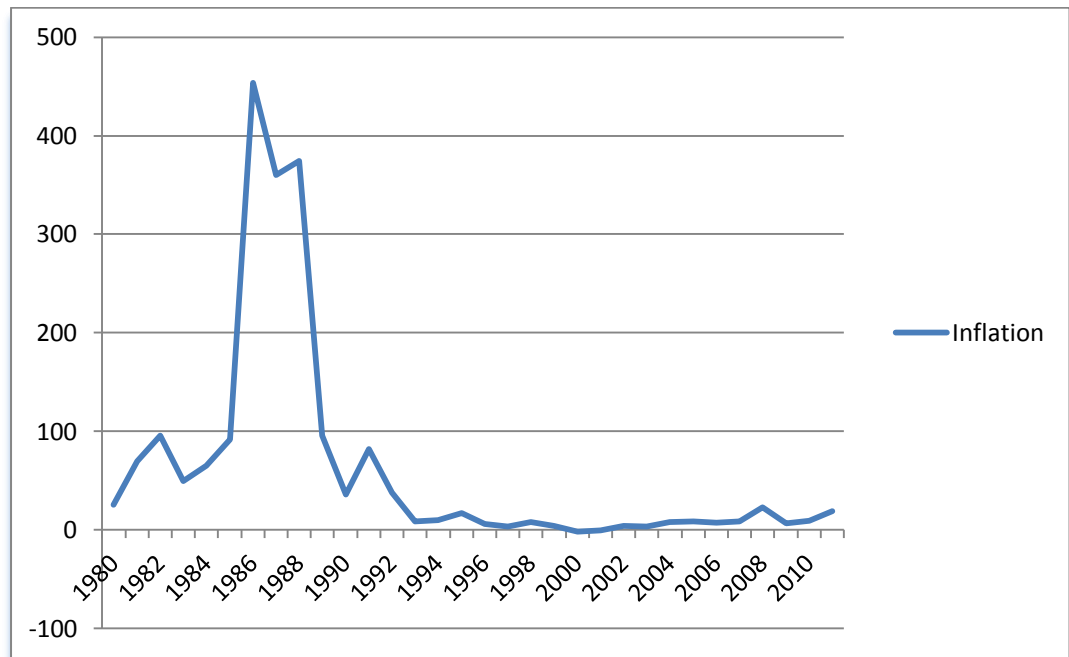


FIGURE 9. Annual inflation rate from 1980 to 2011 (International Monetary Fund 2011).

3.3.1 Period from 1980 to 1984

This period of time was marked by premises of a reform in Vietnam's economy. The average inflation rate of the whole period was 164.9 percent. The economy faced an excess aggregate demand caused by necessities for food, commodities and industrial materials. In order to encourage supply, the government attempted to co-integrate the planned market with the parallel market. Farmers could sell their products to the state agents at a negotiated price, instead of a fixed price as in the previous time. At the end, inflation rate was pushed up to 200 percent in 1982

as a result of such an incomplete reform, although the total output generally increased. To control inflation, people were forced to save their unspent money, as a type of tightened monetary policy. However, despite many efforts to restrict money supply, inflation was hardly influenced. (Bui 2008.)

Despite an increase in the total output encouraged by the incomplete reform, inflation was still pushed up by the shortage of goods. Responding to high inflation, the government increased retail prices by 10 to 15 times and wholesale prices by 7 to 10 times. More money was created to compensate for budget expenditures. (Luoc 1992.) Moreover, the free market seemed to be a solution for the people to avoid the forced-saving policy. Therefore, instead of an expected money restriction, money circulated even more quickly. (Hung 1999.) However, causes of inflation were not studied thoroughly and measures to control inflation were not used appropriately. Consequently, regardless of various efforts, the government could not achieve desired results. (Dam 1995.)

3.3.2 Period from 1985 to 1989

During this period the average inflation rate was 263 percent. The so-called “General Adjustment of Price, Wage and Money” was implemented by the government, in an attempt to control inflation. There were several main points in this adjustment:

- Planned prices were adjusted according to market prices to accelerate the production, especially agricultural production.
- Currency was adjusted to eliminate the excess amount of cash on the market.
- Loans for state-owned enterprises were increased to cover the aftermath of the currency reform. (Hung 1999.)

However, despite expectations put on new regulations, they showed no effectiveness but even worsened inflation situation. Evidentially, inflation jumped to its peak of 453.5 % only one year after the implementation. One of the explanations for such inconsistency is the shortage of cash and fund for state-owned enterprises resulting from the currency adjustment. The soft budget could

not cover the government spending, not to mention expenditures of inefficient state-owned enterprises. The government thus had to borrow from the Central Bank to compensate for this increasing budget deficit. Demand for credit forced the banking system to print more money. At last, the budget deficit more or less intensified the inflation problem. (Bui 2008.)

Apart from the budget deficit, hyperinflation was also caused by other consequences of the adjustment. The expectation of future high inflation increases the hoarding and speculation in the market, which lead to the decline of aggregate supply. In addition, since the rationing system was removed, there was an increase in nominal households' income, which leads to accelerate demand for goods. All of these factors contributed to an increase in aggregate demand, pushing up inflation to its peak. (Bui 2008.)

However, there was a bright light at the end of the tunnel after all confusion in the economy. The fiscal crisis and hyperinflation became the precondition for a new phase of Vietnam's economy, a renovation called "Doi moi". The renovation included various macro policies, of which the objectives were stabilizing the economy, improving economic growth and encouraging exports. The most successful achievement of this innovation, however, was the decline of the inflation rate to 37.7 percent in 1989, after the excessive demand pressure was relieved. This was considered as a turning point of the country's economy from a centrally planned economy to a more flexible economy. Nevertheless, the threat of supply bottleneck and excessive demand in such a planned economy should not be ignored. (Bui 2008.)

3.3.3 Period from 1990 to 2007

The inflationary pressure in this period was considered to be less serious, after the success of the innovation in the previous time. The inflation rate decreased significantly from hundreds to two-digit indicators. Though the rate was still high around 51 percent in the first three years of the 1990s due to the inflationary inertia from the previous period, inflation was kept below 10 percent after 1993, except only for 1995. (Bui 2008.)

Another highlight was that Vietnamese inflation rate maintained relatively stable during the Asian financial crisis in 1997, in which many Asian countries faced an escalation in inflationary pressure (Tran & Fujita 2007). The efficient government's policies and the nonconvertible domestic currency were reasons for such protection from the crisis. However, the GDP fell sharply during the crisis, from 9.8 percent in 1995 to 4.7 percent in 1999. In response to the risk of a recession, the government again expanded the fiscal policy and relieved monetary policy. (Le T.T.H. 2011.)

It should also be noticed that although the inflation was managed practically to be at slow rates, the GDP maintained relatively high around 8 percent annually. The monetary theory, starting that the economic growth rate and inflation rate share positive correlation, seemed to be contrary to the circumstance of this period. Figure 10 presents the annual inflation rates and growth rates from 1990 to 2007. (Bui 2008.)

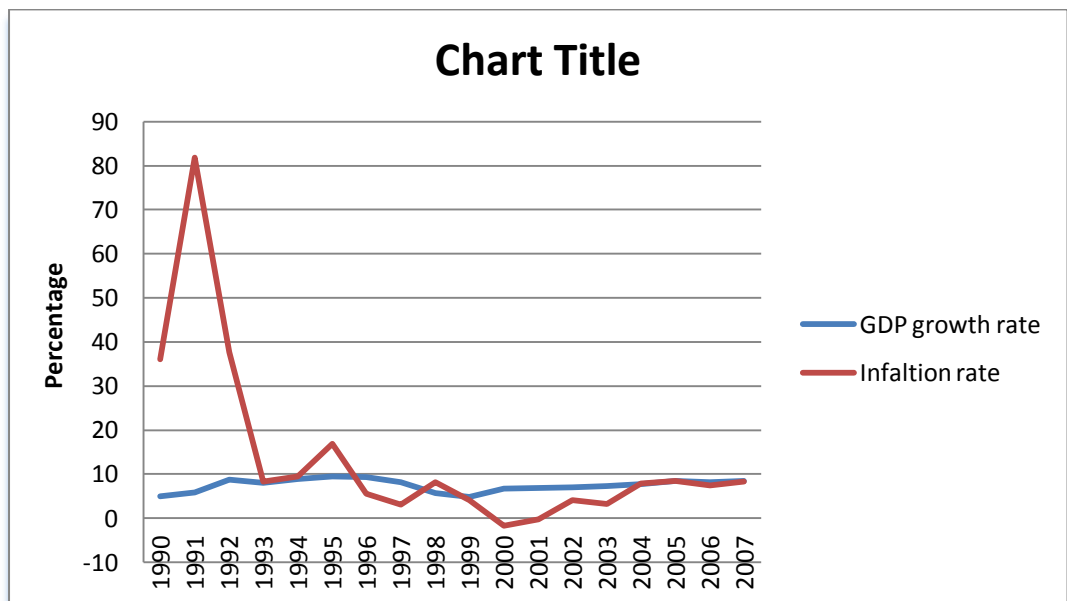


FIGURE 10. Inflation rates and GDP growth rates from 1990 to 2007 (International Monetary Fund 2012).

After 1992, inflation was no longer affected by the budget deficit, which had been equal to 6 percent of the GDP (Hung 1999). The domestic economy was observed to be more open to the world. The balance of payment and the deficit issue were controlled because of the liberalization in trade and an increase in capital inflow. Moreover, more financial sources which were not pressured by inflation were applied, such as the government bond. The value of government bond increased from 0.1% in 1988 to 1.2% in 1995. All of those policies helped the country to stabilize the inflation. (Bui 2008.)

The lack of aggregate supply was resolved by an increase in the number of private companies. Moreover, the expanding trade to other countries also contributes to the increase in domestic production capacity and supply of goods and services from abroad. Although the capital outflow was still controlled, the liberty in financial market was considered as a major change from the previous period. The domestic currency was no longer pegged to the U.S dollar and the floating exchange rate was finally applied. (Bui 2008.)

3.3.4 Period from 2007 until present

After officially joining WTO in 2007, international business organizations considered Vietnam as a country with high development potential. Foreign capital investment increased rapidly. It rose to \$8 billion in 2007, \$11.7 billion in 2008, accounting for one third of total investment in the economy. Foreign portfolio investment (FPI) also increased quickly, it is estimated that over \$7 billion of indirect investment flowed into Vietnam at that time. Moreover, every year the country received approximately \$2 billion of ODA, this amount was \$2 billion in 2007 and \$2.2 billion in 2008. Overseas remittance sent to Vietnam was from 5 to 7 U.S. dollar annually. Although Vietnam has always had high trade deficit, it has been less than the amount of cash flowing into Vietnam, as a result the current account surplus still remains. Foreign currency reserve in commercial banks continuously increased. The increase was respectively \$4.6 billion in 2006, \$10.6 billion in 2007 and \$2.4 billion in 2008. The increase in foreign currency reserve meant a corresponding amount of domestic money was pumped into the economy, which was not disabled by the central bank by any measures. Money supply,

therefore, kept growing. Furthermore, the banking system also developed steadily in 2006 and 2007. The credit growth reached 50.8 percent in 2006 and 49.1 percent in 2007. (Nguyen, T.B.L. 2011.)

There are many reasons proposed to explain the strong return of inflation in the years 2007-2008. These reasons include the increase of minimum wage level, the rise of international commodity prices, lax and inflexible monetary policy and rigid and inflexible exchange rate management policy. Vietnam's openness to the world since the country joined the WTO in late 2006 led to inflows of indirect foreign investment into Vietnam, pushing stock prices and asset prices very high. To keep a stable exchange rate, the central bank had to inject a great amount of money into the economy contributed to worsening inflation. (Nguyen, T.T.H & Nguyen, D.T. 2011.)

The world economic crisis 2008-2009 has contributed to lower inflation in Vietnam since the end of 2009. Decreases in international prices together with the total demand reduction have helped Vietnam to reverse the ominous increasing trend of inflation in 2008. When the Government's stimulus package began to rise from the second quarter of 2009, money supply also began to increase and credit strength had similar signs. The commercial bank experienced shortages of cash and attempted to raise interest rates to attract deposits. Therefore, the competition of interest rates pushed them up. (Nguyen, T.T.H & Nguyen, D.T. 2011.)

