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IS INDONESIA UNDERGOING A PROCESS OF DE-INDUSTRIALIZATION?

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List of Acronyms

AFTA	Asean Free Trade Areas
APEC	Asia Pacific Economic Cooperation
BAPPENAS	National Development Planning Agency of Indonesia
BI	Central Bank of Indonesia
BKPM	Indonesia Investment Coordinating Board
BPS	National Bureau of Statistic Indonesia
BULOG	National Logistic Agency aimed to stabilize the price of foodstuffs especially paddy and rice at affordable price.
REPELITA	Five Years Development Plan
GDP	Gross Domestic Product = National Output
WTO	World Trade Organization

Abstract

The debate of whether Indonesia has been experiencing deindustrialization after being severely hit by the economic crisis in 1997 is the most talked about, since manufacturing industry has been the foundation of the national economy for long time after the revenue gained from the oil sale has been depleted, generating a lot of employment, raising people living standard and as vital engine of economic growth and development. However, poor performance, growth deceleration and the contraction of the manufacturing industry for the period of ten years after the crisis has left the question of what is the factor that has contributed to that, since Indonesia has been forced to pursue the policy of liberalization, whereas the prolonged contraction could lead to deindustrialization.

The measure of deindustrialization being used in this paper is a declining share of manufacturing industry to GDP. The paper also discusses the reason of deindustrialization and growth consequences of deindustrialization.

Relevance to Development Studies

Well-built manufacturing industry is necessary for economic growth and development in developing countries.

Keywords

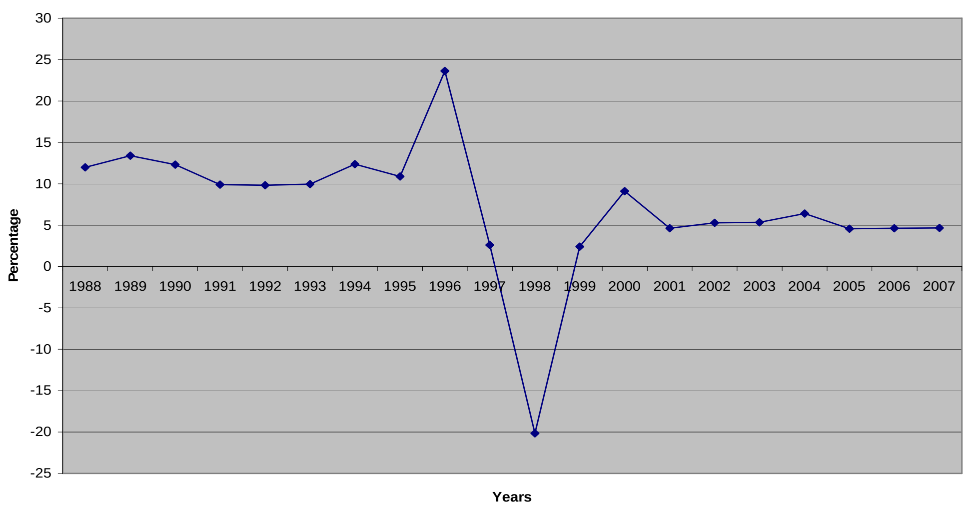
Deindustrialization, liberalization and Indonesia.

Chapter 1
INTRODUCTION

1.1. Statement of the Problem

After being severely hit by the economic crisis in 1997, Indonesia has been experiencing slowdown of its national industrial development. This declining trend of the national industrial growth after the crisis can be seen from the graph below which reveals that the average annual growth of the manufacturing industry after the crisis is below 5% during period 1998-2007, which is 2.68%. This figure is far beyond the average annual growth that has been achieved before the crisis which amounted to 11.68% during period 1988-1997 [table 5]. Here is the graph which shows the average annual growth rate of Indonesia manufacturing industries.

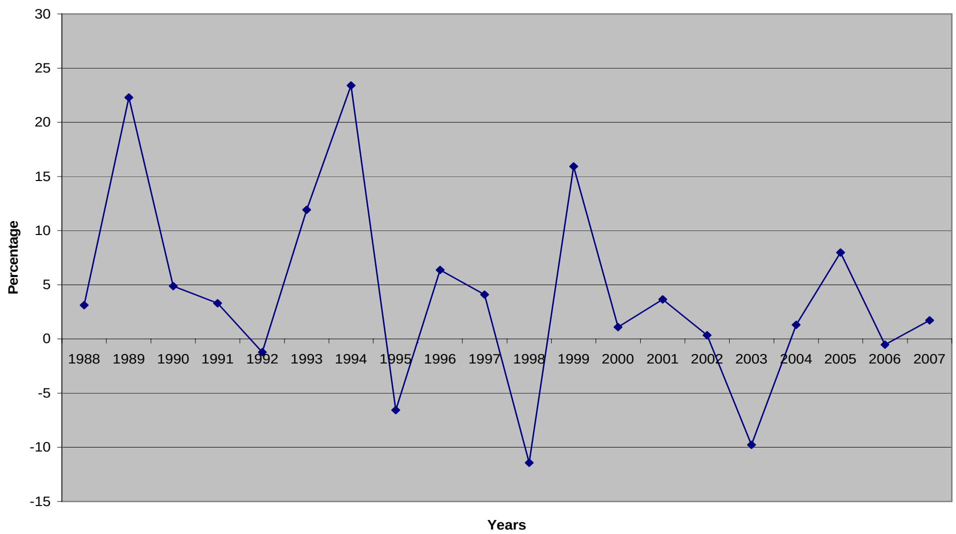
Indonesia Growth Rate of Manufacturing Industry



Source: World Bank Database Indicator and BPS

This poor performance of average annual growth rate of manufacturing industry in post crisis is followed by poor performance of average annual growth rate in labour absorbing industrial manufacturing sector which accounted only 1.03% during period 1998-2007, compared to 7.16% during period 1988-1997 in pre crisis [table 6]. This means that there were a lot of lay offs in this secondary sectors. People whom were previously reliant and dependent on working in manufacturing industries for their livelihood are now become unemployed workers after the crisis. This can be seen graphically below.

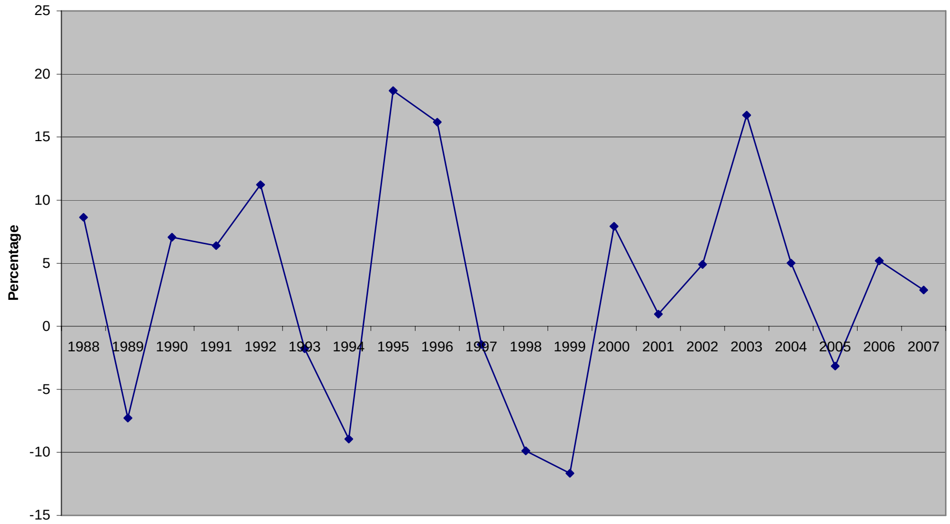
Indonesia Annual Growth Rate of Labour Absorbing Manufacturing Industry



Source: World Bank Database Indicator and BPS

In addition to that, there has been declining of the productivity per worker in manufacturing industry from average annual productivity per worker of 4.88% during period 1988-1997 before the crisis to 1.89% during period 1998-2007 after the crisis [table 7], meaning that there were further blow in terms of declining output in manufacturing industries since the productivity declines. The graph below presented the average annual growth rate of productivity per worker.

Indonesia Average Annual Growth Rate of Productivity Per Worker in Manufacturig Industry



Source: World Bank Database Indicator and BPS

Although it is too early to judge that Indonesia has been de-industrializing, taking into account that percentage contribution of the industrial manufacturing sector to GDP has been relatively stable at 27-28% in the year 2000s which is above percentage contribution of the agricultural sector which has been amounting only to 13-14%, it did raise concern amongst the Indonesian people that the government has to take necessary measure to improve the performance of the national manufacturing industry and to restore its competitiveness in global market, so that well-built and strong manufacturing industry has really existed in Indonesia. The problem is that while there existed the poor performance and the slowdown as well as the growth deceleration of the national manufacturing industry, the agricultural sector has performed very badly as well, its share to the national output or GDP has been decreasing continuously. As result there are a huge influx of foreign goods and commodities including food stuff into the domestic market. In addition to that the service sector which is expanding, has failed to absorb the workers or employment that have been laid off as result of the ailing manufacturing industry.

Although the share of the manufacturing industry to the national output or GDP has been relatively stable to 27-28% after the crisis or during period 1996-2006, the data reveal that there are some sub sectors of manufacturing industry which are really undergoing deindustrialization showing their share to GDP declining year by year after the crisis. This decline is offset by the increase of the share of the service industry to the national output or GDP, especially transport & communication and banking and financial sector.

This is very scary phenomenon since Indonesian is developing country and the living standard is very low. The poor performance of manufacturing industry and the decline of the share of some sub sectors in manufacturing industry to GDP accompanied by the increasing share of service industry to GDP would not be a problem, if this phenomenon is a simply natural outcome of successful economic development and associated by rising living standard. However this phenomenon of declining share of some sub sectors in manufacturing industry to GDP is caused by the poor performance of the manufacturing industry indicated by low rate of its growth which could lead to the unsustainability of growth and development of the national economy. Since this is the case, where Indonesia is only able to produce less, then as consequence it also has to consume less. It would be bad and unsustainable if Indonesian people consume what they do not produce as a nation. Either they have to live in moderate way of life and to consume less to the products and commodities they do not produce as nation or they have to produce more to be able to consume more by creating profitability condition in the national investment realm, restoring their competitiveness and developing Indonesia manufacturing industrial sector which eventually leads them to high technology and innovation since this sector has positive relationship with generating job employment and raising living standard. From the historical perspective, Indonesia manufacturing industry has been the foundation of national economy and has become vital engine for economic growth which has created employment and job generation. The low performance of the national manufacture industry simply means low employment and fewer jobs available. So something has to be done to restore the national economy especially in manufacturing sector.

This macro indicator has shown the symptom or signal of deindustrialization which can be clearly seen from the slowdown growth and development of the manufacturing industry in the economy showing the decreasing rate of annual its growth, the decreasing rate of annual growth of the labour absorbing in manufacturing industry, the lower per worker productivity level and the declining share of sub sectors in manufacturing industry to GDP year by year, though the contribution or the share of manufacturing sector to GDP has been relatively stable. This declining share of sub sectors in manufacturing industry to GDP is offset by the increasing share of the service sector to GDP year by year. Despite this expansion of the service sector in the economy, the people's living standard has not increased and reached higher, but their living standard has decreased as there are a lot of people have been forced out of work and unemployed as result of the poor performance of the manufacturing industry while the capacity and capability of the service sector to absorb labour force is limited especially the workers who do not have the skills and technical abilities needed in the service industry. As result there are massive unemployment, widespread poverty and low purchasing power among the people within the country, losing competitiveness in the domestic market as well as in the world market.

1.2. Justification of the Research

It has long been recognized that Industry or manufacturing has played an important role in economic development and as an engine of growth in South East Asian countries. However since Indonesia has been severely hit by the economic crisis in 1997, there has been slowdown of industrial development and poor performance of its industrial manufacturing sector. Poor performance of industrial manufacturing sector combined by the decline of the share of sub sectors in manufacturing industry to GDP in the economy will certainly raise concern that the country is losing its valuable economic activity to others, that industrial manufacturing sector is not profitable and not competitive in the world market.

This phenomenon has raised our concern on the ground that manufacturing has been the foundation of the national economy and as vital engine of economic growth, creating employment and generating job for the people before the crisis hit Indonesia. Declining contribution of industrial manufacture in an economy will tend to have poor productivity performance for the country and vice versa. Likewise an expanding labour industrial manufacture will tend to have high employment and good job generation for the country while contracting labour industrial manufacture will tend to have massive unemployment and job loss in the economy leading to poor standard of living.

Departing from this concern of declining the share of sub sectors in manufacturing industry to GDP vis-à-vis the increasing share of the service sector to GDP in Indonesia's economy and the consequences of this changing pattern of economic structure -that is expanding the service sector in the one hand and the contracting manufacturing industry sector in the other hand- to the development of the national economy and its sustainability in the long run, especially the growth that leads to the successful economic development associated with the rising living standard. This paper will investigate the economic phenomenon that has had and tends to continue to have repercussion on the Indonesia's economy after being severely hit by the economic crisis. It will examined the share of three sectors in the economy to GDP; agriculture, manufacturing and service sector during 11 years from 1996-2006, which one has been rising or declining or stagnant. It will also present the analysis of the policy implementation pursued by the policy makers or the government as well as the reasons and growth consequences as result of the poor performance and slowdown growth and development of its manufacturing industry sector in the economy showing the decreasing rate of annual growth, the decreasing rate of annual growth of the labour absorbing industrial manufacturing sector and the lower per worker productivity level that show the strong indication and the signal of deindustrialization that Indonesia has been experiencing after the crisis.