Vietnam's economy in 2010 once again faced the volatility of inflation, associating with related uncertainties. The growth rate of the CPI reached two-digit numbers at the end of the year, much more than that in the same period of the previous year. It put the policymakers in a dilemma between steady economic growth and stabilizing inflation, the interest rate and the exchange rate. Except for 2009, when inflation was low largely due to a decline in aggregate demand and a decrease in input raw material prices originated from the global financial crisis, inflation in recent years has always been two-digit numbers, beyond the targets of the government. These continuously high inflation rates imply a certain shortcoming in defining objectives and operating monetary policies to achieve those objectives. The implementation of monetary policies seems to be lack of a

solid theoretical foundation, leading to negative and inefficient responses to the economy. (Pham 2011.)

3.4 Vietnamese CPI

In Vietnam, the CPI is calculated by the General Statistics Office (GSO). The CPI weights was determined in 2000 and used in 2001. These weights are decided based on the examinations of Vietnam Living Standard in 1997-1998 and the Household Economy in 1999. (General Statistic Office 2012.) It should be noted that the weight of group food - foodstuff accounts for 47.9 percent while that of group Culture-Sport-Entertainment accounts for only 3.8 percent. (Phan tich va danh gia chi so gia tieu dung cua Viet Nam giai doan 2008 - 6 thang dau nam 2010 2010.)

Vietnamese CPI basket comprises 11 main groups of goods and services. This basket is built by the GSO, based on the market studies in cities and provinces, the study on living standard of the households and the study on CPI weights in 2008. The basket is planned to use in the period from 2009 to 2014. Details of weights and changes of commodities in the CPI basket are presented in Figure 11 and Table 4.

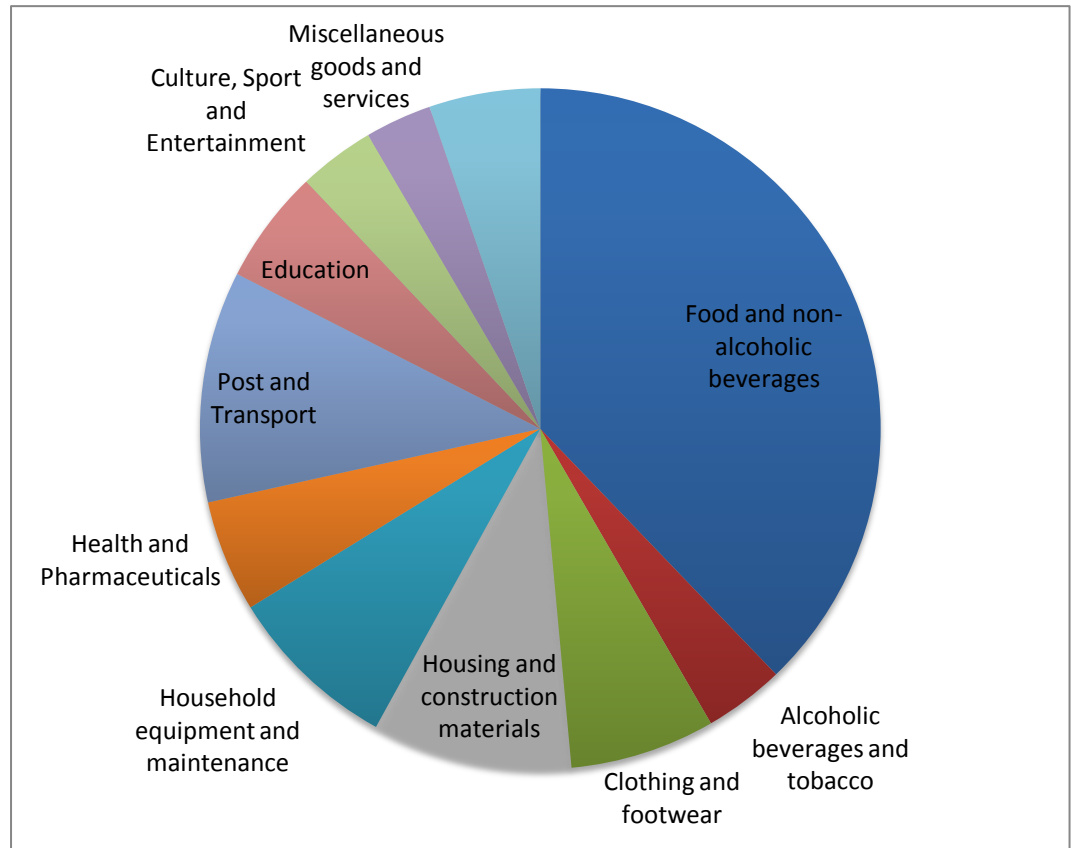


FIGURE 11. Weights of commodities in CPI basket. (Pham 2011).

Table 4 shows that the CPI has a tendency to increase in recent years. The CPI growth rate on average was 13.38% in the period 2008-2012, nearly doubled the rate in the period 2003-2007. Furthermore, the deviation of CPI also increased from 2.39% in the period 2003-2007 to 8.26% in the period 2008-2010. This indicates that the monthly CPI in recent years is not only higher but also more fluctuated than the CPI in previous years. Focusing on each group, it could be observed that the group of food and non-alcoholic beverages played a dominant role on the price variation. This group, of which the weight in the basket was approximately 40%, always increased and fluctuated more than other groups. The level of its growth and fluctuation was even higher in the period 2008-2010. On average the CPI of this group increased 18.85% with the deviation of up to 14.59%. Among the remaining groups, housing and construction materials, accounting for 1.10% by weight, and transport, accounting for 8.87% by weight,

are two groups that have elevated level of growth rates and fluctuation rates. (Pham 2011.)

TABLE 4. Vietnam's CPI and weights over period 2003-1010 (Pham 2011).

| | 2003-2007 | | | 2008-2010 | |
|--|-------------|---------|-----------|-----------|-----------|
| | Weights (%) | Average | Deviation | Average | Deviation |
| CPI | | | 2.39 | 13.08 | 8.26 |
| Food and non-alcoholic beverages | 39.93 | 9.22 | 4.59 | 18.85 | 14.59 |
| Alcoholic beverages and tobacco | 4.03 | 4.71 | 0.99 | 9.53 | 2.20 |
| Clothing and footwear | 7.28 | 4.52 | 1.48 | 8.72 | 2.30 |
| Housing and construction materials | 10.01 | 8.32 | 2.46 | 12.95 | 8.20 |
| Household equipment and maintenance | 8.65 | 4.04 | 1.86 | 7.67 | 2.73 |
| Health and Pharmaceuticals | 5.61 | 8.52 | 5.44 | 6.15 | 2.69 |
| Post and Transport | 11.6 | 4.19 | 4.00 | 7.29 | 9.47 |
| Education | 5.72 | 2.85 | 1.97 | 6.81 | 4.48 |
| Culture, Sport and Entertainment | 3.83 | 1.68 | 1.75 | 5.10 | 2.68 |
| Miscellaneous goods and services | 3.34 | 5.57 | 1.68 | 12.06 | 1.10 |

In addition to aggregate demand, the price fluctuation of a commodity group can also be caused by high seasonality, monopoly in supply chain or ineffective market management. Monitoring groups that have frequent movement in prices, authorities could implement reasonable and efficient policies on time to prevent hoarding and speculation. At the same time, supply and distribution channels of these goods and services also need to be improved in order to encourage investments of enterprises. (Pham 2011.)

3.4.1 Factors affecting Vietnamese CPI

In general, the CPI is affected by the following factors:

The exchange rates

Since the U.S. pumped more money into the economy to support its businesses after the recession, the U.S. Dollars has depreciated against other currencies, especially to the Yuan of China. On the other hand, Vietnamese businesses have to purchase USD at the price of the black market instead of the bank rate because of limited supply of USD. As the Black market price tends to increase in the end of the year, Vietnamese currency declined 2 times against the Chinese Yuan. Since Vietnam imports lot of consumer goods from China, the CPI is considerably affected by the exchange rates. (Pham 2011.)

Fuel and energy

Fuel and energy prices are found to have significant impacts on prices of goods and services and, therefore, the CPI. Since Vietnam is highly dependent on hydropower, the scarcity of electric power always happens in the dry season, pushing up the electric price. The escalation of the world oil price also affects the domestic gasoline price. Furthermore, a potential military action of the U.S. on Iran is predicted to make the CPI look even worse. (Pham 2011.)

Natural disasters

In recent years, many floods occurred in many provinces in the middle of the country and even in Ho Chi Minh City. This causes material damage, which delayed production and obstruct the traffic, increasing prices of many commodities. Moreover, foreign countries such as Indonesia, China, Philippines and Thailand were also affected severely by natural disasters, as a result supply for food and essential goods in the area decreases. Chinese merchants have been observed to seek for the supply of rice in Vietnam to satisfy their domestic shortage. (Pham 2011.)

Gold price fluctuation

The fluctuation of the gold price also has an indirect impact on the CPI through the exchange rate. The devaluation of U.S. dollar increases a trend to keep gold instead of the dollar. Demand for gold and the gap between international and domestic prices of gold encourage people to collect U.S. dollar for smuggling gold. Thus it contributes to the rise of U.S. dollar in the black market. (Pham 2011.)

3.5 Causes of Vietnam's inflation

High inflation has negative impacts on the people's living standard, on business activities, and on the expectation of domestic and foreign investors for the prospects of Vietnamese economy and the efficiency of macroeconomic policies. So what are the underlying causes of inflation in Vietnam recently? It is firstly observed that inflation in Vietnam in 2011 was the inevitable consequence of the internal instability in the economy over the years, especially in the period from 2007 to 2010, and the imbalance in the macro economy. (Nguyen, N.V. 2011.) It consists of the following reasons:

High but inefficient credit growth rate

The first cause of inflation is the government's policy to maintain a high-level growth rate at all cost. The development targets are unrealistically planned: the GDP growth rate of 7 to 7.5 percent per year in the next five years and 7 to 8 percent in the next ten years. Meanwhile, Vietnam experienced the highest inflation rate in the region in 2010, at 11.8 percent. The economic development should not be targeted at such high rates in a context of high inflation. However, to achieve these development goals, the government increased the public investment in state-owned enterprises, consequently raised the demand for credit. Therefore it could be argued that inflation in Vietnam is mostly due to demand-pull factors. (Nguyen, Q.K. 2011.)

In the period from 2007 to 2009, the credit growth rate was on average 25 to 30 percent, especially in 2009 when the government implemented the stimulus package worth nearly 8 billion U.S. dollars to deal with the global financial crisis,

of which the highlight is the loans subsidy worth 17,000 VND, approximately 1 billion U.S dollars at that time. This package alone drastically increased the money supply in the economy by 400,000 billion VND. Investment of the whole economy also maintain at more than 40% of the GDP in the period 2005-2009. Despite the credit growth and social investments at high levels compared to other countries, Vietnam's economic growth rate during this period was just on average 6 to 7 percent. (Nguyen, N.V. 2011.)

Spreading and inefficient public investments

According to statistics, Vietnam spends from 15 to 20 percent of its GDP on public investments each year, while that percentages of other countries in the region are just below 5 percent, such as 4.5 percent in China and 1.6 percent in Indonesia. A recent research of Vu Anh Tuan, from Vietnam Economic Institute, reveals that the scale of public investments has increased 3.2 times in the past ten years, which means on average 13.9 percent every year. However, the efficiency of those investment is still very poor, for example the loss of Vinashin and ALC II. (Nguyen, N.V. 2011.)

Vinashin or Vietnam Shipbuilding Industry Group, was established in 2005 with a capital of \$750 million from state bonds. In July 2010, Vietnam announced that Vinashin has piled up a debt of \$4.4 billion, having no solvency but a threat of bankruptcy. In August 2010, Ms. Pham Thanh Binh, the former president of Vinashin, and some other executives were arrested for violating administrative rules. In late 2010, Vinashin negotiated with creditors to defer the payment for \$60 million on the total debt of \$600 million. The ability of bankruptcy may take place. While the issue of Vinashin has not been resolved, as soon as the state claims to increase fuel and electric prices, the Financial Leasing Company ALC II announced a loss of 3,000 billion VND. This company has been losing money for many years, but only detected in 2007. (Nguyen, Q.K. 2011.)

According to Ms. To Trung Thanh at the seminar "Vietnam's economy: The issues raised in the medium and long term" held by the Economic Committee in collaboration with the Institute of Social Sciences, the ICOR in the public sector is

currently 7.8, higher than the average ratio of the whole economy which is 5.2. (Nguyen N. V. 2011.) The ICOR is the Incremental Capital Output Ratio, which evaluates the marginal amount of investment capital required for an entity to produce the next unit of manufacturing. The ratio is used primarily in accessing the efficiency of a country's production level. It is calculated by the equation:

$$\text{ICOR} = \frac{\text{Annual Investment}}{\text{Annual increase in GDP}}$$

For example, suppose that the ICOR of country A is 10. It means that the country needs to invest \$10 to generate \$1 of extra production. Moreover, if that ratio of the previous year was 12, this implies that the capital investment of country A has become more efficient. (Incremental Capital Output Ratio – ICOR 2012.)

Budget deficit and trade deficit in the long run

During the period from 2005 to 2010, the government's budget deficit increased continuously from 7,100 billion VND to 115,900 billion in 2009 and 69,000 billion in 2010. The trade deficit also increased sharply from \$4.3 to \$12.2 billion in 2009 and was estimated approximately \$12.4 billion in 2010. It was respectively equivalent to 8.9 and 5.9 percent of the whole GDP in 2009 and 2010. Most recently, the Ministry of Trade and Industry declared that the trade deficit in the first five months of 2011 grew to \$6.4 billion. If this condition continues, it will be an obstacle for planning the exchange rate implementation, and for the sustainable growth of the economy. (Nguyen, Q.K. 2011.)

These figures expose that state expenditures are higher than incomes and demands for import are higher than exporting values. These two deficits pressurize the prices by both demand-pull and cost-push factors. However in case of budget deficit, the government's spending increases GDP in short-term, but the trade deficit otherwise reduces GDP. (Nguyen, N.V. 2011; Nguyen, Q.K. 2011.)

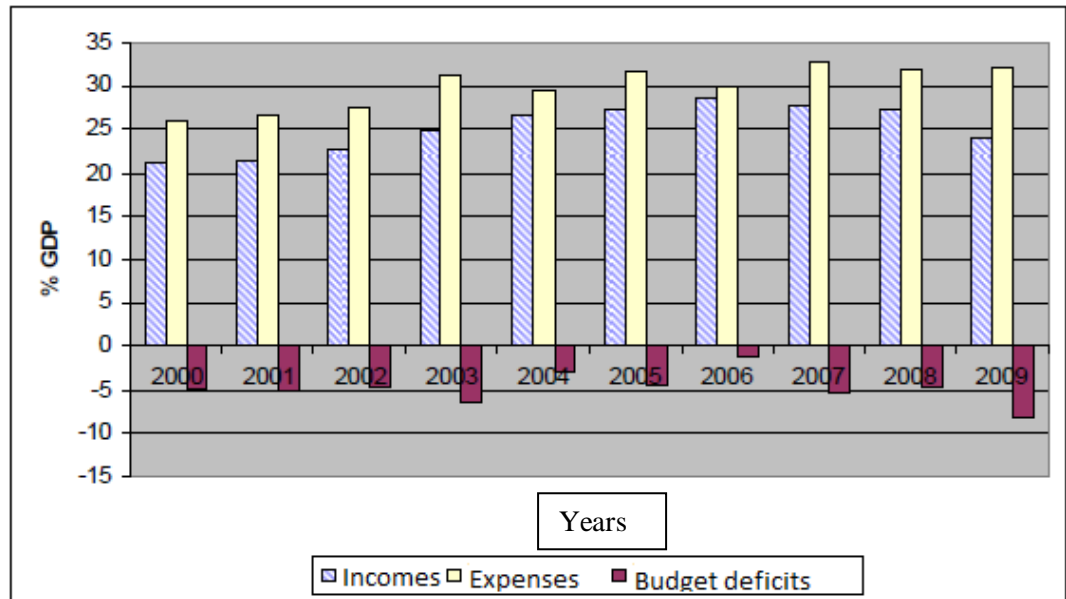


FIGURE 12. Budget incomes, budget expenses and budget deficit, 2000-2009 (Nguyen, T.T.H & Nguyen, D.T. 2011).

To ensure such a sustainable growth of the economy, the government has to resolve the budget deficit, and in parallel with the credit, credit flows need to be driven by improving the monitoring system and the credit management.

Moreover, the trade deficit also needs to be reduced by stimulating domestic demand, while expanding exports. (Nguyen, N.V. 2011.)

Escalation of prices

The increase in prices is one of the causes of inflation. According to Resolution 11, the domestic fuel price is allowed to increase to correspond with the international price and the electricity price in the market mechanism. The rise of electricity and fuel prices directly affects many aspects of the economy, leading to higher inflation. This is a cost-push phenomenon. The increase in fuel price is inevitable because the world's oil price is escalating and Vietnam's import of fuel is much more than its export of crude oil. Because of the budget deficit and the economic uncertainty, the state has constantly increased the fuel price three times last year. (Nguyen, Q.K. 2011.)

The electricity had also been controlled by the government for a long time, making the production cost higher than the market price. The average electricity price was 5.2 U.S. cents /kWh until 2010, which was approximately half of the prices of other countries in the region. Meanwhile, the cost to produce 1kWh was on average 7 to 12 U.S. cents. Since the cancellation of the subsidy was necessary, the state's allowance to increase the fuel price by 15.3% began to take effect in March 2011. Although the price was pressurized by the budget deficits and losses of the state-owned Vietnam Electricity Corporation, this was an improper decision as the country is dealing with high inflation. Indeed, the leaders of the Ministry of Technology and Commerce revealed that the main purpose of the increase in electricity prices is to minimize the losses of the corporation. (Nguyen, Q.K. 2011.)

3.6 Government's policies to control inflation

The Government agreed to adjust the anti-inflation target and economic growth in 2008, implemented five solutions that focus on the direction and coordination in order to curb inflation, stabilize macro-economy, ensure social security and maintain the growth potential of the economy. (Nguyen, T.B.L. 2011)

Operating monetary policy

Government continued to control monetary policy, credit market principles in a coherent way, actively and flexibly, in order to ensure goals against inflation, macroeconomic stability, and the mobilization of resources capital for economic development. The press reported that the State Bank implemented the contractionary monetary policy, and banks raised interest rates on deposits, tightened lending with the common objective of curbed inflation and economic stabilization. Nevertheless, the costs for implementing these policies were not cheap. (Nguyen, T.B.L. 2011.)

In January 2008, the VND capital situation of the commercial banks has been concerned; since the beginning of the year, interbank interest rate was already up to 25%. Many banks had continuously increased interest rate, where the interest rate adjustment represents 2-3 times in a month. Thus, the decision to withdraw

from circulation by bills would precipitate the process of increasing interest rates. (Nguyen, T.B.L. 2011.)

With adversity in attracting foreign indirect investment, the stock market conditions of 2008 was not expedient, and continuous contractionary monetary regulations would incite a sense for investors as the central bank is "sacrificing market stock" to fight inflation. Vietnam Dong will continue to raise its interest rate for the VND, lifting the interest rate in U.S. dollars, which is depreciated resulting in downward pressure on the dollar against the dong. (Nguyen, T.B.L. 2011.)

Reducing the budget deficit

Increased revenues were associated with tightened expenses, improved efficiency of state budget funds and limited budget deficit. The Prime Minister asked the political system to attain a saving of 10% on regular spending cuts, which was not necessary implementing measures to save gas, and oil and reduce the review items, and not very urgent work; also he called for people to practice thrift consumers. (Nguyen, T.B.L. 2011.)

Reducing the budget deficit in the investment management of demanded reduction policies through the tightening of public spending was justifiable and necessary but insufficient. Efforts to reduce public spending by the Government are only effective if the government ensures these investments remains effective. (Nguyen, T.B.L. 2011.)

To rarefy the budget deficit is parallel to reduce expenditure. Government also needs to improve the revenue budget, avoid overreliance budget, more than 40%, on unsustainable revenues from oil and the current import tax: tax reform, especially the personal income tax; currently 2% of the total budget of Vietnam, while this figure in the modern economy are greater than 20%. (Nguyen, T.B.L. 2011)

Balancing out supply and demand in the economy

The Prime Minister asked the assigned ministries to ensure the balance between supply and demand of essential goods and service in production such as gasoline,

oil, rice, medicines, cement, iron, steel, and fertilizer which are associated with strict control of prices. It assured that there would be no increased price of coal for electricity, electricity and rising gasoline and it was expected to continue covering losses for these items in order to stabilize prices. (Nguyen, T.B.L. 2011.)

The Prime Minister intended to continue promoting business to sustain growth. Striving for the resolution for capital of businesses, especially capital, the Prime Minister also regulated ministries to be more active in solving difficulties. In particular, Ministers are expected to conduct their responsibility on the operation of corporations with proper management. (Nguyen, T.B.L. 2011.)

Stabilizing market prices

The Prime Minister requested the ministries, local governments, industry associations of measures to strengthen market management and price, and domestic trade, calling for the enterprise's responsibility for land water profiteer and increased commodity prices. Government has identified prioritized rule later to curb inflation, stabilize macro-economy, create momentum for the following years and ensure social security. In addition, in order to stabilize the prices of essential commodities, the Prime Minister has adjusted, with petroleum products, in any time, any place to ensure that the overall supply is sufficient. In case of any unexpected developments, government will determine reasonable measures to deal with. This shows that the government always prioritizes fighting inflation is the top target, especially for fuel, essential commodities in the economy. (Nguyen, T.B.L. 2011.)

In regard to coal, the Ministry of Finance verified plans and strict schedule in future coal prices, which set retail prices of coal for each major consumers. Keeping prices stable from now until the end of the price of coal sold to electricity is a must. However, coal sold to cement production, fertilizer production, and paper production are calculated by the Finance Ministry in building route to meet current conditions' demands, based on curb and anti-consumer price inflation solution regarded as the prioritized objective. (Nguyen, T.B.L. 2011.)

Cement Association regulations consent to set up a consistent price in the market. Before the recent proposal of the Vietnam Steel Association to increase the price

of construction steel and the steel prices on world markets increases, the government's opinion is not in favor of increasing steel prices. Currently, the fertilizer business is continuing to implement several measures to stabilize the fertilizer market. (Nguyen, T.B.L. 2011.)

To boost exports to reduce trade deficit

Determined to boost exports to reduce trade deficit, the Prime Minister fixed on promoting the export of goods with competitive advantage as fisheries, textiles and leather products. The government will conduct drastically deficit control measures, and Ministry of Trade and Industry ascertains deficit limit non-essential items such as automobile, and motorcycle parts, striving to control the trade deficit in 2008 equal to last year and balance trade. (Nguyen, T.B.L. 2011.)

With the deficit of 11 billion in the first four months, accounting for 60% of total exports, the Prime Minister requested to boost export to avoid losing the balance of payments. In addition, the Prime Minister also directed the Ministry of Trade and Industry, Ministry of Agriculture and Rural Development management to focus on the tight control in prices of gasoline, oil, and food. When The Ministry of Trade and Industry strictly controlled price situation in the areas, the Ministry of Public Security coordinated with other agencies to strictly handle cases of speculation, profiteering revaluation (Nguyen, T.B.L. 2011.)

Exchange rate policies and measures to attract USD in order to reduce inflation

The interest rate tools and open-market operations were not successful and became more unpredictable. Inflation should have a new treatment in accordance with the current economic situation. When interest rates drop, raw materials and fuel would be imported at cheaper prices, leading to the domestic production cost reduction and thus fall in domestic goods prices. Additionally, reduced export and import growth will also increase the total supply for the domestic economy. All impacts of these factors together can reduce inflation. Since these measures are appropriate, the government receives benefits from reducing inflation and production costs, fall in the amount of dollars, psychological rehabilitation of the people and sufficiency in bank's liquidity while paying a damage to the balance of

trade deficit or reduce the growth rate. Impacts thus are beneficial. (Nguyen, T.B.L. 2011.)

3.7 Inflation in Vietnam in comparison to that of the world

After the renovation in 1989, many achievements were observed immediately in the economy of Vietnam, but not the controlling of inflation. Until 1993, inflation remained relative high because of the inflationary inertia from the previous period. Although 1990 was considered as the milestone of the renovation, 1993 was actually turning point of the inflationary happenings. The inertia of the hyperinflation in the past just became weaker after that. (Bui 2008.)

However, inflation in Vietnam revealed a sign of the volatility. It was found that after 1993, inflation in Vietnam shared a positive correlation with inflation in ASEAN-5 and other Asian countries rather than that of the world. Figure 13 presents this tendency.