1.3. Research Question(s)

1. Has Indonesia been de-industrializing of late?
2. If so, what are the reasons?

3. What are the growth consequences of the deindustrialization in Indonesia?

1.4. Research Hypothesis

1. It is believed that Indonesia has been undergoing the process of deindustrialization of late.
2. Poor performance of industrial manufacture as result of the economic crisis that severely hit Indonesia in 1997 has led to the symptom of deindustrialization. In addition to that there have been inadequate measures and poor policies in favour of rebuilding industrial manufacturing sector and developing national industrial strategy aimed to create profitable condition and to achieve competitiveness in the world market as well as domestic market.
3. Deindustrialization has had negative growth consequences in developing countries.

1.5. Research Methods

This paper will use mostly the secondary data from various Indonesia government agencies, like National Bureau of Statistics Indonesia (BPS), the Central Bank of Indonesia (Bank Indonesia), National Development Planning Agency (BAPPENAS), Indonesia Investment Coordinating Board (BKPM), Indonesia Department of Industry and Trade as well as current data from International Monetary Fund, World Bank and Statistical Year Book for Asia Pacific by the United Nations Publication. Of course some tertiary data will be helpful in integrating various perspectives into the topic of this paper, even to acquire primary data from the primary sources regarding the industrial performance, if it is needed.

This paper then will use descriptive analysis to clarify and answer the problem, identify the reasons and causes as well as growth consequences of deindustrialization and the poor performance of manufacturing industrial sector in Indonesia's economy during the period of 1996 – 2006. The paper also discusses the policies pursued by the government of Indonesia with regard to the performance of its manufacturing industry especially what account for deindustrialization as well as who and what is responsible for it. How far and to what extent Indonesia has been experiencing deindustrialization after being severely hit by the economic crisis will also be examined and elaborated in this paper with reference of the data available from 1996-2006.

1.6. Organization of the Paper

This paper is divided into five chapters. Chapter 1 is introduction which contains statement of the problem, justification of the research, research question(s), research hypothesis, research methods and organization of the paper. Chapter 2 is review of the literatures which discuss theories of deindustrialization, reason of deindustrialization and growth consequences. Chapter 3 is the background of Indonesia's economy which discusses the evolution of Indonesia's economic structure from 1970 to 2006, followed by the growth history and growth policy. Chapter 4 is analytical reasons and growth consequences of deindustrialization in Indonesia, investigating and analyzing whether Indonesia has been de-industrializing after being severely hit by the economic crisis, what are the reasons and the growth consequences. Chapter 5 is conclusion.

Chapter 2
LITERATURE REVIEW

2.1. Theories of Deindustrialization

Deindustrialization is simply anti-thesis of industrialization, and it can be defined as decrease of industrial manufacturing share or its contribution to GDP and declining manufacturing employment and income as well as manufacturing output. We can consider manufacturing industry as a whole, or focus on individual industries such as steel, wood, timber and clothing and textiles. Deindustrialization is also the phenomenon of the secondary sector (industrial manufacturing sector) growing more slowly than the rest of the economy, whether it is measured by share of GDP or of employment (B. Easton, 1998). In the case of industrialization, economic development is accompanied by (1) an increase in the share of national income from industrial manufacture (2) an increase in the share of people employed in industrial manufacturing sectors and (3) a continual rise in labour productivity in the leading industrial manufacturing sector and to lesser degree in agricultural sector. In the case of deindustrialization the reversal condition applies to number (1) and (2), while number (3) it could be the result of changing structure of employment and value added (U. Pieper, 1999).

Cairncross (1982) and Lever (1991) have come up with four possible definitions of deindustrialization:[1]

1. **Deindustrialization** can mean a straightforward decline in the output of manufactured goods or in employment in the manufacturing sector.

2. **Deindustrialization** can mean a shift from manufacturing to the service sectors, so that manufacturing has a lower share of total output or employment.

3. **Deindustrialization** can mean that manufactured goods comprise a declining share of external trade, so that there is a progressive failure to achieve a sufficient surplus of exports over imports to maintain an economy in external balance.

4. **Deindustrialization** can be defined as a continuing state of balance-of-trade deficit (as described in the third definition above) that accumulates to the extent that a country or region is unable to pay for necessary imports to sustain further production of goods, thus initiating a further downward spiral of economic decline.

In the same light of what has been defined by Cairncross (1982) and Lever (1991) above, there is debate about the definition of deindustrialization. For some people deindustrialization refers to levels of activity in the economy as whole and the economy's ability to reproduce itself. For others, probably the majority, deindustrialization is concerned with the decline of manufacturing. The most common definition is the **absolute decline** of manufacturing employment, but **relative decline** is also used as indicator by some. Output can also be used as measure to deindustrialization rather than employment (J. Allen & B.D. Massey, 1988).

The **relative measure** of deindustrialization can be applied when manufacturing industry might actually be growing from year to year, but if other sectors of the economy are expanding at a faster rate, then the share of total output or employment may still be falling. This relative decline of manufacturing industry can be measured in terms of its falling share in total national output (GDP), or the falling share of industrial employment in total employment, or the falling share of the national manufactured export in the world market.

The **absolute measure** can be seen when there exists the actual fall in output, employment and profit or investment spending in manufacturing industry, then an absolute decline does occur. Although GDP continues to grow and other sectors of the economy are expanding such as trading and service sector, the share of manufacturing industry does actually decline in the national economy, be it a decrease in total employment, or a decline in manufacturing output by sector, or a falling level of capital investment spending in manufacturing industry.

They further (J. Allen & B.D. Massey) presented the definition of deindustrialization from Rhodes (1986) that said "Deindustrialization is defined as the failure of the country or region to secure a rate of growth of output and net export of all kinds sufficient to achieve full employment". They also presented Ajit Singh's view of deindustrialization (1977) that defines it in term of the economy's ability to sell enough of its products abroad to pay the nations import requirement and to do these things while maintaining socially acceptable levels of output, employment and the exchange rate.

The above definition both from Rhodes and Singh has to do not only with the internal matters or domestic terms, but also with regard to the international trading position. In other word, deindustrialization occurs as result of poor performance of the economy vis-à-vis its competitors can be measured in terms of balance of payment and exchange rate as well as poor performance in domestic economy can be measured in terms of declining employment or output. This is because when a country is not able to generate income from exports to pay for its import requirements at acceptable level of unemployment and exchange rate, the country can suffer from economic problems basically trade deficits. If this condition is persistent where the country is unable to sustain sufficient exports to balance its imports, then the drive wheel of the economy will be stagnant, as more and more debt becomes burden, there will be no country at the end that will trust and believe in the sustainability of the performance of the national economy of that country. As result its productivity also will be low especially its manufacturing sector, then deindustrialization does occur.

This paper chooses to analyse this angel on the reason that the majority of people regard the term "deindustrialization" in terms of declining manufacturing performance, just like what (Rhodes, 1988) said when he was asked about why the term deindustrialization -in relation to the UK's economy- is being emphasized on manufacturing sector?. He answered that this emphasis is given on manufacturing because the UK's economy and also other advanced countries has relied heavily on manufacturing activities as a source of net exports and employment (Rhodes, in John Allen & Doreen B. Massey, 1988). This is in line with the historical perspective of the United States that manufacturing has been the foundation of the nation's economic and national security and as vital engine of economic growth, generating good jobs and guaranteeing a high standard of living for America's working families (Bob Baugh & Joel Yudken, 2006).

The question then arises whether if manufacturing industry collapses, it implies the collapse of the UK's economy? He said that if Britain had sources of net exports which were growing rapidly, then the relative decline of manufacturing industry would not matter, but the growth in net exports of service and food can not be relied on to replace the loss of manufacturing and oil net exports and secure further growth sufficient to achieve full employment (Rhodes, in John Allen & Doreen B. Massey, 1988). However, according to (Robert Rowthorn & R. Ramaswamy, 1997), they said that deindustrialization which is indicated by the decline in labour employed by manufacturing sector, but then absorbed by the service sector will not matter and will not be problem in the advanced countries.

Deindustrialization in the advanced countries is simply the natural outcome of successful economic development and is generally associated with rising living standards. This view has been supported by empirical evidence that productivity in manufacturing industry has grown faster than productivity in services, though the people employed in that secondary sector decline, as result of changing structure of employment and value added. Assuming that such productivity patterns continue, the service sector will inevitably have to keep absorbing an ever greater proportion of the workforce just to keep its output rising in line with manufacturing (R. Rowthorn. & R. Ramaswamy, 1997), however this view has been challenged by (Bacon and Eltis, 1976). They said that this labour productivity relationship is not really true, in fact the non market sector has not only deprived the labour from manufacturing sector, but also deprived the finance necessary for investment channelled in that secondary sector. Thus the money which previously has been flowing and channelled into investment in manufacturing sector and has been reinvested in that sector, has now been paid out in taxes to support the non market sector namely the service sector. In this case the growth of services in the economy will only put severe constraints on economic growth (R. Bacon & W. Eltis 1976). However, I tend to go along with the view of Rowthorn & Ramaswamy that as long as the productivity in service sector is to keep absorbing labour just to keep its output rising in line with the increased productivity in manufacturing industry, then nothing has to be worry about the deindustrialization, thus the increasing productivity level in industry and the propensity toward a service economy will occur as country becomes richer (D. Bell, 1974). He further described a post industrial society as a society that incorporate three major components; in economic sector, in technology and in sociological term. In economic sector, the coming of post industrial society is marked by the massive shift of employees who are engaged in manufacturing industries to one in which workers are predominantly employed in the service sectors and in white collar job. In this sense, the industrial society gradually would be transformed into the service society and there exists an expanding service economy with the declining industrial society. In technology, there exists the development of new scientific based industries along with an increase of the importance of research institutes and universities. In other word, with technology there will emerge and come up with new inventions, innovations and policy formulation in the products as well as in the methods of how the things have to be produced or have to be done. In sociological terms, the post industrial society is a society in which expertise and technical competent provide the basis of social ranking. The higher the expertise and technology someone has, the higher his or her social ranking will be. It is no doubt that in this type of society the science, knowledge, technology and information are the primary determinant of the society.

To summarize, I would like to quote from S.M. Shafaeddin that he said in (S.M. Shafaeddin, 2005);

> *One would expect that in the process of economic development of a county, first the share of the manufacturing (secondary) sector in GDP would increase (and the share of the primary sector decline) up to a certain point before it declines (Chenery and Syrqin, 1985). Such a decline, together with a decline in the share of the sector in employment, normally takes place when a country reaches a certain level of development in terms of per capita income (around US $12000). In such cases "... deindustrialization is simply the natural outcome of successful economic development and is generally associated with rising living standards" (Rowthorn and Ramaswamy, 1997).*

On the other hand, **deindustrialization in developing countries** has to be taken seriously and can be disaster for the national economy, as many people who have lost the job from manufacturing industry could not easily be absorbed in the service sector. This deindustrialization also create difficulty within manufacturing sector which is not mature enough and has not reached the phase of industrialization or industrialized countries like what the UK has experienced with industrial revolution. S.M. Shafaeddin defines deindustrialization as a premature decline in the ratio of manufacturing value added over GDP or *MVA/GDP ratio* without recovering. It is due to the re-orientation of the production structure of the economy from import substitution strategies towards production on the basis of static comparative advantage due to trade liberalization. In addition, in some cases in developing countries commodity boom resulting from a price jump, e.g. the case of oil exporting countries in the 1970s and the early 1990s, has led to the decline in the share of manufactures in GDP and employment due to so-called Dutch disease (S.M. Shafaeddin, 2005).

Although there is no general agreement on the definition about the term deindustrialization in the case of developing countries, most of the study has shown the hypothesis that trade liberalization has led to deindustrialization in many developing countries. For example, in the case of sub-Saharan Africa, Bennell (1998), Shafaeddin (1995), Noorbakhash and Paloni (2000) and Thoburn (2001) concluded that trade liberalization has led to de-industrialization in many countries. Stein (1992) also argued in favour of the hypothesis. By contrast, Tribe (2000), Jalilian and Weiss (2000) and the World Bank (1994) argued against the hypothesis (S.M. Shafaeddin, 2005)

R.N Gwynne has used the terms deindustrialization in referring to the declining manufacturing output and employment. The study has been conducted during the period 1974-1984 in Chile (R.N Gwynne, 1986).