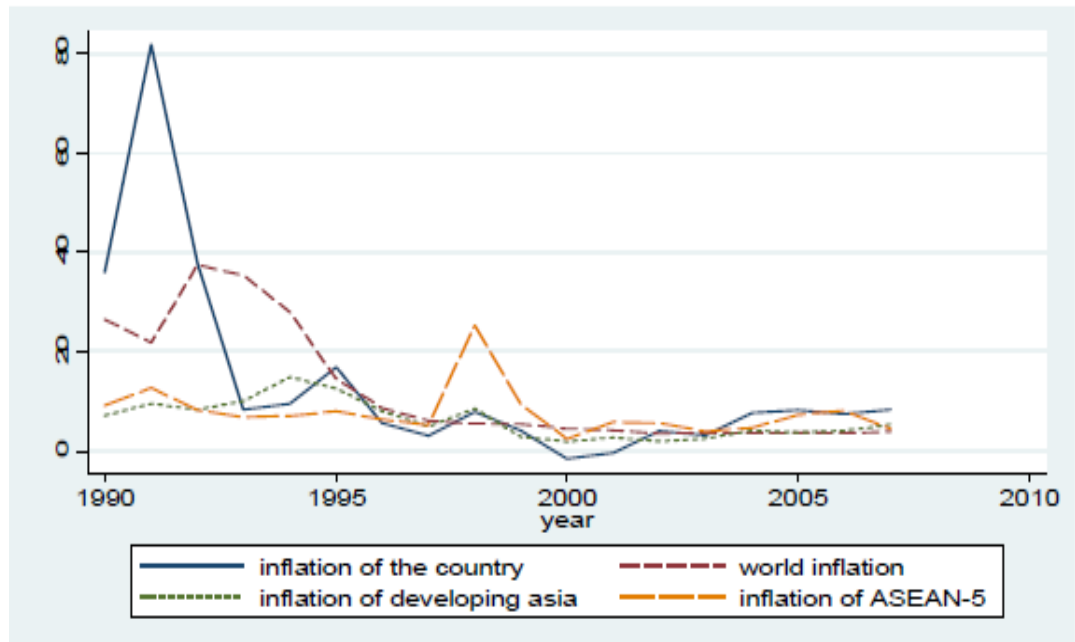


FIGURE 13. Vietnamese inflation in comparison to that of ASEAN-5, developing Asia and the world, 1990-2007 (Bui 2008).

Figures 14, 15 and 16 evidently present a positive correlation between inflation in Vietnam and in other Asian countries, such as China, Singapore, Korea, Malaysia and Indonesia. However, inflation trend in Vietnam was not similar to those in Japan, Germany, Russia and the U.S. Consequently, it was proposed that inflation in Vietnam may not necessarily be manipulated by the country's trade relationships. However, it could be argued that inflation in Asian countries showed connection because those countries respond similarly to external factors. This could also be a critical difference between emerging and developed countries. (Bui 2008.)

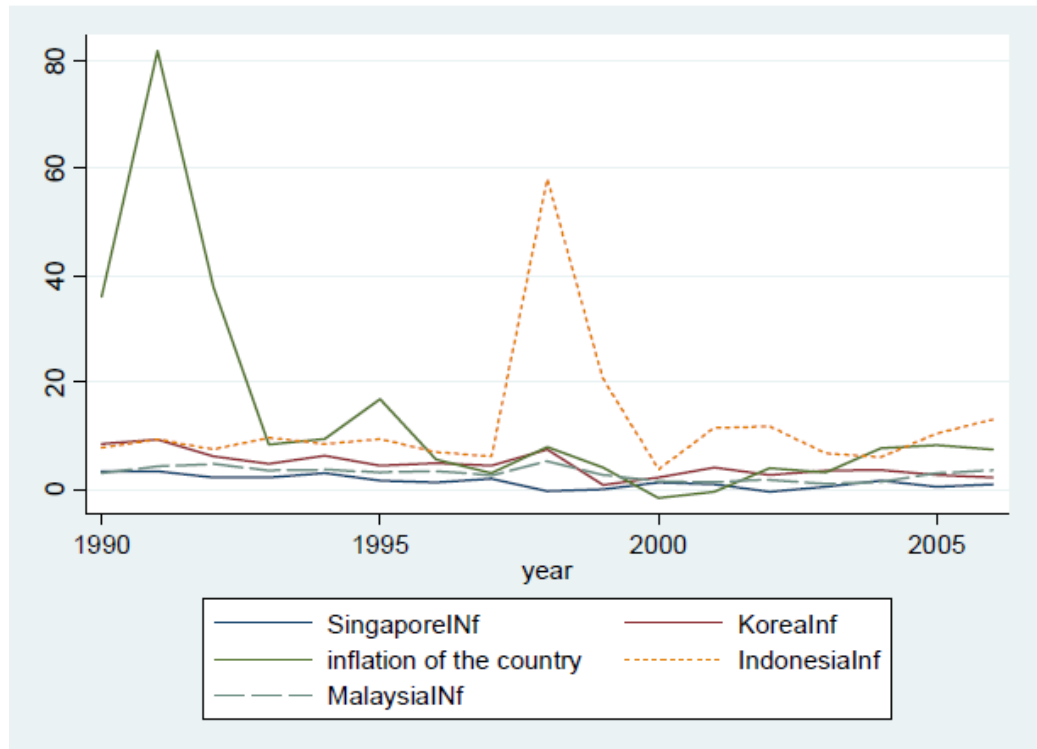


FIGURE 14. Inflation in Vietnam, Singapore, Korea, Indonesia and Malaysia, 1990-2007 (Bui 2008).

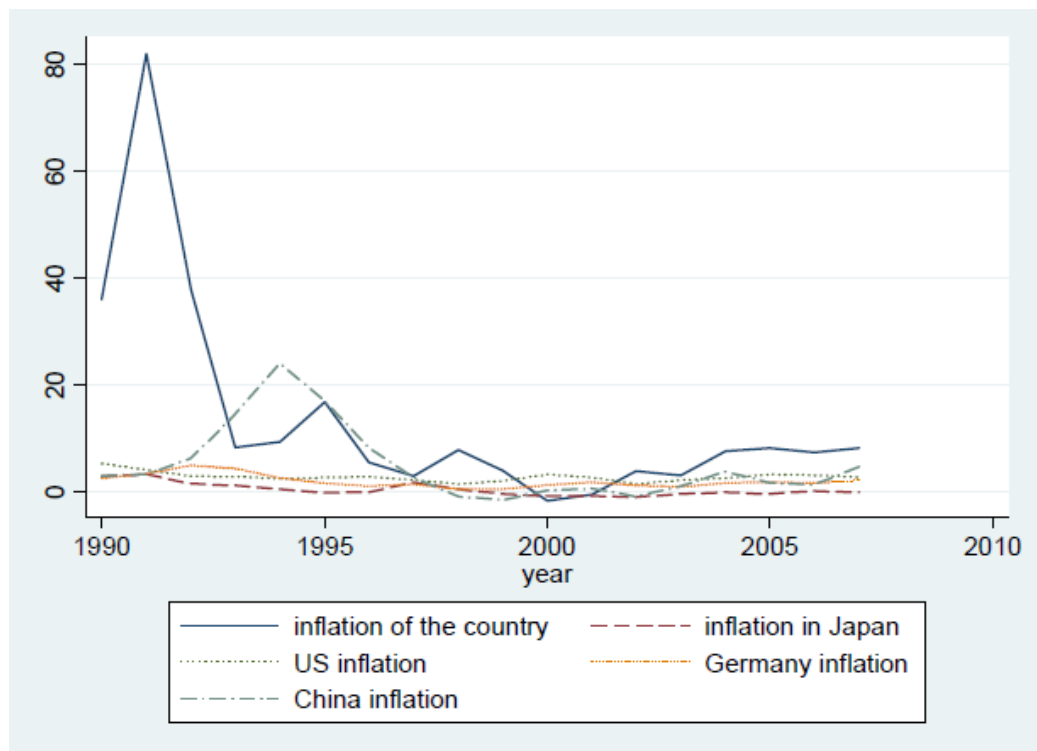


FIGURE 15. Inflation in Vietnam, Japan, US, Germany and China, 1990-2007 (Bui 2008).

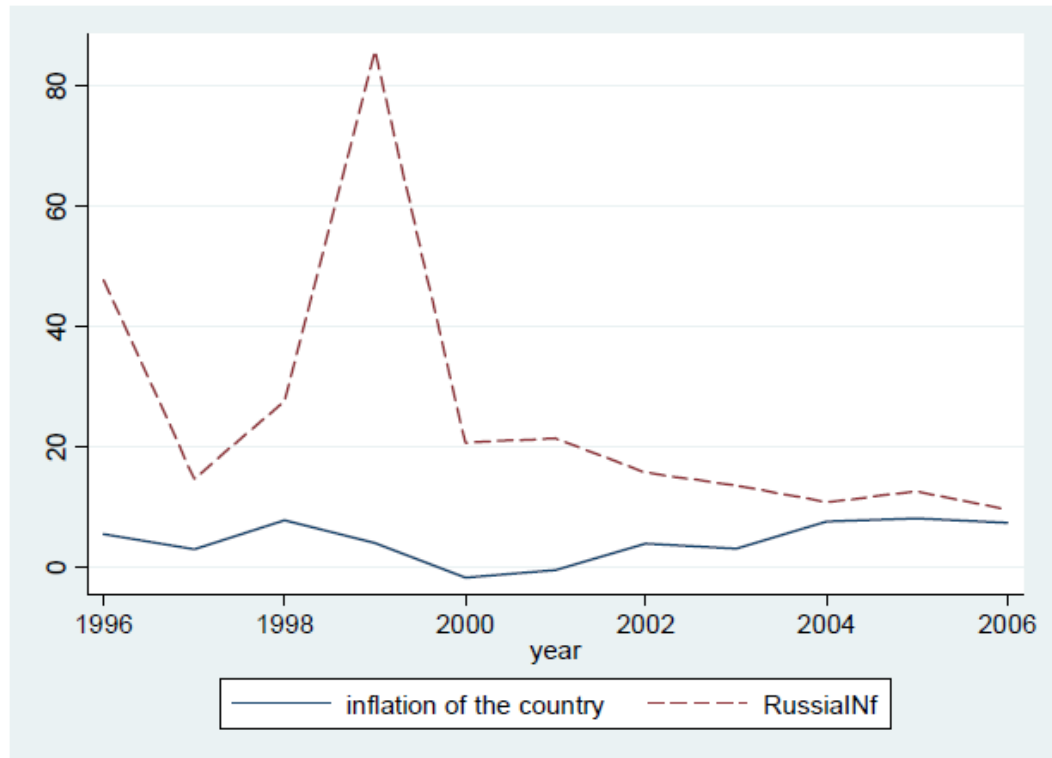


FIGURE 16. Inflation in Vietnam and Russia, 1990-2007 (Bui 2008).

3.7.1 Inflation in the U.S.

Before the 1960s, inflation rate in the U.S was on average 1.3% per year. In the next five years, it remained 4.7%. The inflation rate jumped up to its peak at approximately 7.5% at the beginning of the 1970s until 1980. In ten recent years, inflation rate in the U.S returned to 4.7% per annum. The causes of such a high inflation in the 1970s were considered to be the superficial of the government in stabilizing economic issues and controlling inflation. As a result, the country faced unprecedented circumstance of recession and inflation. The tightened monetary policies and interest rates were then implemented to prevent such an unpredicted inflation. (Nguyen, T.B.L 2011.)

3.7.2 Inflation in Japan

During the process of recovering the economy after the second War World, high inflation in Japan was observed in 1950-1951 because of the war with the North

Korea, and in 1973-1974 due to the Gulf War. The Japanese applied various measures to control inflation and recover the economy at the same time. Responding to inflation in 1970, Japan adopted financial policies to reduce costs and increase exports in order to stabilize commodity prices. From April to December of 1973, the government increased the interest rate five times and showed efforts to control consumer prices. In December 1984, nine principles were implemented to secure the economic stability. By those explicit economic activities, Japan not only successfully prevented the risk of high inflation but also efficiently increased the economic output. (Nguyen, T.B.L 2011.)

3.7.3 Inflation in South Korea, Taiwan, Hong Kong and Singapore

A rapidly developing economy tends to be accompanied by a high inflation rate. In fact, there are several economies in which the economy growth rates are rather high but the inflation rates are relative low or reasonable. Such economies are South Korea, Taiwan, Hong Kong and Singapore, which are so-called The Four Asian Tigers because of their notable high growth rates and rapid industrialization. (Nguyen, T.B.L 2011.) For instance, South Korea and Taiwan have become famous for assembling information technology, while Hong Kong and Singapore are considered as major financial centers of the world. Many emerging countries have followed their successful models in developing economic policies. (Four Asian Tigers 2012.)

The authorities of these economies also faced various difficulties in the beginning, such as the competition of larger economies or the market manipulation. Recognizing that the market mechanism could not be neglected, they increased the government's investment in "non-democratic and relatively authoritarian political systems" during the early years of development. The regimes of state laws and legal systems were continuously improving. In such orderly societies and economies, the governments' policies were strictly monitored, thus the governments achieved their intended objectives: high economic development and low inflation rate. (Four Asian Tigers 2012; Nguyen, T.B.L 2011.) It will be examined in the following the main factors that brought the success to the economies:

Applying strategic economic policies, properly monitoring domestic and international markets to adapt quickly to external changes

The strategy of the economic development has significant impact on inflation. In the beginning period, the four tigers maintained closed economies in order to avoid conflicts between domestic and international commodity prices, at the same time restrained domestic demand. In the 1960s, when the international context had many beneficial changes to an outward economy, they quickly modified their economic strategies, adjusted their economies to follow an outward trend and facilitate international trade. However, maintaining stable and sustainable economies is always the main objective of the four tigers. Avoiding inflation which could bring damages to the countries and the region, they were always cautious in considering the strategies. The policies were carefully discussed with the economists, the strategists and the major employers before the implementation, and were frequently adjusted to changes of the international economy. (Nguyen, T.B.L 2011.)

Strictly controlling prices, protecting benefits of consumers and manufacturers

Commodity prices may influence many aspects of the society. The fluctuation of a product price may affect other prices in the market. Understanding the market mechanism, the four tigers followed the neo-liberal capitalist economies, in which the prices were formed liberally. Prices were basically created by three factors, which were the government intervention, commercial organizations and manufacturers. Government intervention may revise prices of public service, food prices, and prices of particular goods. The price movement of these goods is subject to the fluctuation of supply and demand of high income people, following state regulations. Its main purpose is to ensure the basic consumption needs of people and the social safety. (Nguyen, T.B.L 2011.)

Flexible adjusting exchange rates

Because the four tigers are major financial centers of the world and international trade have significant impact on their businesses, the exchange rate considerably affects the inflation rate of the economies. However, exchange rate was treated not as a risk but a tool to develop economy in a flexible manner. Before the 1960s, relying on exports to improve the economies, the four tigers degraded their domestic currencies to expand their exports. On the contrary, when the economies became prosperous, raw materials, equipments and components became essential factors for the production, the domestic currencies were upgraded to encourage the import. The success of the four tigers was to maintain the value of their money not too high or too low, which were both harmful factors to the inflationary stability. (Nguyen, T.B.L 2011.)

Effectively utilizing foreign investments

The movement of capital flow may promote the integration process of global economy. The capital flows mainly from developed countries to emerging countries, seeking for high return-on-investment sources. The growing foreign capital investment, however, may raise the inflation rates in receiving countries. Experienced the threat of foreign capital flows, four economies relied on demands in different stages of the development to define the policies of foreign investment attraction. (Nguyen, T.B.L 2011.)

Regulating behaviors of enterprises and manufacturers, enhancing their cooperation with the government

Inflation may cause disorder and confusion in production operation of manufacturers. Although many methods have been proposed to control the instability in business operation when inflation happens, governments hardly achieve desired results. One of the reasons for such failure in controlling the unsteadiness is the non-cooperation of enterprises. Therefore, the four tigers focused on developing a mechanism by which firms are rewarded or fined for their behaviors toward the economies, in order to strengthen the cooperation between governments and firms and allow the policies to be followed seriously. (Nguyen, T.B.L 2011.)

4 EFFECTS OF INFLATION ON SMES IN VIETNAM

According to Vietnamese Chamber of Commerce and Industry (VCCI), until the end of 2011, Vietnam had totally 543,963 enterprises, whose total capitals are approximately 6 million billion VND. Nearly 97 percent of them were small and medium businesses, mostly private enterprises. SMEs employ 51 percent of the social workforce and contribute over 40 percent of the GDP. If including 133,000 cooperatives, farms and about 3 million individual business households, this section contributed to 60% on the GDP. SMEs not only contribute significantly to the country's economic growth but also generate more than a million of new jobs each year for the majority of workers, which are mostly untrained, contributing to the poverty reduction and enhancing social security. (Thuy 2012.)

The world economic crisis, followed by inflationary crisis, has made many businesses collapse. Many companies and state-owned corporations are facing various losses. In such a complicated context, SMEs could not avoid a series of bankruptcy. According to VCCI, until the end of last year, 79,014 companies dissolved, of which nearly 8,000 companies dissolved in 2011, not to mention thousands of enterprises had losses or suspended. (Thuy 2012.)

Following the overview of inflation in Vietnam in the previous chapter, this chapter describes SMEs in Vietnam, their role and characteristics; at the same time examine the possible inflationary effects they may confront. The Case Company is also analyzed to confirm the findings.

4.1 SMEs definition

SMEs can be categorized by their sizes, locations, technological development or types of organization. Regard of sizes, SMEs are regularly divided into three groups: micro, small and medium sized companies. Table 5 presents the classification of Vietnamese SMEs based on the Article 3 of decree 56/2009 ND-CP, issued on 30/6/2009:

TABLE 5. SMEs Definition according to Decree 56/2009/ND-CP (Nguyen, H.L. 2011).

| Field | Micro enterprise | Small enterprise | | Medium enterprise | |
|--|------------------|----------------------|----------------|--------------------------------|-----------------|
| | Employees | Capital (VND) | Employees | Capital (VND) | Employees |
| I. Agriculture, forestry and fisheries | Less than 10 | Less than 20 billion | From 10 to 200 | From 20 billion to 100 billion | From 200 to 300 |
| II. Industry and construction | Less than 10 | Less than 20 billion | From 10 to 200 | From 20 billion to 100 billion | From 200 to 300 |
| III. Trade and services | Less than 10 | Less than 10 billion | From 10 to 50 | From 10 billion to 50 billion | From 50 to 100 |

(Note: the exchange rate on 15 March 2011: 1 USD = 20,833 VND)

According to the table, the Case Company falls into the group of small enterprises.

4.2 Characteristics of SMEs

SMEs have four main features: limited resources, flexibility, innovation and personal influences.

Limited resources are prominent features of SMEs. Lacking of resources and competed by large enterprises, SMEs have to be careful in each expenditure and investment. In addition, having limited options in business, they must focus on their core business and expertise. (Tran & Hoang 2011.)

Despite limited resources, SMEs can adapt quickly to changes in the market. The flexibility of SMEs can be explained by their simple and informal structure. Due to the informal management structure, decision are made quickly and communicated promptly. The communication is easy and direct between

managers and their staffs. Furthermore, competition with large companies forces them to continuously improve their products and services to create their own niche market. (Tran & Hoang 2011, according to Levy & Powell 2004, 22.)

The final characteristic of SMEs is the dependence on individual decisions. Due to a small number of employees, the manager and staff in a small company tend to have a closer relationship than those in large companies. Therefore, the personality of the manager may influences many aspects of his company. Thus SMEs tend to be dominated by individual decisions rather than decisions made by a group or a council. (Tran & Hoang 2011.)

4.3 Case Company overview

An Think Investment Private Company was established in 2007. The company is operating as a supplier of chicken eggs for CP (Charoen Pokphand Group) in Thailand. In this closed supply chain, CP is the main supplier and also the only consumer of the final output of An Think. CP provides An Think chicken breeders, chicken feeds and breeding techniques. The Case Company invests on facilities and recruit employees for the production process. The company is responsible for production operation and labor organization. The output is collected once a month, at the same time An Think collects the payment. Apart from chicken eggs, Chicken manure is another product of the company. Figure 17 presents the supply chain between the Case Company and its partner. Table 6 summarizes essential information of the company. (Vu 2012.)

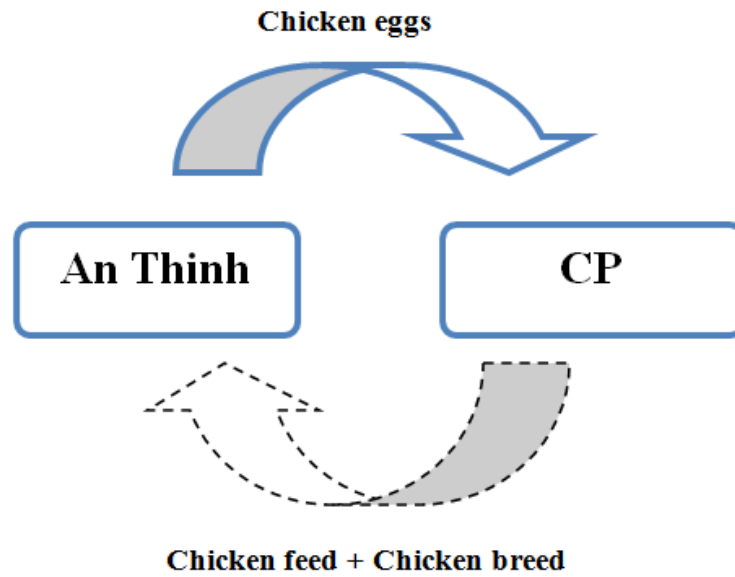


FIGURE 17. Case Company's supply chain. (Vu 2012).

TABLE 6. Case Company overview.

| | |
|-----------------------------------|---------------------------|
| Chartered capital | 7.5 billion VND |
| Total capital | 14.5 billion VND |
| Number of chickens | 110,000 |
| Main product: chicken eggs | 95,000 eggs / day |
| By-product: chicken manure | 7 tons / day |
| Chicken feeds | 12.500 kg / day |
| Office location | Ho Chi Minh City, Vietnam |
| Farm location | Dong Nai, Vietnam |

4.4 Effect of inflation on capital sources

The decisions of companies during inflationary period are affected by various factors, such as the intrinsic difficulties of the economy, the uncertainty of many economies around the world and the increase in input costs. According to Vu Quoc Tuan, the chairman of Vietnamese Craft Village Association, despite the previous difficult time, SMEs hardly received any subsidy from the state. They are currently subject to the critical high interest rate of 25 percent, however, in fact, companies suffer higher expenses due to various valid but unreasonable expenditures which are not included in tax calculation. Moreover, the renting payment for the premises of SMEs is two to three times more than that of the foreign invested enterprises and state-owned enterprises. Enterprises now have no access to bank loans while their taxes are not reduced and production costs increase from day to day. (Thuy 2012.)

According to Dinh Thi Kim Cuc, the director of Phuoc Thinh Aluminum Private Company, who has 20 years of experience in trading construction materials, her business has never been miserable as current. The biggest challenge is the decline in the number of purchasing orders. This number falls by 60% from that of 2010. Many projects in process are forced to stop, while the payments for finished projects are postponed. Having no capital, the company has to borrow from the banks to maintain its operation.

However, taking bank loans are also not simple, and companies must accept the negotiated interest rates, which are excessively high. By the calculation of Ms. Cuc, in the previous time when the interest rate was just approximately half of the current rate, capital turnover might be from 5 to 7 times. On the contrary, the company now has to suffer higher interest rate without purchasing orders; as a result the capital turnover may be only 3 at the highest. (Thuy 2012.)

Most SMEs mobilize their capital either from bank loans and friends or from the partners by receiving advance payment from debtors or delaying payment to creditors. However, all these capital sources from friends and partners are no longer available since they also lack of capital. Recently, several banks announced to lower the interest rates and give priority to SMEs. However, banks have capital

priority criteria for each specific group. According to Vu Duy Thai, the chairman of Hanoi Association of Industry and Trade, only approximately 50 percent business outside of the public sector can access the bank loans. A survey conducted by VCCI revealed that even during inflationary period, 90 percent of SMEs still need bank loans. However, only 10 percent of SMEs may access 100 percent of their demanded loans. (Ngoc 2008)

In a context of an unsteady economy and tightened capital sources, many enterprises accept penalties for late tax payment, in order to use that amount as their additional capital. Moreover, companies also delay payments to their partners in commercial transactions, aggravating the tax arrears. Hoang Anh Gia Lai Join-stock Company is not an SME but can be considered as a typical case with the unpaid tax liability of up to 157 billion VND, which is equivalent to approximately 7.53 million U.S. dollar. However, the company fulfilled its debt payment at the latest deadline on March 31, 2012. (Doanh nghiệp bat dong san no thue hang nghin ty 2012; Minh 2012.)