After examining the various definition and theories about the deindustrialization in advanced countries as well as in the developing countries. This paper will not take the term deindustrialization in term of declining employment in manufacturing industry as this could be occurred because of changing structure of employment and value added, the changing of structure of production modes which require less employees to produce the same amount or even to produce more produce and more goods and commodities as result of technical efficiency and the state of the art technology being used in the production processes. This paper will take the term deindustrialization in term of declining share of manufacturing industry to the national output or GDP from the period 1996-2006. Although the data show that the share of manufacturing industry to GDP has been cyclical or stagnant during the last 11 years (1996-2006), there are some sub sectors of manufacturing industries which is really undergoing the process of deindustrialization indicated by their declining share to GDP from year to year. This declining share of sub sectors in manufacturing has been offset by the increasing share of the service sector to GDP year by year and followed by the construction sector. These phenomena will be elaborated in the analytical chapter. This paper has chosen this term of deindustrialization on the ground that declining share of manufacturing industry to the national output or GDP has posed serious problem to the nation economy as whole. If this phenomenon of declining the share of the manufacturing industry to GDP is persistent and has not been tackled and handled in proper way, there will never be well-built manufacturing industry in the country which is the major driver of productivity growth and technological innovation. Since a country will not be able to rely on the primary products in developing the national economy and raising their living standard in the long run, it has anyway to develop and rely on its well-built and resilient manufacturing industry to be able to compete globally before moving to the service industry.

2.2. Reason of Deindustrialization

The phenomenon of deindustrialization and what account for deindustrialization have been given a greater attention and have attracted many people to lively debate as to whom and what is responsible for it. This is because deindustrialization has consequences on structural change in a country's economy and needs structural adjustment to put the economy in the right track of growth and development in order to achieve high standard of living, economic well-being and the welfare of the people. I would like to explain the reason of deindustrialization firstly pertaining to the advanced countries. Deindustrialization in advanced countries has nothing to worry about as it is merely feature of successful economic development followed by rising living standard. In this case deindustrialization occurs as result of rising productivity in manufacturing industry followed by the massive movement of employment from doing job in secondary sector to doing job in tertiary or service sectors. The reason of this massive movement of employment is due to what economists call **Engel's Law**.

This is **the case of deindustrialization in advanced countries**. There are two factors that can explain this movement of employment. The first is from the demand side, which states that the relative amount of income that an individual spends on food declines as his or her income rises. In practice, this means that, as economies industrialize, people spend proportionally less on food and proportionally more on manufactured products and services. The second is from the supply side, which states that the rapid growth of productivity in agriculture, as innovations make it possible to produce more food with ever fewer workers, leads to declining employment in that sector. The combined effect of these demand- and supply-side factors is a large-scale and massive shift of employment from agriculture to manufacturing (Rowthorn. R & Ramaswamy R, 1997).

This is in line with the thesis of the coming of post industrial society where people start moving from doing job in secondary sector to doing job in tertiary sector. This shift is due to two processes:

> First, with the economic development, "as real income per head increases, it is quite clear that the relative demand fro agricultural products falls all the time, and that the relative demand for manufacture first rises and then falls in favour of services".
>
> Second, given higher relative productivity of in the industrial manufacturing sector, "stationary relative demand for manufacturing products would lead to a decreasing proportion of the labour force

employed therein", even when the relative demand for manufacturing products is increasing, we still generally expect that in the long run, a decreasing proportion of labour force employed there in will eventually happen.

In this case when the productivity grows and the industrial economies mature, one should expect that in the normal course of economic development, secondary sector will contract while tertiary sector will expand in the time of rising demand for services (A.S. Alderson, 1999).

The second reason or another factor that may have contributed to the phenomenon of deindustrialization is foreign direct investment. Although Neil Fligstein argues that the link between deindustrialization and globalization is weak, in the sense that the changes in the world economy are much smaller, more gradual, and unevenly spread across societies than the globalization thesis suggests, especially the links between globalization and its alleged negative outcomes. He further says that the rhetoric of globalization has more to do with the U.S. and changes in its political economy than changes in world trade (Neil Fligstein, 1998). However the debate is, but the fact is that, this foreign direct investment exists as result of globalization which refers to the worldwide economic integration of many formerly separate national economies through free trade and free movement of capital mostly undertaken by multinational corporations. This move has been an integral part of corporate strategies designed not only to restore acceptable level of profit which has reduced or squeezed in the domestic level but also in search for lower labour cost in abroad countries to generate higher and higher profit. In other word, foreign direct investment is no longer undertaken by multinational corporations in an effort to complement domestic investment and production but it appears to replace it. Since many firms are going abroad to put their capital and investment in search of lower labour cost and higher profit, the result of the growth of direct foreign investment has been deindustrialization. This relocation of manufacturing production through foreign direct investment activity by multinational corporations in abroad countries can certainly contribute to the poor performance of manufacturing industry in home countries resulting domestic manufacturing job losses, as in the case of the

United Kingdom in the period of 1972-1983. This is what economists call the direct labour displacing effect of direct foreign investment (A.S. Alderson, 1999). The link between globalization and the deindustrialization in the advanced industrial societies has been examined by Alderson A.S, employing a pooled time-series of cross-sections data set that combines observations on 18 OECD nations across the 1968-1992 periods. Fixed-effects regression models that control for unmeasured country-specific effects reveal the support for arguments that implicate foreign direct investment and North-South trade in the declining percentage of the labour force employed in manufacturing in the OECD countries (A.S. Alderson, 1999).

The third reason or another argument of why direct foreign investment may contribute to deindustrialization is that capital outflows from foreign direct investment may over time move nation's economy into "debt trap" in the perspective of developing economies or "wealth trap" in the perspective of developed economies (R.E. Rowthorn & J.R. Wells, 1987). In this sense, there exists the automatic process where a country which is a capital exporter may become a rentier nation, as the capital outflows may turn into real inflows of profit from abroad which outrun the amount of the capital outflows of foreign direct investment. This process is likely to experience overall net positive effects on the balance of payments that may cause an increase in the exchange rate of its currency as the profit generated from abroad that grows at faster rate than the domestic economy is to be used to import manufactured goods (North-South trade) which in turn lead to deterioration of its manufacturing trade position and ultimately its industrial manufacturing sector if its economy is in a situation where it can not expand to meet the extra demand coming from the income inflows. In the long run the effects of foreign direct investment and North-South trade will be a weakening of manufacturing sector with loss of job and deindustrialization (G. Ietto-Gilllies, 1992). This is in line with the view of deindustrialization that the loss of high wage manufacturing jobs is due to foreign trade and is major cause of stagnating and declining income amongst advanced economies workers, as they are unable to find replacement jobs with similar wage (P. Krugman, 1996).

In addition to that, direct foreign investment will likely raise the rate of return on financial investment in home countries, because multinational corporations generally enjoy higher rate of return when they invest in abroad countries. This behaviour will have raised the marginal rate of return required on capital formation and accumulation. Similarly this behaviour will be followed by demand for high rate of return in service sector, particularly in financial services, and consequently high rate of return in service sectors may have raised the marginal rate of return in manufacturing sectors. Therefore direct foreign investment and North-South trade then may contribute to deindustrialization, as it may raise the required marginal rate of return on domestic investment, shift investment from manufacturing o services, and reorient investment away from real investment toward financial investment (A.S. Alderson, 1999).

In the case of developing countries, deindustrialization is not the outcome of successful economic development, but rather it is a disaster for the national economy. A developing countries like South East Asian countries can lose their industrial manufacturing jobs directly as a result of such economic shocks to the system like what happened in 1997 exacerbated by the political upheaval in the case of Indonesia, when the severe economic crisis hit South East Asian countries resulting in precipitous increase in the real exchange rate or depreciation of domestic currency caused by the financial problem. This very sharp depreciation in domestic currency has forced the debtors to pay higher in real amount. This crisis has forced many people to lose their job especially from manufacturing sector, as this sector has been absorbing and employing a lot of people during 1980s after the oil boom and in 1990s just before the crisis severely hit Indonesia. Ten years after the crisis the performance of manufacturing industry is still very poor indicated by lower and decreasing rate of growth of manufacturing sector, lower and decreasing rate of labour absorbed in that sector as well as lower and decreasing rate of productivity. This phenomenon of deindustrialization in developing countries is mainly due to the liberalization.

Liberalization is the major cause of deindustrialization in developing countries, as most of the manufacturing industries in developing countries are not mature enough and have not reached to the stage of maturity to compete globally and in the world market. It is therefore indeed in need of the government protection for those industries especially infant industries for the certain period of time to reach the stage or near stage of maturity and fundamentally strong enough to compete before the government gradually lifts such protection and let them stand on their own resources. Liberalization can be in term of trade and financial liberalization.

First is trade liberalization which requires market openness and embarks to the market system, free flow of capital and goods and services amongst countries, no subsidies given to the domestic firms and industries, there is no restriction in term of quota and tariff and all firms and industries have to compete in the global market. This fist competition will certainly remove the ineffective and inefficient firms and industries out of market system which sound very good, but in general the firm and industry which is effective and efficient is the one that has reached to the stage or near the stage of maturity. In this case the opinion of S.M. Shafaeddin from United Nations Conference on Trade and Development (UNCTAD) is very interesting, he said that (S.M. Shafaeddin, 2005);

> *It is no doubt that trade liberalization is essential when an industry reaches a certain level of maturity, provided it is undertaken selectively and gradually. Nevertheless, the way it is recommended under the Washington Consensus, is more likely to lead to the destruction of the existing industries, particularly of those that are at their early stages of infancy without necessarily leading to the emergence of new ones. Further, any new industry that emerges would be in line with static, rather than dynamic, comparative advantage. The low income countries, in particular, will be locked in production and exports of primary commodities, simple processing and at best assembly operation or other labour intensive ones with little prospect for upgrading.*

He further said that international trade and trade liberalization has resulted in deindustrialization in least developed countries. In addition to that, the UNCTAD economists said that that the liberalisation policies has resulted in deindustrialization in many of the least developed countries (LDCs), particularly in Africa and there is need for an alternative approach to trade reforms.[2]

Second is financial liberalization especially with regard to the commercial external borrowing and portfolio investment. Without proper regulation, control and smart setting, -for example; by imposing tax on foreign loans in the case of the commercial external borrowing or by imposing exit levies that are inversely proportional to the length of the stay for the capital inflows, meaning that capital which leaves the country sooner is subject to a higher tax-, the commercial external borrowing and portfolio investment could lead the developing country's economy into financial crisis. This is because there are some significant negative economic and social effects of financial liberalization, which are often so large that they significantly outweigh any benefits in terms of access to more capital inflows. More specifically financial liberalization for developing countries can create exposure to the following kinds of risk: a propensity to financial crises, both external and internal; Financial fragility and a deflationary impact on real economic activity and reduced access to funds for small-scale producers, both urban and rural. This in turn has major social effects in terms of loss of employment and more volatile material conditions for most citizens (J. Ghosh, 2005). Moreover this financial liberalization which increases financial fragility and deterioration in the economic performance of the developing countries has made the South East Asian Nations suffer from the financial problem during the 1997/1998 monetary crisis which led to the poor performance of their industries and loss of employment. For example, in Indonesia, many investors has re-evaluated their investment and drawn back their capital in the time of crisis, especially those who invested in the portfolio investment, indicated by the sharp decline of nearly 50% of the composite of stock price index at the Jakarta Stock Exchange (A. Nasution, 1998). Concomitant with this sharp decline in the composite of stock price index at the Jakarta Stock Exchange, the financial problem has also stricken the big corporations, conglomerates along with the government where they are not able to pay their debts in due time as their real amount of debt has been increasing due to their currency depreciation as result of the deterioration of the exchange rate.

This capital outflows, high interest rate and sharp depreciation of domestic currency have occurred as result of financial liberalization which in turn leads to the deindustrialization.

Another reason for deindustrialization in developing countries is the **deterioration of the exchange rate**, when the domestic currency depreciates very dramatically against the major currency in the world, because of such economic shock which made the developing countries are quite difficult to recover from this shock financially. Assuming that the developing countries are very much dependent on the foreign loans in their development and their industries are also very much dependent on the import contents in their operation, the precipitous decline in domestic currency –caused by shock- will certainly harm their economic performance, especially when their payment of debts is in due date while the industrial sectors are not able to operate as result of higher price on import contents which they could not afford anymore to purchase in the price levels where they can usually compete in the market. This circumstance will only produce layoffs, idle manufacturing plants and factories, decline in the national output as well as in employment which refer to and lead to the case of deindustrialization.

2.3. Growth Consequences

Deindustrialization as it is defined in the above definition that is concerned with the declining share of manufacturing industry to GDP, has its consequences in advanced countries as well as in developing countries.

In advanced countries, deindustrialization has positive consequences, as it is not necessarily the symptom of economic failure of their manufacturing sectors for the economy as a whole, but it is simply the natural outcome of the successful economic development and is generally associated with rising living standard and moving employment from manufacturing sectors to service sectors. This is because one would expect that in the process of economic development of a county, first the share of the manufacturing (secondary) sector to GDP would increase up to a certain point before it declines while the share of agriculture (primary) sector declines (Chenery and Syrqin, 1985 as quoted by S.M. Shafaeddin, 2005). He further said that such a decline, together with a decline in the share of the sector in employment, normally takes place when a country reaches a certain level of development in terms of per capita income around US $12,000. In such cases "... deindustrialization is simply the natural outcome of successful economic development and is generally associated with rising living standards" (Rowthorn and Ramaswamy, 1997 as quoted by S.M Shafaeddin, 2005). This massive movement of employment from the manufacturing sector to the service sector is merely the natural outcome or the result of successful economic development when productivity grows and industrial economies mature. With the economic development, as real income per head increases, it is quite clear that the relative demand for agricultural products falls all the time, and that the relative demand for manufactures first rises and then falls in favour of service. Given higher relative productivity in the industrial manufacturing sector, "stationary relative demand for manufacturing products would lead to a decreasing proportion of the labour force employed therein", even when the relative demand for manufacturing products is increasing, we still generally expect that in the long run, a decreasing proportion of labour force employed there in will eventually happen. In this case when the productivity grows and the industrial economies mature, one should expect that in the normal course of economic development, secondary sector will contract while tertiary sector will expand in the time of rising demand for services (A.S. Alderson, 1999).

In developing countries, however deindustrialization has negative growth consequences, such as widespread unemployment, declining living standard as well as prevailing poverty in the society resulting from decline in manufacturing employment and output, decline in productivity and poor performance of the country's industries. These phenomena have been exacerbated by the inability of other sectors including service sector to absorb labour force resulting from their losing job in manufacturing sectors causing higher level of unemployment and declining living standard as well as widespread poverty. This is because growth in other sectors that is non-manufacturing is not great enough to absorb the surplus labour, even with retraining and relocation (G.F. Summers, 1984). Loss of a job usually creates an economic crisis in the worker's household and is generally accompanied by psychological costs to the worker and family members, especially when they could not find a comparable replacement job with the same wage or salary to keep their living standard the same as previously they have enjoyed. In this case, cutback on expenses is very common sense and more likely to be the option, even it is often followed by the postponement or forgoing of basic needs such as health care, clothing purchases, nutrition, recreation, home maintenance, and family vacations or perhaps the worst scenario is they would likely not be able to secure their foodstuff even to the subsistent level. Moreover the history of development and growth in South East Asian countries was propelled by the manufacturing industries, since they have been the foundation of the South East Asian economy generating a lot of employment, good payment of job and raising living standard. In addition they are also vital engine for growth and development.

Chapter 3
BACKGROUND

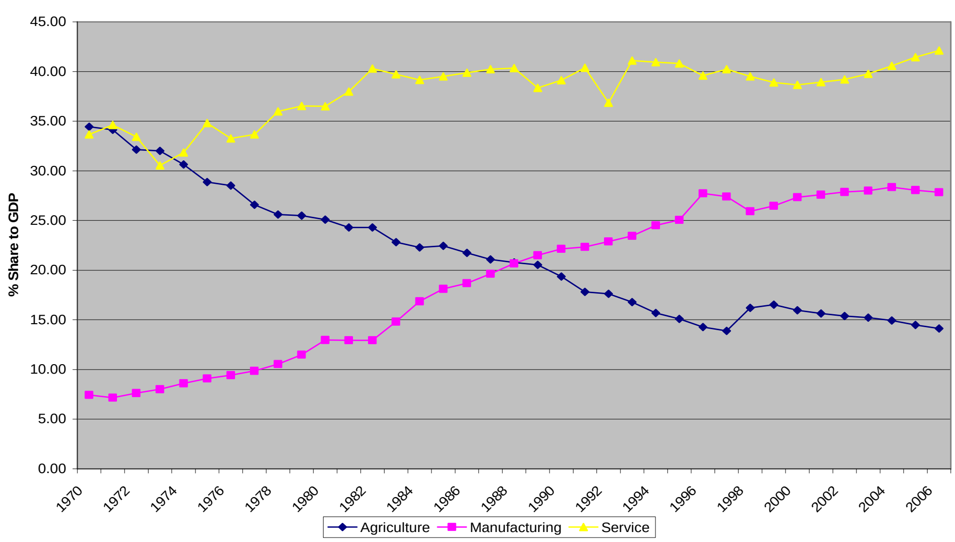
3.1. Evolution of Economic Structure

It is no doubt that the change of economic structure is determined by the process of economic growth and development and history has shown us that the main driving force for that changing of economic structure is technological progress (H. Pan, 2004). Very long time ago before the coming of post industrial society, almost all countries in the world had been experiencing pre industrial societies where their economic structure is based on agricultural sector. Indonesia is no doubt falls in the category of agrarian society after its independence in 1945, the time when people are overwhelmingly engaged in the extractive industries such as fishing, mining, forestry and agriculture, their economic structure is developed within limited production function and relies heavily on agricultural sectors and very limited use of technology. Most of their works depend on the seasons, the nature of the soil and the amount of water. The rhythm of life is shaped by those contingencies, as result their productivity is also low. This low productivity combined with the large population has contributed to the high percentage of underemployment and lower standard of living in Indonesia and most agrarian society. In the 1970s, Indonesia began to develop its economy and move away gradually from agricultural economy in favour of developing its manufacturing industries, hoping that someday it will move to the industrialized nation. The time came when the price of oil was at high level and Indonesia fortunately was the oil exporter at that time. Some of the oil revenues were channelled into investment to develop the industrial sector to assure the sustained growth after the revenues gained from selling oil becomes depleted. This favour in developing industrial sector did not make the government set aside the agricultural sector, but the concern was developing industrial sector alongside with the s self sufficiency in the provision of food and become available to the whole people of Indonesia.

This concept of traditional societies is not static concept, in the sense that they are also able to develop in terms of their skills and knowledge, either through learning by doing or learning from others in the form of transfer of technology and skills through interaction with outside people. This development of skills, knowledge and technology will transform that societies from agrarian societies or pre industrial societies into industrial societies.

In the case of Indonesia, it has failed to move from agrarian society to industrial society just as its economy collapsed after being severely hit by the economic crisis in 1997. However before the crisis the Indonesia's economy has tried its best to move gradually from agrarian to industrial economy. This can be seen from the graph below that the structure of economy of Indonesia historically has been dominated by the agriculture, as the country is rich of natural resources and has a vast range of mineral resources, which have been exploited rapidly over the past three decades, enabling the mining sector to make an important contribution to the economic development and balance of payments. The manufacturing sector began to expand very rapidly in the mid-1980s. In 1989, for the first time the share of manufacturing industry (21.49%) to GDP has exceeded that of the agricultural sector (20.54%), while the share of the service sector has remained relatively stable after the year 1982.

The Structure of economy of Indonesia (GDP Composition)



Source: World Bank Database Indicator and BPS

From this year 1989, the structure of economy of Indonesia had changed from the economy that was dominated by the agricultural economy to the economy that is dominated by the manufacturing economy. This expansion of the manufacturing sector in the mid 1980s has been supported by the policy set up by the government, in the sense that in the mid 1980s Indonesia has made significant changes to its regulatory framework and began to eliminate regulatory obstacles to economic activity to encourage economic growth and create profitable investment climate in such a way, so that many investors were attracted to invest in Indonesia, from private investment and domestic investment as well as from foreign. As result there were a lot of investments especially in manufacturing sector which grew very rapidly and the new class of entrepreneurs were expanding alongside with the flow of investment in large scale in the private sector. This growth in manufacturing industry has changed the structure of the economy of Indonesia which was dominated primarily by the agriculture to heavily reliant on manufacturing industry.

The growth rate of manufacturing sector in the mid 1980s up to the 1997 is no doubt very high; it recorded 11.68% which is higher than the average annual growth rate of Indonesia's GDP which recorded only 7%, although its share to GDP has been relatively stable to 27-28% from 1996 up to 2006. In contrast the share of the service sector tended to increase year by year starting from 2000 up to 2006 after being relatively stable in the mid 1980s, while the share of agricultural sector has been decreasing since 1970s up to the 1997. When Indonesia was severely hit by the economic crisis, the share of agriculture to GDP rose in 1998. This rise of the share in agricultural sector was concomitant with the decline of the share in manufacturing sector suggesting that there might be people who have been laid off or forced out of work in manufacturing sector, were forced to earn their livelihood from agriculture and the other have been left unemployed since the service sector is still unable to absorb them into work, and only those who have certain skills and abilities that could be absorbed in the service sector in the time of the breakdown of the manufacturing industry in Indonesia.

Although the share of the manufacturing sector has been relatively stable in 27-28% after the crisis, there has been indication that this economic structure might change in the future if the government has not paid great attention to the restoration of the national manufacturing industries, making them more competitive, innovative and efficient in their production processes to raise further the share of the manufacturing industry to GDP. This effort to upgrade the performance of the manufacturing industry is essential, since the share of sub sectors in that manufacturing industry to GDP has really decreased while the share of the service industry to GDP tended to continuously rise, especially from the year 2000 onward, the share of the service sector has really increased.

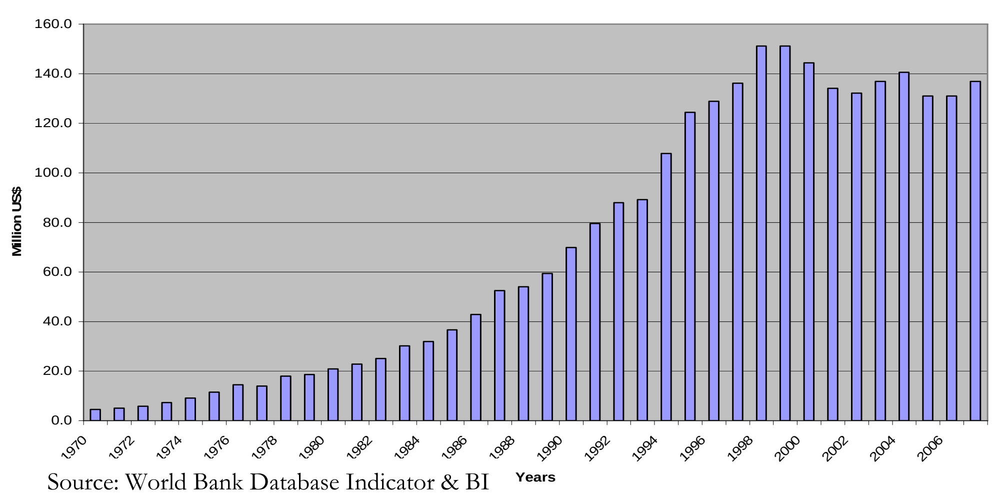
Looking at the data and the graph above, it is very obvious that the growth and development of the manufacturing industry in Indonesia was extremely very high. Its share to the national output or GDP has jumped from 7.43% in 1970 to 27.41 in 1997, just before the crisis hit Indonesia, then it went down to 25.92% in 1998. It was believed that Indonesia would have been industrializing and becoming one of the Southeast Asia's successful highly performing and newly industrializing economies, following the trail of the Asian tigers Hong Kong, Singapore, South Korea, and Taiwan, if the crisis had not severely hit Indonesia and destroyed its economy especially its manufacturing industry. However the crisis in 1997 had nullified and put off Indonesia to successful take-off to the stage of industrialization and brought back Indonesia into the phase of pre-industrialization. This empirical evident and the remarkable growth of Indonesia's economy is sufficient to say that Indonesia before the economic crisis had really made big endeavour and effort to achieve industrialized nation which was indicated by the high growth of its manufacturing industry which recorded 11.68% on average per year in the mid-1980s above the GDP growth rate which recorded only 7% on average per annum. Then the times of the crisis came to Indonesia and sink the economy into trouble and collapse, leaving many ailing manufacturing industries left idle without any production activities resulting in output drops, and as consequence led to the decline of the manufacturing share to GDP to 25% in 1998, before it relatively stabilize to 27-28% in 2000s up to 2006.

Having failed to become the industrialized nation, Indonesia now facing declining performance and growth deceleration of the manufacturing industry which if the government has not done very seriously to restore this sector, it was worried that Indonesia would face difficulty or would never become industrialized nation, taking into account that the pattern of the economic structure in the year 2000s tends to favour the service sector without having any increase and significant development of its manufacturing industry. In this case the share of the service sector to GDP tends to continuously rise while the share of manufacturing sector tends to be stagnant, but the share of sub sectors in manufacturing industry to GDP has been really showing declining trend year by year the same as that of the agricultural sector whose share to the GDP tends to decrease as well. This is the evolution and the changes of the Indonesia's economic structure which once was dominated by the agricultural sector before being taken over by the manufacturing sector in 1989, when the share of manufacturing to GDP succeeded that of agriculture. Since that point Indonesia has undergone major structural change in its economic structure, where the economy was dominated by the manufacturing industry. However in the year 2000s, the pattern of the economic structure is in favour of the service sector when its share to GDP tends to rise year by year compared to that of the manufacturing sector whose share to GDP is being stagnant to 27-28% while the share of the agriculture sector continuously decrease along with some of the sub sectors in manufacturing industries which is also showing the decline of their share to GDP year by year.