4.5 Effect of inflation on profits

The level of the inflationary pressure on a company's profit is determined by two factors: the ability to limit price increases from its suppliers and the degree of imposing price changes on its customers. Although it is impossible to entirely protect the company from inflation, the objective is to ensure that the increase rate of inputs costs is slower than that of sales prices. (Pidun & Stelter 2011.)

There are two questions that should be discussed when evaluating effects of inflation on a company's loss and profit. How is the severity of issues related to higher costs of production? To what degree can the company alter its price level during inflation period? To answer those questions, there are three factors that need to be considered: the terms of contracts, the relationship of the company with its suppliers and customers, and the intensity of competition in the market. (Pidun & Stelter 2011.)

The contract terms

Most of business exchanges are affected by contracts. While sales prices are decided by contracts with consumers, input costs could be determined by either retail contracts, modified contracts with contractors or standardized contracts on the stock market. Some formal elements such as the warranty or service convention could be prescribed in informal agreement. To assess effects of inflation on prices and cost, and thus profits, contract terms need to be stated clearly. (Pidun & Stelter 2011.)

The duration of contracts is a critical factor, which needs to be considered carefully. For instance, on the perspective of the supplier, long-term contracts could be a protection for their businesses while short-term contracts may increase the inflation risk. Likewise, contracts with fixed prices prevent disadvantages of inflation better than contracts with adjusted prices. (Pidun & Stelter 2011.)

Contracts may also contain terms which are renegotiable. For instance, many long-term fixed-price contracts allow prices to be negotiated again when inflation reaches a certain rate. Firms should also aware of the impact of financial hedging, especially for raw materials which are largely traded in unstable markets. Effects of inflation on production costs may be significantly reduced or increased by financial hedging. (Le, T.L. 2011.)

When signing contracts of input costs, firms should also evaluate labor cost, which is not less important than material costs. There could be related elements of the labor cost such as costs bargained by collective contracts, duration of these contracts, and the increase rate of wages. For nonunion contracts, the duration and price growth in the labor market may be estimated. (Pidun & Stelter 2011.)

Whether a company can pass the increase in its costs to consumer prices depends greatly on the format of contracts. In fact, contract terms that are beneficial to suppliers may be harmful to customers. For example, companies may favor short-term rather than long-term contracts signed with their customers since changes in sales prices are more flexible. Similarly, contracts that peg sales prices to raw material prices tend to be more effective in protecting companies from inflation risk. (Pidun & Stelter 2011.)

Relationship with suppliers and customers

It is another story to fix terms in contracts, aside from indentifying the critical points. Whether or not a company can propose favorable conditions that are agreed by both suppliers and customers depends on the equilibrium of power within its industrial mechanism. (Pidun & Stelter 2011.)

The frequency of price adjustment of suppliers and customers are different among industries. For example, suppliers in food industry alter their prices more regularly than suppliers in other industries. Consequently, buyers of food are more sensitive with price changes. (Le, T.L. 2011.)

The position of the company on negotiating table contributed mostly to its ability to defend price changes from the supplier. This position may be determined by the significance of the company to the supplier and its ability to find alternative suppliers. A company which is the sole customer of its supplier or a company which has variety of supplier options has obviously more chances to limit or delay price rises during inflationary times. (Pidun & Stelter 2011.)

On the other hand, the position of the company towards its customers decides its pricing power, in other words its ability to pass higher cost to price increase. This ability depends mainly on the customers' price elasticity. A company may define its customers' price elasticity by either estimation or market research. In some cases, the product elasticity or price elasticity need to be analyzed by specific features of customers such as social status, age or participation in loyalty assessment programs. These factors may seriously influence customers' decisions when prices fluctuate. (Le, T.L. 2011.)

The intensity of competition

Most companies have their own product and market segments, each of which has its particular competitive intensity. The competitive intensity is another factor which needs to be evaluated, since it usually influences the impact of price adjustment of a company. For example, in a market which there are a small number of buyers are served by a large number of suppliers, a company may find it enormously difficult to increase its prices. On the other hand, in a market where

a small number of suppliers sell to a large number of customers, a company may enjoy flexible price adjustment. Suppose that in this case, suppliers increase their prices in turn so that they can avoid a price war. (Pidun & Stelter 2011.)

4.6 Inflation exposure matrix

Impacts of inflation on SMEs are not similar. Enterprises suffer differently from inflation, depending on their business characteristics, market segments and products. Some companies may face various disadvantages created by inflation, but some others may have minor or almost no obstacles during an inflationary period. Figure 18 presents the “Inflation exposure matrix”, in which companies are categorized by the extent of their vulnerability to cost inflation and the degree of their capability to convey higher costs to their buyers in form of higher prices. (Pidun & Stelter 2011.)

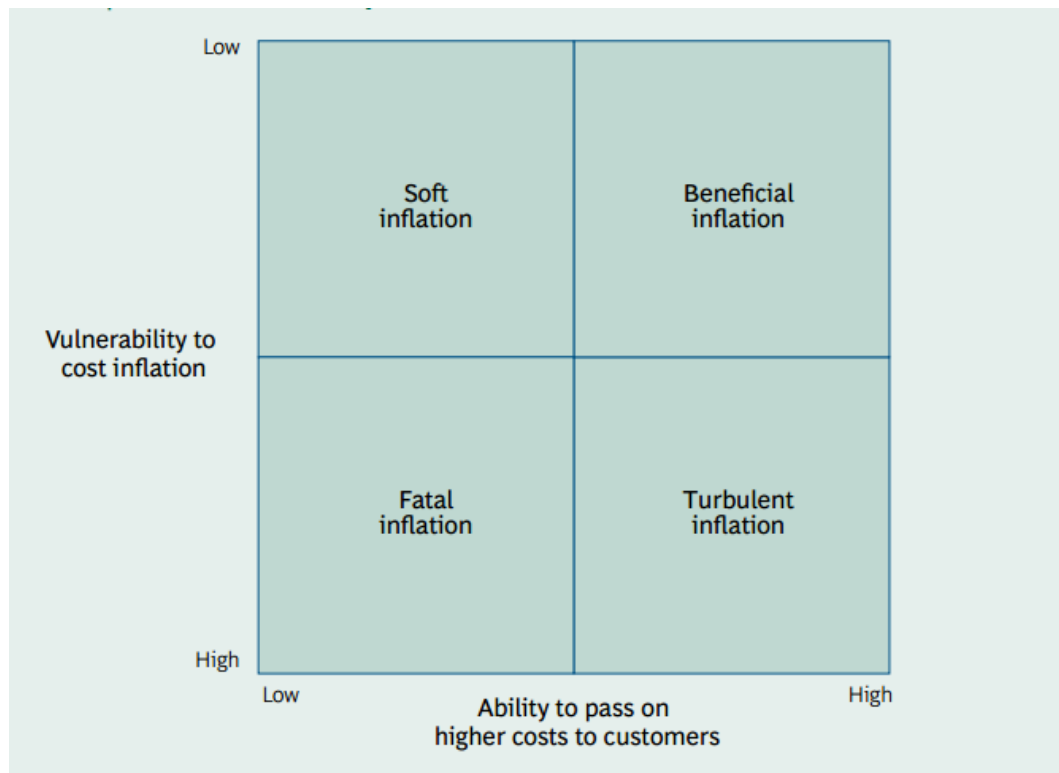


FIGURE 18. Inflation exposure matrix (Pidun & Stelter 2011).

Inflation may be a favorable condition for enterprises in the upper-right quadrant of the matrix. They do not suffer cost inflation, at least in the short run, because of a large contribution of fixed costs and long-term contracts with fixed prices. Moreover, they have large advantage in negotiation to increase prices during inflationary times. One reason of this advantage is that there are not many alternatives of their products or services in the market. (Le, T.L. 2011.)

Examples of companies that enjoy beneficial inflation are suppliers of essential raw materials, such as petroleum, iron ore or other metals. Fixed costs as infrastructure and material exploration account for a high share of the total costs. Furthermore, those companies also benefit from long-term contracts with index prices and a lack of alternative suppliers. There are possibly two strategies for such companies during inflationary period: to raise their profits by increasing prices at a higher rate than the inflation rate, or to expand their market shares by keeping prices steady when competitors raise theirs. (Pidun & Stelter 2011.)

Businesses in the bottom-right quadrant fall into the group of turbulent inflation. They are involved in dynamic markets where an increase in costs could be forwarded to the end of the distribution chain. These companies are significantly affected by inflation because costs of raw material highly contribute to their total costs. However, they may straightforwardly transfer those costs to their customers, due to strong pricing power. Examples of this group's members are retailers who not only have high variable costs but also take advantage in pricing negotiation. (Le, T.L. 2011.)

The coordination between the purchasing department and the sales department determines the success of the company in the category of turbulent inflation. The task of the purchasing department is to understand the impact of increased prices on the consumption of their products, in order to optimize the procurement strategy. Moreover, they need to promptly inform the sales department with potential changes in input costs, so that the sales staff can transfer these costs to the customers in form of increased prices. Meanwhile, it is the duty of the sales department to gather information of their competitors' prices, and consider whether the company should raise its prices with the costs of smaller market share and lesser production utilization. (Pidun & Stelter 2011.)

For enterprises in the bottom-left quadrant, inflation could be a disaster. Companies in this group not only tolerate rising input costs but also find it difficult to transfer these costs to their consumers. These companies are characterized by unpredicted material costs, competitive markets, and customers with strong bargaining power. In the distribution chain, they are usually affected by all other sides, from their suppliers to their buyers and competitors. An example of this kind of business is the automobile manufacturer, who has to compete with other producers in an industry which lack of the variety of equipment suppliers. (Le, T.L. 2011.)

To cope with fatal inflation, companies in this group require bold management to avoid pressure of profitability. These companies need to scrutinize their existing supplying contracts, appraise the possibility of renegotiation and, if possible, revise those contracts to reduce redundant costs. Similarly, for sales contracts, those enterprises should evaluate the possibility to shorten the contract duration, otherwise request temporary surcharges. However, such strategic approach to price alteration and index pricing only becomes effective if they soon realize their exposure to fatal inflation. (Pidun & Stelter 2011.)

Finally, those companies in the upper-left quadrant hardly recognize the existence of inflation, because effects of inflation on their prices and profits are rather insignificant. These enterprises often lack of negotiation power, usually because of government's regulations, instead, they enjoy a large contribution of fixed costs and long-term supply contracts. For instance, the pharmaceutical companies face small impacts of inflation on their costs but their prices cannot be raised effortlessly because of the price-ceiling regulation. Professional service providers, such as law firms, also tolerate small effects of inflation. However, those enterprises should not ignore the threat of inflation, as its result does not occur immediately but its impacts may appear in long-term. They should stay alert, to evaluate effects of inflation on their competitors, and take advantage of those who suffer most. (Le, T.L. 2011.)

4.7 Effect of inflation on capital expenditures

Although effects of inflation on a company's financial statement may be less obvious than effects on loss and profit of that company, they could be more significant. It is because the value of a company is estimated by cash flows, not incomes. When inflation increases, the power of money declines, therefore, the amount of cash required for investment plans increases, sometimes considerably. Since the fixed-capital investments become more expensive when paying with inflated money, net working capital need to be refinanced. The value of the company will suffer seriously if it cannot raise its prices faster than the inflation rate. Consequently, a company needs to assess the impact of inflation on two elements of its capital expenditures which are necessities of net working capital and fixed-capital investment. (Pidun & Stelter 2011.)

Net-working-capital requirements

Net working capital, or working capital, is a measurement of the operating liquidity of a company. It is calculated as:

$$\text{Net working capital} = \text{Current assets} - \text{Current liabilities}$$

This ratio reflects the company's ability to pay back its creditors in short term. As can be seen in the equation, the net working capital relies heavily on the amount of debt owed by the company. The larger the scale of a company is, the more capital it needs. This requires the company's working capital to grow smoothly with a correspond amount, or otherwise it faces the trouble of paying back its liabilities, followed by a risk of bankruptcy. The working capital ratio also provides the investors an outlook of the company's underlying operational efficiency. A positive ratio means that the company's obligations could be guaranteed by the value of the inventory or expected payments from the customers. (Working capital 2012; What is net working capital 2012.)