3.2. Growth History

Before being severely hit by the economic crisis in 1997, Indonesia has been viewed as one of the Southeast Asia's successful highly performing and newly industrializing economies, following the trail of the Asian tigers Hong Kong, Singapore, South Korea, and Taiwan. Indonesia has been considered the most promising country where many investors were competing to put their capital making investment and profit in Indonesia as its growth in the past several decades was averaging 7% between 1970-1997. However the crisis reversed the scenario and has forced the foreign investment community to quickly re-evaluate their investment in Indonesia and decided to leave Indonesia with their capital resulting in negative growth of Indonesia's GDP of -13.1%, a rise in the number of people living below the poverty line from 34.5 million (17.7 percent of total population) in 1996 to 49.5 million (or 24.2 percent) in 1998 (Ari A. Perdana & J. Maxwell, 2004), as well as an increase of unemployment of 15-20% and putting back Indonesia into backward and developing country. Indonesia's high rate of growth was initially facilitated by the high price of oil in the world market in the 1970s and 1980s. During that time period, Indonesia which is oil exporter has experienced oil boom especially during the period of 1974-1977 and 1978-1982, when the price of oil was very high. There was clear recognition that the dependence on oil revenue will not be sustainable in the long run growth and that oil revenues were a temporary blessing, as this oil revenues may well affect the behaviour of the recipients, such as reluctance to working hard, becoming spoiled as people receive money without producing more good and services, in addition to that the oil resource is limited in the sense that a country like Indonesia would not be able to extract its oil indefinitely without limited time period. This consciousness has produced the policy of directing and channelling some of the oil revenues into investment in order to assure sustained growth after oil becomes depleted. Although during the period of oil boom Indonesia has got a lot of revenues from selling its oil, this income generated from selling oil could not help Indonesia to reduce its external debt, but the debt always keep rising year by year. This rising debt can be seen from the graph below.

Indonesia Total External Debt

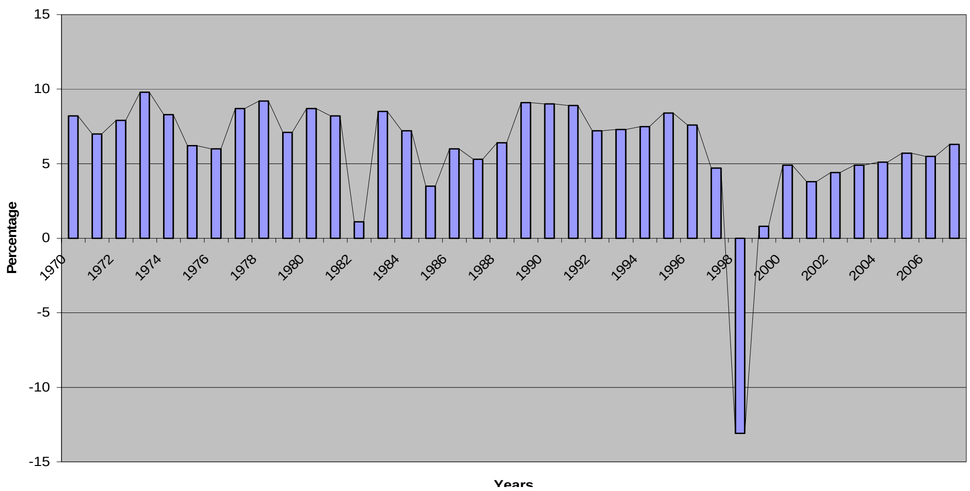


Source: World Bank Database Indicator & BI

This dependency both on oil revenues and external debt in searching for growth and development has penalized Indonesia economy. Firstly in 1982 when the oil revenues depleted, its growth felt very dramatically from 8.8% in

1981 to 1.1% in 1982. Secondly in 1998 when the severe economic crisis hit Indonesia in 1997, the growth rate was falling down very sharply from 4.7% in 1997 to minus 13.1 % in 1998, before it gradually rise to positive growth, though it was very much helped by consumption driven growth (See Graph on Indonesia GDP Growth Rate).

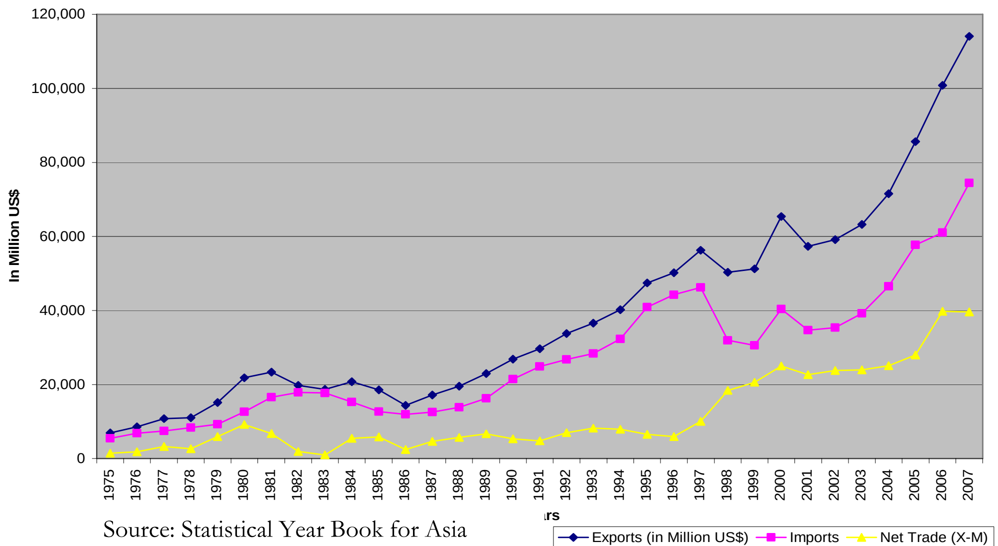
Indonesia GDP Growth Rate



Source: World Bank Database Indicator and BPS

This fact has forced the government to consider another source for the national development and boosting the growth, it began to promote manufacturing industry to boost the growth and support the development of Indonesia's economy especially from that of private sectors by setting de-bureaucratization, deregulation and to a greater extent liberalization and fully liberalized in 1997. This policy has created a bit healthy economy and paved the way to the economic growth higher to the average of annual growth rate of 7%. However in 1997 when the severe economic crisis came and hit Indonesia, the manufacturing industries were not able to stand against that crisis resulting in their breakdown and collapse, making the manufacturing industry performance very poor, being unable to compete in the market, losing their market share and unable to pay their debt, since most of them were trapped by huge amount of debt and the financial problem which made them even become more devastated and in deeper problems. This crisis was exacerbated by the presence of IMF who was initially invited to rescue Indonesia economy, but then their prescriptions appeared to be inappropriate to save Indonesia economy and made the economy even worst, especially when the government was forced to lift the subsidies in order to liberalize the economy and embark on the liberalization and on the market system. Although Indonesia has been experiencing positive trade balance on the average in which its exports is more than its imports, these surpluses did not provide sufficient exchange for debt repayment. The data below shows that Indonesia always enjoys surplus or positive balance in its foreign trade.

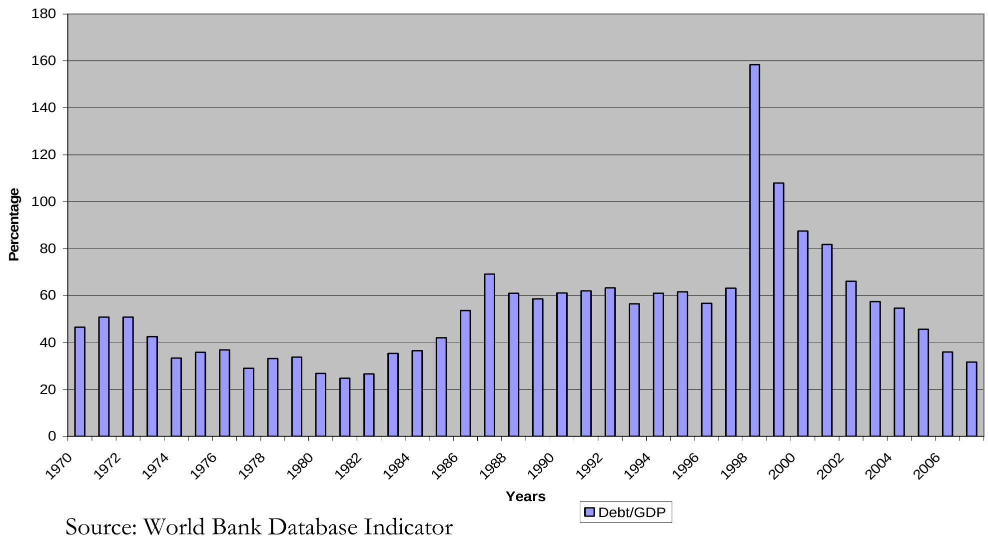
Indonesia Foreign Trade



Source: Statistical Year Book for Asia Pacific, UN Publication (ESCAP) & BPS

However there is consciousness that the growth will not be sustainable in the long run if it is financed by and heavily dependent on debt. Indonesia then started to reduce the debt and finally since 2000 Indonesia has made progress in managing its burden and successfully reduced its external debt to GDP ratio to 31.6% in 2007, as seen the graph below;

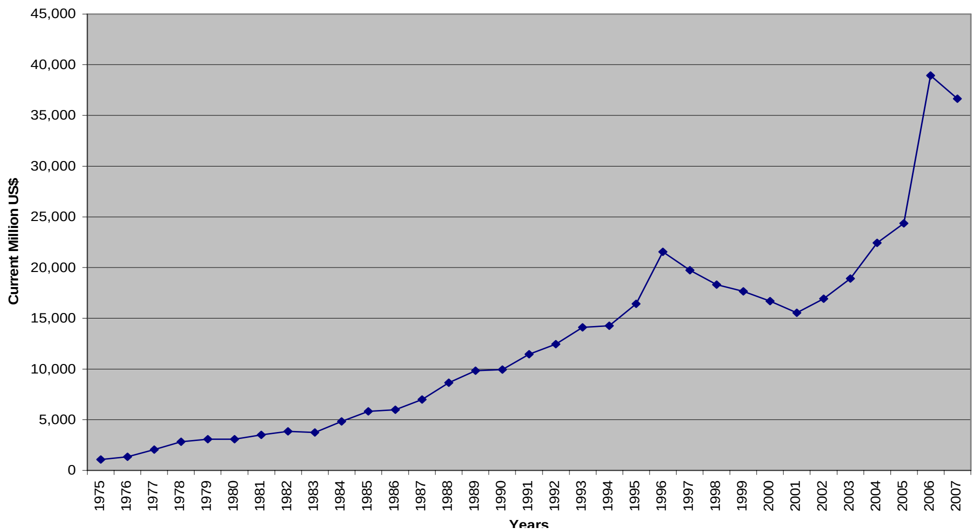
Indonesia External Debt to GDP Ratio in Billion Current US$



Source: World Bank Database Indicator

This is in line with report released by the World Bank that Indonesia has managed its government debt burden well; referring to the ratio of public debt to GDP has fallen from 100 percent (1999) to 40.8 percent in 2006 and is expected to decline to 30-35 percent by 2009. However if we look at the total debt service in which Indonesia has to repay, the figure indicates that Indonesia has to worry about the continuous increase of its debt service since debt service is indeed burden to the economic growth and development. By this I mean that the income generated in the economy which supposed to be channelled into investment, economic growth and development, it must be allotted to repay the principal and its interest. The graph below presents the continuous rising of Indonesia total debt service in general.

Indonesia Total Debt Service

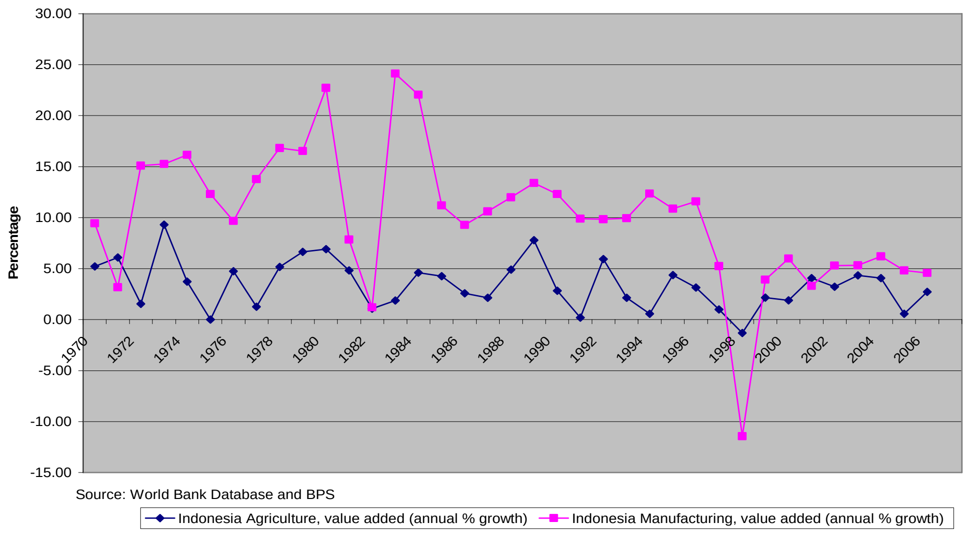


Source: World Bank Database Indicator & BI

This figure has to be worried about and taken carefully as the surpluses generated from foreign trade (exports – imports) do not provide sufficient exchange for debt repayment, which in turn becomes burden to the economic growth and development. This pattern of growth and development is not sustainable in the long-run, where the country's growth and development is mostly financed by the debt and is dependent very much on it, especially a country like Indonesia whose natural resources are very abundant. If the resources could be managed properly for the sake of the people of Indonesia that natural resources will of course be able to feed the whole population without being incurred in huge debt in the effort of improving the economic and human development of Indonesia. They could also be exploited in such a way that can be used to improve and develop the agricultural industry as well as the manufacturing one. This of course has to be supported by the use of modern technology, modernization of machineries and new techniques and efficient ways of production in agriculture and manufacturing as well in service industry.

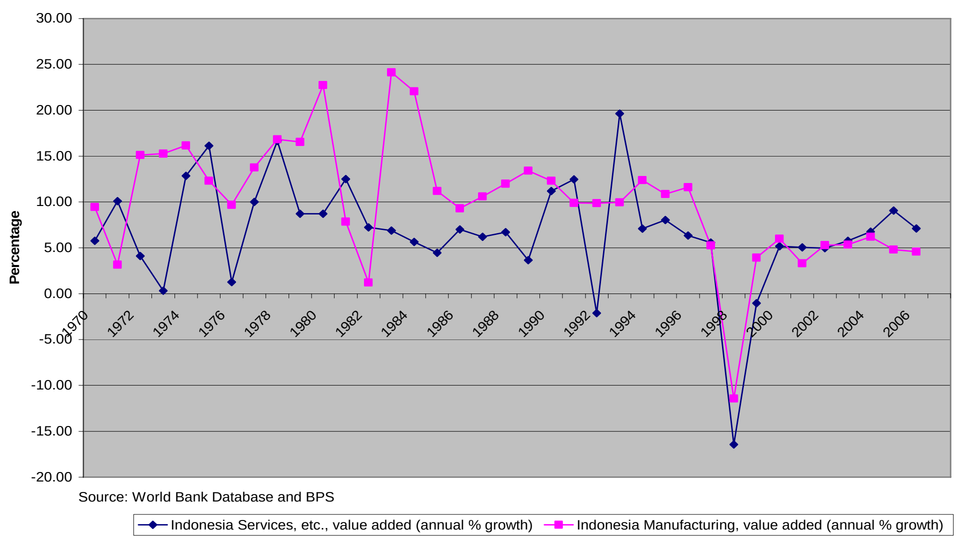
The other growth that this paper will talk about is the growth history of the agriculture, manufacturing and service sectors. Overall the growth rate of manufacturing sector is superior to that of agricultural sector and only in 1998 the growth rate of manufacturing sector is below that of agricultural one, when its growth rate slumped to -13.1. Here is the graph that shows the superiority of the manufacturing annual growth rate over the agricultural sector from 1970 to 2006.

Indonesia Manufacturing and Agriculture Growth Rate



However if the compare the annual growth rate of the manufacturing and the service sector, there is tendency that the growth of service sector supersedes and exceeds the growth of manufacturing sector in the year 2000s, although the period before the year 2000s, the manufacturing growth has taken a lead and was above the service sector on average. This phenomenon is in line with the increasing share of the service sector to GDP while some sectors in manufacturing industry have been experiencing declining share to GDP in the year 2000s.

Indonesia Manufacturing and Service Growth Rate



3.3. Growth Policy

In this sub title, the paper divides the period of the growth policy into two periods; the period before the crisis which can be seen from REPELITA to REPELITA or before the fall of Suharto and the period after the crisis which is the period after the fall of Suharto.

In the mid of 1970s, Suharto came up with the strategy of development which stressed on "**Trilogy of Development**" which resorted on three main elements, they are; a sufficiently high economic growth, improved distribution of income and the fruits of development, and national stability in economic, social and political matters.

In REPELITA I (1 April, 1969 – 31 March, 1974), the economic development has been taking the priority and putting emphasis on agricultural sector by improving agriculture, irrigation, and transportation as well as building industry which can be used to support sustainable productivity in agriculture. **In REPELITA II** (1April, 1974 – 31 March, 1979), the economic development still emphasised on agricultural sector while trying to upgrade the development of industrial manufacturing sector to be able to undertake the production process from raw materials into intermediate goods. In this phase the economic policy was directed to increase the standard of living through better food, clothing, housing, infrastructure, social-welfare benefits, and employment opportunities. **In REPELITA III** (1 April, 1979 – 31 March, 1984), the priority of economic development continued to be in agricultural sector that has to be able to achieve self sufficiency in food especially in producing rice and paddy as staple food for Indonesian people concomitant with the development of industrial manufacture in order to produce final goods by being able to process raw material and intermediate goods into the final ones. In this phase the policy was directed to achieve high economic growth, national stability, and equitable distribution of income. **In REPELITA IV** (1 April, 1984 – 31 March, 1989), in these periods, the economic development has to maintain its stance of self sufficiency in producing rice and food and being able to keep the produce abundant, so that it would be sufficient to feed the whole people and could be reached by all people. In addition to that, the industrial manufacturing sectors were expected to be able to support this sustainability and produce capital goods in highly modern technology and modernization of machineries to process and commercialize the products and goods produced from agricultural sectors as well as from the manufacturing industries. **In REPELITA V** (1 April, 1989 – 31 March, 1994), the priority was still in developing agricultural sectors to the extent that they have to be able to mass produce agricultural commodities not only sufficient for the domestic consumption but also more than enough to export them into the global market, combining with the developmental stage of industrial manufactures, hoping that this secondary sector will be able to absorb high level of employment, raise the people living standard and produce exported goods and commodities in international market. It was hoped that during these periods of five years development plan, Indonesia has laid down the strong foundation for its economy to take off and moving toward industrialized nation. **In REPELITA VI** (1 April, 1994 – 31 Marc, 1999), the government began to encourage foreign investment and liberalize to some extent to abandon policies of high tariff barriers, heavy regulation, and import substitution, before Indonesia has been further liberalized its market as it was dictated by IMF in 1997 which exacerbated and devastated the national economy and plunged into further crisis. This REPELITA VI lasted only four years, since people power has successfully required the president Suharto to resign from his presidency. The fall of Suharto in 1998 has forced Indonesia in period of transition or what is called "Orde Reformasi" 1998-2004 when B.J Habbibie was sworn as the president of Indonesia. Since these periods were the period of transition, the above goals were very difficult to realize and it was not clear as to where the economic development be directed. In addition to that, there has been several changes in the national leaders from the president B.J Habibie (21 Mei 1998 - 20 Oktober 1999) to Abdurrahman Wahid (20 Oktober 1999 - 23 Juli 2001), then to Megawati (23 Juli 200 - 20 Oktober 2004), until the President Susilo Bambang Ydhoyono was elected as the president of Indonesia for the next five year terms.

In the first three REPELITA, Indonesia has been undertaking policy of stabilization in terms of fiscal and monetary policy to stabilize its exchange rate especially when the rupiah appreciated against the US dollar due to the windfall revenue from oil export. Bank Indonesia was compelled to devalue the rupiah by 50 percent in 1978, bringing the exchange rate to Rp625 per US$1 to address the eroding profits of exporters.[3] This devaluation was aimed to make industrial manufacture competitive in the world market, launching soft loan for those who doing businesses in export activities as well as giving special relief for import duties for certain commodities which were aimed to boost export activities.

The next is the period of post oil boom. In 1980s the world has been experiencing economic recession and decline of oil price which affected Indonesia economy that very much dependent on it such as decline in oil revenue and an increase of budget deficit. Having challenged by such situation, Indonesia tried to sustain its economy by boosting non-oil exports, helping continuous expansion of its manufacturing sectors and relying more on domestic resource mobilization to replace its dependent on oil revenue. In 1983 Bank Indonesia was again compelled to devalue the rupiah as response to oil price weakness and declining foreign reserves bringing the exchange rate Rp970 to US$1 (Sheila. Page, 1993). This period was well known of structural adjustment, and amongst those policies was cutting subsidies, implementing tight monetary policy to control inflation, an effort to raise the volume of saving and investment, giving incentive to foreign investment as well as getting permit as easy as possible to set up businesses in Indonesia. Although these markets began to develop gradually, Bank Indonesia continued to confront periodic financial crises that required a more drastic response. The third major devaluation since 1978 was undertaken in September 1986, primarily in response to the decline in foreign exchange earnings through oil exports. The exchange rate rose from Rp1, 134 per US$1 to Rp1, 641 per US$1.[4]

For many years, the government has strictly adhered to policy prescriptions that it has set for itself. These include the principle of a balanced budget, a current account deficit of no more than 2 percent of GDP, and a limit to external borrowing to maintain a debt-service ratio (DSR) of less than 20 percent. Distribution objectives were pursued through a policy of developing eight channels for more equal distribution' that is meant to improve access of the poor to basic health, education and training, job opportunity, credit, etc. A significant portion of the national development budget has been devoted to the agricultural sector, rural development and the provision of basic needs (H. Soesastro, 1999). However this policy prescription that has been set up has not been consistently pursued by the New Order regime, as the external debt rose year by year, inequality increased very dramatically as there is saying "the rich become richer and the poor become poorer". This is because the development was not pro poor development but pro conglomerate development, though Indonesia has successfully made reduction in the numbers of people living under the poverty line, from 70 percent in the late 1960s to 20 percent in the early 1990s (H. Soesastro, 1999). Moreover, the beneficiaries of the growing economy during the New Order regime were the Chinese minority and members of Suharto's own family, whose business interests multiplied with lucrative government contracts and who have been given business facilities and privilege in doing heir businesses.

In 1990s, Indonesia expanded very rapidly; this was followed by the monetary expansion triggered by the increased domestic demand which could not be offset by the ability to increase supply. As result the prices were increase, though the inflation was still kept to the low level due to the subsidies. The dramatic increase in investment activities as well as in consumption has raised money demand as well as causing the rise in interest rate and massive capital inflows especially external debt made by the private sectors and widening current account deficit. Moreover the high rate of GDP growth during the 1990s was mostly associated with the bubble industries, including construction, public utilities, and services in the non-traded sector of the economy (A. Nasution, 1998).

In this phase Indonesia is indeed in need of adjustment because of its weaknesses in its economy and the above indicators have proved enough that fundamental economy of Indonesia was not as strong as predicted before. As result when the financial economic crisis hit Indonesia, its economy collapsed and Indonesia was hit hardest because of overinvestment in non-traded sector and manufacturing industries that required high level of protection. That was the root cause of the crisis. The weak financial system of Indonesia also exacerbated the crisis. The crisis was aggravated further by the political uncertainty that evolved around the departure of Suharto (A. Nasution, 1998).

After the fall of President Suharto, the new era came into power and had to restore the economic turmoil left by the New Order regime. Although the New Order Regime had stepped down, Indonesia still had to comply with IMF through the Letter of Intent (LoI) as it was condition for obtaining loans and the IMF's intention is to liberalize Indonesia in all sectors in the economy. This liberalization policy is very obvious in the Letter of Intent (LoI), from removing trade barrier, quota and tariff, even IMF demanded Indonesia to remove import tariff f on foodstuffs to 0%.[5] Here are among the policy set by IMF, the elimination of consumer price subsidies, removal of utility subsidies, reducing quota and tariff and further trade and investment liberalization. Demanding National Logistic Agency (BULOG) not to control the price of foodstuffs and let it to the market system causing a lot of import of foodstuffs especially rice to Indonesia which at the same time became severe blow to the Indonesian farmers making their purchasing power even lowest. Setting up tight monetary policy to stabilize the exchange rate and t fiscal stance to reduce the fiscal deficit which caused heavy blow to the economy as interest rate rose very sharply and huge capital flight occurred.

This policy of liberalization had actually devastated Indonesia economy and plunged it into deeper crisis. Considering this negative relationship with IMF, Indonesia finally decided to cut the ties in December, 2003. In October, 2004 President Susilo Bambang Yudhoyono was elected with his agenda of achieving prosperity, peace, justice and democracy. At the top of his agenda was a plan for increasing economic prosperity, aiming for economic growth of at least 7% and a revival of small and medium-sized enterprises. He also put forward policies to offer better credit lines, improve labour laws and to sweep out corruption from the top down, reduce poverty, create jobs, increase purchasing power and rebuild infrastructure, invite investment and improve the investment climate such as legal certainties, political stability, law and order, sound tax policies, customs policies, good labour management. I will improve the guarantees to encourage investors to come to Indonesia.[6] In addition to that, he also launched the economic program of pro growth, pro poor and pro employment in his economic policy. In his 100 days term of presidency he tried to design short-term policy action to energize the bureaucracy and announced an ambitious anti-corruption plan in December 2004. He also released a Medium Term Plan focusing on four broad objectives through his administration of the State Ministry of National Development Planning (BAPPENAS) in early 2005 as follows: creating a safe and peaceful Indonesia; creating a just and democratic Indonesia; creating a prosperous Indonesia; and establishing a stable macroeconomic framework for development. His administration then targeted average growth of 6.6% from 2004-2009 to reduce unemployment and poverty significantly. Indonesia's overall macroeconomic picture is stable and improving, hoping that by 2004, real GDP per capita returned to pre-financial crisis levels. [7]

Chapter 4
ANALYTICAL REASON AND GROWTH CONSEQUENCES OF DEINDUSTRIALIZATION

4.1. Has Indonesia Been De-industrializing After Being Severely Hit by the Crisis in 1997?

A strong and well-built manufacturing industry will only exist if it is supported by the industrial society. In other word, there exist harmonious industrial chain between big industries –corporation and conglomerate- and small and medium enterprises from the upstream to the downstream, where the small and medium enterprise could supply the spare part and other goods and services needed by the big corporation whereas the big corporation could strength the existence of small and medium enterprises by consuming their products and making them as business partners, it therefore exists interdependence between them in doing economic activities. This economic and business structure will create competitiveness and technological improvement and innovation between the small and medium enterprises within the national economy and at the same time drive the big corporation and conglomerate to be technologically advanced, competitive and innovative in the world market.