Inflation may cause significant increase in required net working capital. Considering the example in Figure 19, the annual inflation rate is 5% during a period of six years from 2011 to 2016. Suppose that the sales revenue of a company was 10 billion US dollar in 2011, and it will grow up by 36 percent to

13.6 billion in 2016. However, inflation makes the company's revenues become higher than the expectation. Revenues increased by inflationary pressure lead to higher necessities of net working capital. It is proved that in a given year, the required net working capital may be as much as double to triple what would be needed in a circumstance without inflation. During the six-year period, this company would need approximately half-billion dollars to support its net working capital. (Pidun & Stelter 2011.)

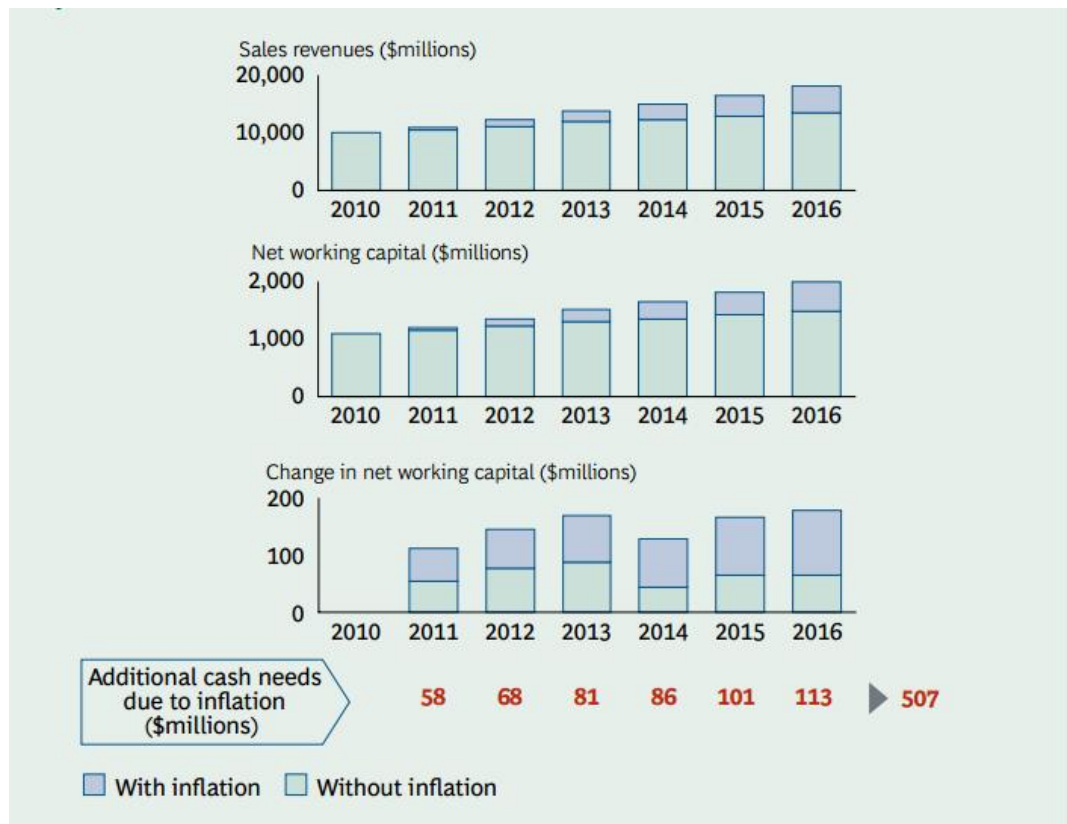


FIGURE 19. Working-capital requirements increased by inflation (Pidun & Stelter 2011).

Each company should consider the above example, examine the statistics of investment plans to estimate the possible changes in net working capital in inflationary context. In fact, most companies always try to limit the required net working capital to the possible lowest level, as it becomes even more important in inflationary times. However, when the company's operating model requires a large amount of inventory, the company has to constantly complement its

inventory at increasing prices, as a result net working capital requirements increase by the time. On the contrary, the company would be more flexible if its model requires a small amount of inventory, it can even take the advantage of current low prices to purchase the basic inputs for an expected inflationary period. (Pidun & Stelter 2011.)

Fixed capital investment

The company investment plan may be another major drain on its cash flow. A systematic assessment on current and prospect investment accounts may assist the company in managing the impact of inflation on the increase of those accounts. The company should segment projects based on the extent to which the company can control. Has the project started yet or it is still on drawing stage? How easy it is to delay the project, or the delay may cause additional costs or extra opportunity cost? How is the importance of the project in maintaining the company's performance? The objective of this process is to identify effects of inflation on capital demand. Apart from formulating proper countermeasures, the company also needs to decide the priorities of its investment projects. (Le, T.L. 2011.)

Financing capacity

The financial capacity reflects the company's ability to deal with the increased capital requirement triggered by inflation. Therefore, another aspect of the evaluation of the balance sheet exposure to inflation is for a company to compare arising capital requirements created by inflation with available capital, whether from capital reserves or from unused loans. The company needs to react immediately if a financial gap is discovered. If necessary, the company should limit the number of their investment projects, in a tactical and systematic process, by postponing the projects that are not implemented yet or by cancelling projects that are not strictly necessary. It is critical to keep in mind that reducing the excessive investment may lessen the competitive position of the company in the market, and lead to deferred investment projects piling up in the following years. (Pidun & Stelter 2011.)

To avoid such risks, the company should consider the initiatives to reduce long-term investment costs such as diminishing the complexity or exceptional features

of the product. Furthermore, it is also required to ensure that the company has adequate financial complement in form of unused loans or cash reserves. This may be the best method to prevent the lack of financial capital and underinvestment during an inflationary period. (Le, T.L. 2011.)

4.8 Effects of inflation on suppliers, customers and employees

In section 5.5 the importance of the company position towards its supplier and customers was discussed. However, it is not enough for a company to just simply to understand the impact of inflation on its input costs and prices. It is also crucial for the company to recognize effects of inflation on the businesses of its suppliers. Understanding the cost structures of suppliers and how those structures will react to inflation, the company may forecast the response of its suppliers towards high inflation context, thus will be prepared with appropriate strategy. (Pidun & Stelter 2011.)

Similarly, knowledge of the customers determines the planned price increase during the inflation period. It is essential to analyze the ability of the company's customers to pass on the higher costs to their own customers. Obviously, a customer who focuses on product quality will appreciate improvement and reliability more than a customer who relies on cost competition. This customer will be more flexible on negotiating table when it comes to price increases. (Le, T.L. 2011.)

Suppliers provide the input used to produce products and offer services. Increased interest rates affect the demand for raw materials and, therefore, their prices. Energy prices grew considerably in the mid-2000s as strong growth in China and India, both energy importers, boost demand up. on the other hand, energy and other raw material prices declined because of the global financial crisis in 2008, as the global depression dampened demand. A supplier of energy and other goods, related raw materials may see profits fluctuate according to demand. (Basu 2012.)

Impacts of inflation on the behaviors of company's employees should also be taken into account. Because of high inflation, the authorities tend to tighten the

monetary policy by raising the interest rate. Because interest rate manipulates general economic circumstances, employees are affected. Increasing rates can direct to a deceleration in the economic growth rate, which affects revenues and profits. Changes in rates impact a company's interest expenses, which also affects profits. A profitable company is likely to employ more staffs and raise compensation and benefit conditions, while the opposite is commonly proper for a losing company. Profitability trends have a tendency to affect share prices, which impact employees who own stock options or involve in stock acquire plans. When high inflation occurs, commodity prices increase instantly, reducing the living standards of employees. (Basu 2012.) The difficulties in life outside of the workplace may be reflected on their working attitude. Managers may find their employees expressing dissatisfaction if wage and working conditions are not sufficient to meet living requirements. Therefore, SMEs should consider adjusting wage levels to ensure the productivity of their employees. Wage adjustment should follow a systematic and strategic process to keep the balance between revenues and expenditures, ensuring the required investment capital.

5 CONCLUSION

All successes are achieved at a cost, either small or large, and the cost that Vietnam has to pay for a rapid growth is not small. As in other emerging markets, the rapid growth of the Vietnamese economy is pushing commodity prices higher, leading to double-digit inflation rates. However, Vietnamese policymakers might not predict all consequences of high inflation. As a result, enterprises, having no experience and critical understanding to cope with such circumstance, have to pay dearly with various losses, and even with bankruptcy. Effects of inflation are happening so quickly that small enterprises are not able to respond or their businesses cannot adapt promptly to the new context. Thus, the availability of this study provides executives of small companies with an overview of the current inflationary circumstance, as well as potential obstacles they may encounter, for which they could find reasonable solutions.

The research problem was defined by research questions in the introduction chapter. Chapter 2 and chapter 3 basically answer two questions: “What is inflation?” and “What is the situation of inflation in Vietnam recently?”, through which the readers are provided the foundation to understand the nature of inflation, as well as a visualization of the inflationary evolution in Vietnam and its internal causes. Within the discipline of international business, the inflationary context in other developed countries is also mentioned, contributing as a “frame of reference” to evaluate the severity of inflation in Vietnam.

Remaining questions are answered in chapter 4. It was found that not only the inflation has negative impacts on SMEs, but also that those effects may be quite considerable. Through personal observations and interviews with the director of the Case Company, the author essentially draws several major impacts of inflation on SMEs.

The most obvious and also most critical impact is the scarcity of capital sources. Inflation forces the authorities to tighten the monetary policies by increasing the interest rate and limiting the credit supply. Small businesses may find it difficult not only to approach the capital sources but also to pay off high-interest loans. High interest rates increase production costs and reduce competitive advantage.

Secondly, inflation decreases the profits of SMEs by higher input costs. However, the problem remains on the ability of enterprises to transfer those additional costs to their customers. It depends on their positions at the negotiating table, in other words the possibility to persuade their customers to accept increased prices. Moreover, the contract terms also contribute to the protection of enterprises against inflation. Long-term contracts with suppliers and fixed prices benefit SMEs, conversely short-term contracts along with flexible price condition with their customers are favorable. Consequently, whether a company may avoid observing its earnings cruelly damaged by inflation depends on two factors: the degree to which it could limit the input prices increased by its suppliers and the degree to which it could impose cost increases on its consumers. Therefore, during inflationary periods, it is required for SMEs to revise the design of companies' contracts and evaluate the power weighing scale in the business chain to determine who may impose the costs of inflation on others. It is also critical to examine the competitive level of the market and competitive position of the company since they may seriously influence the impact of pricing decisions. (Stelter 2011.)

Thirdly, SMEs may need to take into account the importance of changes in capital expenditures, because the value of a company is evaluated by cash flows, not earnings. Companies with both high debts and considerable capital expenditures may experience a critical hit of inflation. Undermining profitability and market value, a small and medium sized company may not be able to meet the corresponding cash requirements for net working capital and investments, unless it could find a way to raise its earnings faster than the inflation rate. Therefore, it is recommended for SMEs to estimate the potential impacts of inflation on their balance sheets. There are two main components of capital expenditures that are required to be inspected: networking capital, which includes payables, receivables and inventories, and future fixed capital investments.

The next, due to the second effect of inflation, apart from being aware of its exposure to inflation, small enterprises should not disregard the exposure of its suppliers and customers. The competitive strategy of SMEs' customers may determine their pricing power. Last but not least, impacts of inflation on the behaviors of company's employees should also be taken into account. When high

inflation occurs, commodity prices increase instantly, reducing the living standards of employees. The difficulties in life outside of the workplace may be reflected in their working attitude. Therefore, SMEs should consider adjusting wage levels to ensure the productivity of their employees. Wage adjustment should follow a systematic and strategic process to keep the balance between revenues and expenditures, ensuring the required investment capital.

The preparation to protect the company from negative effects of inflation is a complex and difficult task. It requires a major effort even when managers do not perceive its urgency and benefits yet. Even so, executives need to change their mindset to be ready to deal with inflation. This thesis may contribute as a reference for developing an essential piece of knowledge of their potential exposures under alternative inflation scenarios.