In the case of Indonesia, the above scenario did not occur and when the severe economic crisis comes, nothing could be done to avoid such crisis resulting in manufacturing industry collapse and the national economy as whole. The collapse and growth deceleration of manufacturing industry has been contributing of what is called deindustrialization in Indonesia, together with the collapse of the big corporations and conglomerates, in which their existence were because of the facilities and privileges given by the government in doing their businesses and in control of an access to economic and natural resources. It is therefore obvious when they did not perform well in the time of the economic crisis, deindustrialization did occur together with de-conglomeration in Indonesia. The ailing conglomerates have left their manufacturing plants, factories and subsidiaries lying idle for financial problem and have divested their manufacturing subsidiaries, because they were beset and impinged by large debts. From the very beginning they were very much reliant on their connection to the central power and authority, asking excessive protection through nepotism, collusion and corruption, which made them very uncompetitive with no creativity and innovation in developing their businesses resulting in high cost economy. The real challenge finally came in 1997 when Indonesia has been severely hit by the economic crisis; they lost their competitive edge and their market share even they have been forced to lay off their workers, leaving their manufacturing plants lying idle. This has been indicated by declining manufacturing industrial growth rate, or the pace rate of growth of their output decreased very sharply, declining labour absorbed in manufacturing industries as well as declining productivity per worker. These indicators have proved and paved the way to the case of deindustrialization.

One of the symptoms of deindustrialization is the declining performance and growth deceleration of manufacturing industry. This phenomenon has been engulfing Indonesia economy since the crisis hit hardest in 1997. Although the share of the manufacturing industry to GDP has been relatively stable to 27-28% after the crisis or during period 1996-2006, the data reveal that there are some sub sectors of manufacturing industry which are really undergoing the process of deindustrialization, showing their share to GDP declining year by year after the crisis. This decline is offset by the increase of the share of service industry to GDP. Below is the data [table 1] that show the share of nine industrial origins in the economy to GDP.

Table 1, Ratio to GDP or Share to GDP

▶	***Agricultural Sector:***	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
1	**Agriculture, Livestock, Forestry and Fishery**	**14.27**	**13.88**	**16.22**	**16.54**	**15.95**	**15.64**	**15.39**	**15.24**	**14.92**	**14.49**	**14.15**
2	**Mining and Quarrying**	10.75	10.57	12.17	11.95	11.93	11.66	11.29	10.63	9.66	9.43	9.14
▶	***Manufacturing Industrial Sector:***	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
3	**Manufacturing Industry**	**27.74**	**27.41**	**25.92**	**26.49**	**27.36**	**27.60**	**27.86**	**28.01**	**28.37**	**28.07**	**27.84**
a	*Oil and Gas Manufacturing*	3.40	3.26	3.96	*4.26*	*3.88*	*3.53*	*3.47*	*3.34*	*3.11*	*2.77*	*2.60*
1	Petroleum Refinery	1.37	1.24	1.56	*1.63*	*1.60*	*1.57*	*1.45*	*1.42*	*1.35*	*1.21*	*1.14*
2	Liquefied Natural Gas (LNG)	2.03	2.02	2.40	2.62	2.28	1.96	*2.02*	*1.92*	*1.77*	*1.56*	*1.46*
b	*Non Oil-Gas Manufacturing*	24.35	24.15	21.96	22.23	23.48	24.08	24.40	24.67	25.26	25.30	25.25
1	Food, Beverages and Tobacco	6.08	6.58	7.77	8.12	7.96	7.85	7.54	7.39	7.13	6.93	7.05
2	Textile, Leather Products and Footwear	3.13	2.90	2.92	3.16	3.23	3.25	3.22	*3.26*	*3.23*	*3.10*	*2.98*
3	Wood Products and Other Wood Products	2.04	1.91	*1.68*	*1.45*	*1.47*	*1.41*	*1.36*	*1.32*	*1.23*	*1.15*	*1.08*
4	Paper and Printing	1.23	1.29	1.46	1.50	1.45	1.32	1.33	1.38	1.41	1.37	1.32
5	Fertilizers, Chemical and Rubber Products	2.67	2.66	2.65	2.91	2.95	2.99	3.00	3.17	3.29	3.39	3.35
6	Cement and Non Metallic Quarrying Products	0.89	0.88	0.74	0.77	0.77	0.83	0.85	0.87	0.91	0.32	0.85
7	Iron and Basic Steel	0.74	0.71	0.61	0.61	*0.65*	*0.63*	*0.59*	*0.52*	*0.48*	*0.44*	*0.44*

8	Transport Equipment, Machinery and Apparatus	7.34	7.00	3.95	3.54	4.81	5.57	6.31	6.56	7.35	7.81	7.96
9	Other Manufacturing Products	0.23	0.23	0.18	0.17	0.19	0.22	0.18	0.21	0.22	0.22	0.21
		1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
4	**Electricity, Gas & Water Supply**	0.41	0.45	0.55	0.59	0.60	0.63	0.66	0.66	0.66	0.66	0.66
5	**Construction**	7.23	7.48	5.63	*5.51*	*5.51*	*5.55*	*5.61*	*5.68*	*5.82*	*5.91*	*6.11*
►	***Service Sector:***	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
	Service Industry	**39.59**	**40.22**	**39.51**	**38.91**	***38.65***	***38.92***	***39.19***	***39.78***	***40.57***	***41.43***	***42.10***
6	Trade, Hotel & Restaurant	16.49	16.80	16.28	16.24	*16.24*	*16.24*	*16.16*	*16.26*	*16.37*	*16.79*	*16.89*
7	Transport & Communication	4.44	4.58	4.60	*4.56*	*4.68*	*4.87*	*5.06*	*5.42*	*5.85*	*6.25*	*6.74*
8	Finance, Real Estate & Business Services	10.32	10.53	9.15	8.48	*8.39*	*8.53*	*8.74*	*8.90*	*9.12*	*9.22*	*9.23*
9	Other Services	8.33	8.31	9.47	9.64	9.33	9.28	9.23	9.20	9.23	9.18	9.24
►	**GDP at 2000 Constant Price**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

It is obvious from the data that sub sector in manufacturing industry have been deindustrializing. Wood Products and other wood products started to deindustrialize in 1998 onward, followed by oil and gas manufacturing that consists of petroleum refinery and LNG in 1999 onward, then iron and basic steel in 2000 and textile, leather products and footwear in 2003. This declining share of some sub sector in manufacturing industry to GDP is offset by the rising share of tertiary industry to GDP starting from 2000 onward, especially transport and communication. It is also interesting to see that the share of construction to GDP has been rising from 1999 onward, while the share of other industrial origins to GDP has been fluctuating except the agricultural sector whose share to GDP has been declining starting in 1999 onward. Moreover, the data below [table 2] show that the share of manufacturing to GDP in 2007 has decreased further except two sub sectors whose share to GDP being stagnant that is paper & printing and the other is transport Equipment, machinery and apparatus whose share to GDP increased from 7.96 to 8.22%.

Table 2, The share of Manufacturing Industry to GDP at 2000 Constant Market Price, 2007

No.	Sub-Sector Manufacturing Industry	Value (Billion Rp.)	Contribution Share to GDP
►	**Manufacturing Industry**	**538.077,9**	**27,29%**
A. Oil & Gas Manufacturing		**47.816,3**	**2,43%**
1.	Petroleum Refinery	20.776,6	1,06%
2.	Liquefied Natural Gas (LNG)	27.039,7	1,38%
B. Non Oil-Gas Manufacturing		**490.261,6**	**24,96%**
1.	Food Beverages and Tobacco	136.722,4	6,96%
2.	Textile, Leather Prod. & Footwear	52.922,5	2,69%
3.	Wood & Other Wood Products	19.657,6	1,00%
4.	Paper & Printing Products	25.861,0	1,32%
5.	Fertilizers, Chemical & Rubber	65.470,0	3,33%
6.	Cement & Non-Metallic Quarrying	16.233,3	0,83%

7.	Iron & Steel Basic Metal Industries	8.213,3	0,42%
8.	Transport Equip, Machinery& Apparatus	161.375,6	8,22%
9.	Other Manufacturing Products	3.805,9	0,19%

Source: Department of Industry and Commerce, Indonesia

It could then be concluded that although the share of manufacturing industry to GDP as whole has been stagnant to 27-28% but some sub sectors have been deindustrializing indicated by declining their share to GDP and that decline is offset by the share of the service sector which increased especially transport and communication. Below [table 3] is the data that show the increasing share of manufacturing industry to GDP before the crisis then being stagnant after the crisis.

Table 3, The Share of Manufacturing Industry to GDP (in Billion rupiah)

Year	Manufacturing industry Value added	GDP at 2000 Constant Price	Share to GDP
1988	159,828	773,095	20.67
1989	181,251	843,328	21.49
1990	203,546	919,241	22.14
1991	223,697	1,001,309	22.34
1992	245,722	1,073,609	22.89
1993	270,159	1,151,489	23.46
1994	303,555	1,238,312	24.51
1995	336,566	1,342,285	25.07
1996	416,018	1,499,442	27.74
1997	426,804	1,557,317	27.41
1998	340,752	1,314,523	25.92
1999	348,917	1,317,062	26.49
2000	380,702	1,391,665	27.36
2001	398,324	1,442,985	27.60
2002	419,388	1,505,216	27.86
2003	441,755	1,577,171	28.01
2004	469,952	1,656,517	28.37
2005	491,422	1,750,656	28.07
2006	514,192	1,846,655	27.84
2007	538,078	1,963,974	27.40

Source: World Bank (1988-1995) and BPS (1996-2007)

4.2. The Reasons of Deindustrialization in Indonesia.

As we have known that although the share of manufacturing as whole to GDP has been stagnant to 27-28% after the crisis, some sub sectors have been de-industrializing, showing their share to GDP continuously decreases, and this has been offset by that of service sector whose share to GDP has shown continuous rise. This deindustrialization is no doubt attributed to the policy of liberalization as major cause and deterioration of exchange rate since Indonesia has huge of external debt denominated in US dollar.

The implementation of economic agenda of liberalization in Indonesia has begun in the mid-1980s through deregulation and debureaucratization, this agenda of liberalization has got what it asked for in the mid-1997 when Indonesia was severely hit by the economic crisis that has led Indonesia to undergoing a process of deindustrialization. This deregulation and debureaucratization in 1980s is followed by AFTA agreement in January 1993, and then APEC was set in 1994 which is known by Bogor declaration towards free and open trade and investment in the region which is then implemented in Indonesia by the government through trade deregulation package in 1995 and 1996. Indonesia also among those who signed the agreement of WTO based on Uruguay round 1994 which forced Indonesia to reduce subsidies and tariff on agricultural products. The process to liberalize Indonesia gained its momentum in 1997, when IMF has successfully forced the government to signed letter of intent (LoI) as requirement and condition for obtaining loans, and since that agreement de facto IMF became the economic policy maker in Indonesia. IMF started to come up with structural adjustment policy (SAP)[8] in Indonesia to liberalize and force Indonesia to enter into international free market economy.

Liberalization as demanded by IMF can be seen from LoI included reducing of import quotas and tariffs especially tariffs on all imported foodstuffs products to 5%, demanded National Logistic Agency (BULOG) not to intervene and leave the price of foodstuffs to the market system, removal of subsidies especially in agricultural products and related products such as fertilizers, and cutting non-agricultural tariffs to 10% by 2003; opening banks to foreign ownership by June 1998; and lifting restrictions on foreign banks by February 1998.[9]

There are many reasons and causes of why liberalization has contributed to severe problem and accelerated the national manufacturing industries into deindustrialization. Since most of the industries in Indonesia have not reached the stage of maturity, they would have lost competition with the established foreign Multinational Corporation when they were forced to liberalization. The removal of tariff, quota and subsidies in all kinds has added to their devastation especially when Indonesia is forced to raise the price of fuel and electricity resulting in sharp increase in the prices. The sharp rise of goods especially the agricultural products and foodstuffs after the crisis, has forced workers to demand high wages as they real wages declined, resulting in increase in cost of production, moreover the price of raw materials has increased as well. As result footloose industries that are dependent on cheap labour have relocated to another country.