As mentioned in the introduction, one of the limitations of this research is the lack of quantitative perspective in methodology. The author believes the methodological triangulation which combines quantitative and qualitative research methods could improve the validity and reliability of the final results. Moreover, analyzing numerical data and statistics, the quantitative research approach could evaluate precisely the significance level of effects of inflation on SMEs and construct a benchmark for business performance improvement.

6 SUMMARY

The aim of this thesis is to describe the high inflation context in Vietnam recently and define the potential effects of such inflation on the small and medium-sized enterprises. The process started with the familiarization with inflationary concepts. The author studied inflation related aspects before designing the research structure in order to have knowledge on the existing information. Accordingly, the thesis is divided into two parts, the theoretical and the empirical.

The theoretical part is the first section of the thesis. This part deals with various sources of literature concerning inflation and related concepts. The objective is to provide the author a background to study the real circumstance of inflation happening in Vietnam. Consumer price index is described as a popular indicator to measure inflationary significance. Different types of inflation and relevant schools of theories are also stated. Causes and costs of inflation are explained, followed by popular methods used by governments to control inflation.

The second part of the thesis is the empirical section. This part examines the current situation of inflation in Vietnam. The history of inflation is found to be useful to understand the present context of inflation. A piece of knowledge of the Vietnamese economy is also presented. Vietnamese CPI and factors affecting the CPI are the basis in analyzing causes of inflation. In addition, inflation context in several developed countries are given to compare with the Vietnamese situation.

Chapter 4 presents the definition of SMEs in Vietnam, their characteristics, the Case Company and findings on researching effects of inflation on SMEs. The empirical examination was mostly executed as a desk research, using primary and secondary sources of information. The support for the findings and their analysis was acquired through interviews with the director of the Case Company. By these interviews, the difficulties that SMEs are facing during inflationary periods are clarified. Generally, effects of inflation on SMEs are classified into four categories: effects on capital sources, effects on company's profits, effects on capital expenditures, effects on suppliers, customers and employees of the business.

To conclude, the author recommends prospective preparation steps that SMEs can consult to apply to their own cases. Suggestions for further research are made in the end of the fifth chapter.

REFERENCES

Published references

Barro, R.J. & Grilli, V. 1994. European Macroeconomics. Palgrave Macmillan.

Begg, D., Fischer, S. & Dornbusch, R. 2000. Economics. Bershire: McGraw-Hill.

Bui, T.K.T. 2008. Inflation in Vietnam over the period 1990-2007. The Hague: Institute of Social Studies.

Chisnall, P.M. 1997. Marketing research. McGraw-Hill.

CIA factbook 2012. Vietnam [referenced 9 Apr 2012]. Available at:
<https://www.cia.gov/library/publications/the-world-factbook/geos/vm.html>

Dam, D.D. 1995. Fighting inflation while sustaining growth and reform. UNDP.

Golafshani, N. 2003. Understanding reliability and validity in qualitative research. The Qualitative report.

Griffiths, A. & Wall, S. 2012. Applied Economics. Financial Times, Prentice Hall.

Heather, K. 2004. Economics, theory in action. Financial Times, Prentice Hall.

Hung, N.T. 1999. The inflation of Vietnam in transition.

Jin, R.K. 2003. Case Study Research: Design and Methods. SAGE Publisher.

Kananen, J. 2011. Rafting Through the Thesis Process: Step by Step Guide to Thesis Research. Jyväskylä: JAMK University of Applied Sciences.

Le, T.L 2011. Chien luoc cong ty trong thoi ki lam phat. Vietnam Economic Forum.

Le, T.T.H. 2011. Inflation dynamics in Vietnam. As: Norwegian University of Life Sciences.

- Luoc, V.D. 1992. Curbing Inflation and the process of Economic. Hanoi: Social Science publishing House.
- Mankiw, N.G. 2002. Macroeconomics. Worth Publishers.
- Mankiw, N.G. 2011. Principles of economics. South-Western, Cengage Learning.
- Mishkin, F.S. 1997. Strategies for controlling inflation. Cambridge: National Bureau of Economic Research.
- Nguyen, H.L. 2011. Supplying small solar photovoltaic systems to Hanoi, Vietnam. Lahti: LAMK.
- Nguyen, T.B.L. 2011. Lam phat cua Vietnam tu nam 2005 den nay. Vinh : Vinh University
- Nguyen, T.T.H & Nguyen, D.T. 2011. Nguon goc lam phat o Viet Nam giai doan 2000-2010: Phat hien moi tu nhung bang chung moi. VERP. Overheated economy 2008. Inside Counsel.
- Parkin, M., Powell, M. & Matthews, K. 2005. Economics. Addison-Wesley.
- Patton, M.Q. 2002. Qualitative Research and Evaluation Methods. SAGE Publication.
- Pham, T.A. 2011. Lam phat va cac quy tac chinh sach tien te. Ha Noi: VERP, Economic University.
- Phan tich va danh gia chi so gia tieu dung cua Viet Nam giai doan 2008 - 6 thang dau nam 2010 2010.
- Pidun, U. & Stelter, D. 2011. Making your company inflation ready. Boston: The Boston Consulting Group.
- Saunders, M., Lewis, P. & Thornhill, A. 2009. Research Methods for business students. 5th edition, Harlow: Prentice Hall.

Shafir, E., Diamond, P. & Tversky, A. 1997. Money Illusion. *The Quarterly Journal of Economics*. Vol. 12, No. 2, 341-374.

Slooman, J. 2007. *Essentials of economics*. Prentice Hall, Financial Times.

Swanson, R.A. 2007. *Analysis for improvement*. 2nd Edition. San Francisco: Benett-Koehler Publisher, Inc.

Tran, T.S. & Hoang, C. T. 2011. *Information system adoption within Vietnamese SMEs*. Lahti: LAMK.

Tran, V.N.T. & Fujita, S. 2007. The impact of real exchange rate on output and inflation in Vietnam, a VAR approach.

Yin, R. K. 2003. *Case Study Research: Design and Methods*. 3rd edition. Newbury Park: Sage Publications.

Electronic references

Accounting Education 2010. Government expenditures [referenced 3 Apr 2012]. Available at: <http://www.svtuition.org/2010/03/government-expenditures.html>

Basu, C. 2012. How stakeholders are affected by interest rate [referenced 5 Apr 2012]. Available at: http://www.ehow.com/info_7752789_stakeholders-affected-interest-rates.html

Burney, A. 2008. DrBurney [referenced 1 Apr 2011]]. Available at: <http://www.drburney.net/INDUCTIVE%20&%20DEDUCTIVE%20RESEARCH%20APPROACH%2006032008.pdf>

Crisis Times 2010. Inflation - effects and how to survive it [referenced 29 Mar 2012]. Available at: <http://crisistimes.com/inflation.htm>

Viet, H. 2012. Kinh tế Việt Nam 2011: 365 ngày day bien dong [referenced 11 Mar 2012]. Available at: <http://dantri.com.vn/c76/s76-551980/kinh-te-viet-nam-2011-365-ngay-day-bien-dong.htm>

Economic Watch 2010. Controlling inflation [referenced 22 Mar 2012]. Available at: <http://www.economywatch.com/inflation/controlling.html>

Economics Web Institute 2001 [referenced 12 Mar 2012]. Available at: <http://www.economicwebinstitute.org/glossary/inflat.htm>

Economy Watch 2010. Built in Inflation [referenced 6 Mar 2012]. Available at: <http://www.economywatch.com/inflation/built.html>

Economy Watch 2010. Economics of Inflation [referenced 5 Mar 2012]. Available at: <http://www.economywatch.com/inflation/economics.html>

Economy Watch 2012. Built in Inflation [referenced 6 Mar 2012]. Available at: <http://www.economywatch.com/inflation/built.html>

General Statistic Office 2012. Phuong phap tinh chi so gia tieu dung [referenced 14 Mar 2012]. Available at: <http://www.gso.gov.vn/default.aspx?tabid=459&idmid=6&ItemID=1874>

Hellerstein, R. 1997. The impact of inflation. Federal Reserve, Bank of Boston [referenced 29 Mar 2012]. Available at: http://www.bos.frb.org/economic/nerr/rr1997/winter/hell97_1.htm

International Monetary Fund 2012 [referenced 15 Feb 2012]. Available at: <http://www.imf.org/external/index.htm>

Investing school 2012. What is net working capital [referenced 3 Apr 2012]. Available at: <http://investing-school.com/definition/what-is-net-working-capital/>

Investopedia 2012. Four Asian tigers [referenced 25 Mar 2012]. Available at: <http://www.investopedia.com/terms/f/four-asian-tigers.asp#axzz1rRntPKL1>

Investopedia 2012. Incremental Capital Output Ratio - ICOR [referenced 5 Apr 2012]. Available at: <http://www.investopedia.com/terms/i/icor.asp#axzz1r9xCh7Cv>

Investopedia 2012. Working capital [referenced 3 Apr 2012]. Available at:
<http://www.investopedia.com/terms/w/workingcapital.asp>

Minh, N. 2012. Bau Duc het no thue dung han chot. Vnexpress News [referenced 5 Apr 2012] Available at: <http://vnexpress.net/gl/kinh-doanh/2012/04/bau-duc-het-no-thue-dung-han-chot/>

Moffatt, M. 2012. Cost-Push Inflation vs. Demand-Pull Inflation [referenced 13 Mar 2012]. Available at:
http://economics.about.com/cs/money/a/inflation_terms.htm

Ngoc, C. 2008. 80% doanh nghiệp nhỏ và vừa đang kho khan [referenced 3 Apr 2012]. Available at: <http://vnexpress.net/gl/kinh-doanh/kinh-nghiem/2008/10/3ba07504/>

Nguyen, A.T. 2011. Nguyen nhan lam phat tai Viet Nam [referenced 5 Apr 2012]. Available at: <http://tntt.vn/gpmaster.gp-media.ban-tin-thuong-nghiep-thi-truong-viet-nam.gplist.11.gpopen.4894.gpside.1.nguyen-nhan-lam-phat-tai-viet-nam.asmx>

Nguyen, H. 2011. BBC Vietnamese News. VN 2011 - kinh tế khó khăn nhất từ 1991 [referenced 11 Mar 2012]. Available at:
http://www.bbc.co.uk/vietnamese/vietnam/2011/12/111214_viet_economy_2011.shtml

Nguyen, N.V. 2011. Nguyen nhan lam phat tai Viet Nam. Thi truong Viet Nam [referenced 5 Apr 2012]. Available at: <http://tntt.vn/gpmaster.gp-media.ban-tin-thuong-nghiep-thi-truong-viet-nam.gplist.11.gpopen.4894.gpside.1.nguyen-nhan-lam-phat-tai-viet-nam.asmx>

Nguyen, Q.K. 2011. Dan Chim Viet. Nguyen nhan va hau qua cua lam phat o Viet Nam [referenced 5 Apr 2012]. Available at:
<http://www.danchimviet.info/archives/33977>

Piana, V. 2011. Economics Web Institute. Inflation [referenced 17 Jan 2012]. Available at: <http://www.economicwebinstitute.org/glossary/inflat.htm>

Reserve Bank of New Zealand 2012. Monetary policy and inflation [referenced 22 Mar 2012]. Available at:

<http://www.rbnz.govt.nz/challenge/resources/2970552.html#howdoesthereservebankcontrol>

Stelter, D. 2011. Time to get ready for inflation [referenced 25 Mar 2012].

Available at:

https://www.bcgperspectives.com/content/commentary/managing_two_speed_economy_growth_time_to_get_ready_for_inflation/

The Economist 2011. Doing battle against inflation [referenced 7 Apr 2012].

Available at: <http://www.economist.com/node/18651919>

The Economist 2012. Hero to zero [referenced 7 Apr 2012]. Available at:

<http://www.economist.com/node/21551538>

Thuy, H. 2012. Doanh nghiệp nhỏ và vừa Việt Nam – những điều cần biết [referenced 2 Apr 2012]. Available at:

<http://www.sggp.org.vn/kinhte/2012/4/285015/>

Vietnam Economic Forum 2012. Doanh nghiệp bất động sản no thuế hàng nghìn tỷ [referenced 3 Apr 2012]. Available at: <http://vef.vn/2012-03-14-doanh-nghiep-bat-dong-san-no-thue-hang-nghin-ty-dong>

Laws, statutes, decrees

Article 3 of decree 56/2009 ND-CP. Vietnamese Government. Hanoi 30 June 2009.

Interview

Vu, H.S. 2012. Director. An Think Investment Private Company. Interview 15 Feb 2012.