In financial sector, liberalization has only contributed to the capital flight, as there is no control of capital flow together with implementation of free foreign exchange regime. This is very obvious when IMF had erroneous policy prescription, and huge capital flight occurred without being able to stop it, resulting in financial problem, just as what Rizal Ramly said (Ramly, R, 2002);

> *The IMF's super-tight monetary policy worked to aggravate instability in the financial markets. The inter-bank interest rate rocketed from 20 to 300 percent from the third quarter of 1997, creating a liquidity crunch in the banking sector as banks found it impossible to obtain short-term credits to cover their immediate obligations. Then in November 1997 the IMF then recommended the closure 16 banks despite grossly inadequate preparation, resulting in a general run on domestic banks. This was followed by a capital outflow of about US$5 billion that placed further pressure on the rupiah. As a result, Indonesian businesses were subjected to the twin blows of soaring interest rates and a sharply devalued currency. The inevitable consequence of these policies was mass bankruptcy in the corporate sector and the loss of thousands of jobs. In 1998 the economy contracted by 13 percent, the worst performance in the nation's history.*

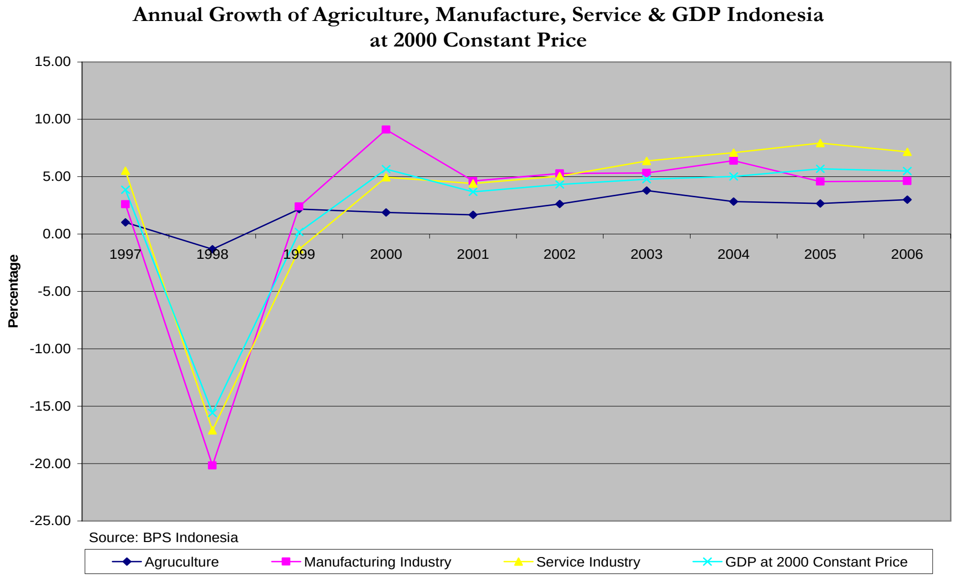
This trade and financial liberalization has not only made Indonesia economy into collapse but also has made some manufacturing industries plunge into deindustrialization, indicated by their declining share to GDP and deceleration of their growth. In addition to that, trade and financial liberalization has caused deterioration in external balances, as imports have soared and service payments increased followed by growing indebtedness that certainly has raised vulnerability to external shocks just as it occurred in 1997.

Apart from this trade and financial liberalization, the deterioration of exchange rate has also caused deindustrialization indirectly, since Indonesia has huge debt in the US dollar denomination. The dramatic rise of the US dollar caused by such external shock will only put them Indonesia into financial crisis since their real debt and service payment is also increase. As result its manufacturing industry is unable to operate within the market system resulting in idle manufacturing plants and factories, decline in the national output especially in manufacturing sector.

4.3. The Growth Consequences of Deindustrialization in Indonesia

Plant closures are common views as consequences of deindustrialization in Indonesia; many of the ailing conglomerates have divested their manufacturing subsidiaries and left them lying idle for financial problems, poor performance of the national industry and growth deceleration. There has been plant closure especially in the labour intensive sector. According to the garment and footwear sources, more than 130 plants have been shut down since 2001 resulting in ten of thousand of workers have lost their jobs. In addition to that, Sony also relocated its plant production to Malaysia in early 2003 resulting in a loss of more than 1,000 jobs in Bekasi (Basri, C & Van der Eng, P., 2003).

The growth consequence of deindustrialization has also resulted in growth pattern in which the annual average growth rate of service sector has superseded that of manufacturing and GDP after the crisis, and in 2003 it is very clearly from the graph below, that the growth of service is above all sectors including GDP, while from 2005 the manufacturing growth rate is below the GDP.



Further the data [table 4] show that within the service sector, transport & communication has performed extraordinary well, recording its growth rate always higher than GDP from 2000 onward, followed by real estate and business services in 2001 onward, whose growth rate also always higher that GDP.

Table 4, Growth Rate	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Agriculture	1.00	-1.33	2.16	1.88	1.68	2.63	3.79	2.82	2.66	2.98
Manufacturing	2.59	-20.16	2.40	9.11	4.63	5.29	5.33	6.38	4.57	4.63
Service	5.52	-17.10	-1.31	4.95	4.42	5.05	6.36	7.11	7.93	7.18
GDP at 2000 Constant Price	**3.86**	**-15.59**	**0.19**	**5.66**	**3.69**	**4.31**	**4.78**	**5.03**	**5.68**	**5.48**
Trade, Hotel & Restaurant	5.83	-18.22	-0.06	5.67	3.66	3.84	5.45	5.70	8.38	6.13
Transport & Comm.	7.01	-15.13	-0.75	8.59	7.80	8.39	12.19	13.38	12.97	13.64
Finance, Estates & Busi. Service	5.93	-26.63	-7.19	4.59	5.40	6.85	6.73	7.66	6.79	5.65

This fact of poor performance of manufacturing industry and declining trend of its growth rate of course made us worry about the future the national manufacturing industry which has been for a long time foundation of the national economy and as vital engine of economic growth generating employment and increasing living standard, thus reducing poverty. The downfall of manufacturing sector simply means producing massive unemployment and creating a lot of poverty. The data from BPS show that since 2000 to 2007 the average unemployment has reached 9.45 million people with unemployment rate of 9.14% on average [table 9]. This massive unemployment is mainly due to the contraction in manufacturing sector while the expansion of service sector is still unable to absorb them into work.

Chapter 5
CONCLUSION

This paper has investigated the process of deindustrialization in Indonesia after being severely hit by the economic crisis in 1997, (the data available is the period 1996-2006). The measure being used in indicating deindustrialization in this case is a declining share of manufacturing sector to GDP. The study is conducted in analyzing the performance of manufacturing industry in Indonesia for 20 years (1988-2007), ten years (19988-1997) before the crisis and ten years after that (1998-2007). The data reveal that the performance of manufacturing industry was extremely good before the crisis compared to that after the crisis. Before the crisis, the average annual growth of the manufacturing industry was 11.68% compared to that of 2.68 after the crisis, the average annual growth in labour absorbing manufacturing was 7.16% compared to that of 1.03% after the crisis, and the average annual growth of productivity per worker was 4.88% compared to 1.89% after the crisis.

This poor performance and growth deceleration of manufacturing industry has paved the way to the process of deindustrialization in Indonesia. Though before the crisis the share of manufacturing to GDP has been increasing from 20.67% to 27.41%, it started to be stagnant to 27-28% after the crisis. Despite the debate of whether Indonesia has been experiencing deindustrialization considering that the share of manufacturing to GDP has been stagnant to 27-28%, the finding of this paper has proved that the share of some sub sector of manufacturing to GDP has been declining such as wood products and other wood products that started to deindustrialize in 1998 onward, followed by oil and gas manufacturing that consists of petroleum refinery and LNG in 1999 onward, then iron and basic steel in 2000 and textile, leather products and footwear in 2003. This declining share of some sub sectors in manufacturing to GDP is offset by the rising share of service industry to GDP at the same time.

Trade and financial liberalization is the main cause of deindustrialization in Indonesia since almost all the industries in Indonesia are not competitive, not innovative and technologically backward. They are losing their market share and competitiveness easily to the multinational corporations. The severe crisis in 1997 has only provided them with financial problem since the national economy was built on huge foreign debt, driving them into severe crisis and collapse. As consequences, many plants in manufacturing industry are closed down and being left idle without any activity of production resulting in widespread poverty and declining living standard, since this secondary sector has been the foundation of the national economy before the crisis, generating a lot of employment and raising living standard and a s vital engine of growth.

The finding also reveals that the growth consequences of deindustrialization is in favour of service sector as its average annual growth rate is higher than that of manufacturing sector and GDP, especially transport & communication sector whose growth rate is always higher than manufacturing except in 1999 and 2000 and higher than GDP except in 1999 [table 4], while there is no expansion in manufacturing industry after the crisis.

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ANNEXES:

Table 5, Average annual growth rate of manufacturing sector &

Table 6, Average annual growth rate of people absorbed in manufacturing sector

Table 5,			**Table, 6**		
	in Billion Rp			in Thousands	
Year	Manufacturing	Growth rate	Year	People employed in Manufacturing	Growth rate
1988	159,828	11.99	1988	5,997	3.13
1989	181,251	13.40	1989	7,335	22.31
1990	203,546	12.30	1990	7,693	4.88
1991	223,697	9.90	1991	7,946	3.29
1992	245,722	9.85	1992	7,848	-1.23
1993	270,159	9.94	1993	8,784	11.93
1994	303,555	12.36	1994	10,840	23.41
1995	336,566	10.87	1995	10,127	-6.58
1996	416,018	23.61	1996	10,773	6.38
1997	426,804	2.59	1997	11,215	4.10
Total growth 1988-1997		116.82	Total growth 1988-1997		71.61
Average annual growth of Manufacturing sector		**11.68**	Average annual growth of people absorbed in manufacture		**7.16**
1998	340,752	-20.16	1998	9,934	-11.42
1999	348,917	2.40	1999	11,516	15.93
2000	380,702	9.11	2000	11,642	1.09
2001	398,324	4.63	2001	12,066	3.64
2002	419,388	5.29	2002	12,110	0.36
2003	441,755	5.33	2003	10,927	-9.77
2004	469,952	6.38	2004	11,070	1.31
2005	491,422	4.57	2005	11,953	7.98
2006	514,192	4.63	2006	11,890	-0.53
2007	538,078	4.65	2007	12,094	1.72
Total growth 1998-2007		26.82	Total growth 1998-2007		10.31
Average annual growth of Manufacturing sector		**2.68**	Average annual growth of people absorbed in manufacture		**1.03**

Source: Statistical year book for Asia & Pacific (1988-2003), United Nation Publication, and BPS (2004-2007)

Table 7, Average annual growth rate of productivity per worker in manufacture

Table 7,		in Thousands	in Million Rp	
	in Billion Rp	People employed	Productivity	Annual Growth
Year	Manufacturing	in Manufacturing	per worker	Rate Productivity
1988	159,828	5,997	26.6513257	8.65
1989	181,251	7,335	24.7104294	-7.28
1990	203,546	7,693	26.4585987	7.07
1991	223,697	7,946	28.152152	6.40
1992	245,722	7,848	31.3101427	11.22
1993	270,159	8,784	30.755806	-1.77
1994	303,555	10,840	28.0032288	-8.95
1995	336,566	10,127	33.2345216	18.68
1996	416,018	10,773	38.616727	16.19
1997	426,804	11,215	38.0565314	-1.45
	Total productivity growth rate 1988-1997			48.77
	Average annual productivity per worker			**4.88**
1998	340,752	9,934	34.3015905	-9.87
1999	348,917	11,516	30.2984543	-11.67
2000	380,702	11,642	32.7007387	7.93
2001	398,324	12,066	33.0121001	0.95
2002	419,388	12,110	34.6315442	4.91
2003	441,755	10,927	40.4278393	16.74
2004	469,952	11,070	42.4527552	5.01
2005	491,422	11,953	41.1128587	-3.16
2006	514,192	11,890	43.2457527	5.19
2007	538,078	12,094	44.491318	2.88
	Total productivity growth rate 1998-2007			18.91
	Average annual productivity per worker			**1.89**

Source: Statistical year book for Asia & Pacific (1988-2003), United Nation Publication, and BPS (2004-2007)

Table 8, Gross Domestic Product at 2000 Constant Market Prices by Industrial Origins (billion rupiah), 1996-2006

	Base 2000											
►	**Agricultural Sector:**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
1	Agriculture, Livestock, Forestry and Fishery	**213,983.1**	**216,129.4**	**213,251.3**	**217,863.6**	**221,965.8**	**225,685.7**	**231,613.5**	**240,387.3**	**247,163.6**	**253,726.0**	**261,296.8**
2	Mining and Quarrying	161,148.0	164,558.8	160,014.7	157,417.7	166,088.4	168,244.3	169,932.0	167,603.8	160,100.5	165,085.4	168,729.9
►	**Manufacturing Industry Sector:**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
3	Manufacturing Industry	**416,017.8**	**426,804.4**	**340,752.3**	**348,916.6**	**380,702.0**	**398,323.9**	**419,387.8**	**441,754.9**	**469,952.4**	**491,421.8**	**514,192.2**
a	Oil & Gas Manufacturing	50,946.9	50,769.2	52,071.9	56,090.2	53,972.7	50,894.9	52,179.5	52,609.3	51,583.9	48,519.2	47,928.1
1	Petroleum Refinery	20,498.5	19,306.0	20,558.7	21,525.1	22,295.6	22,670.0	21,820.0	22,374.1	22,322.3	21,207.2	21,002.3
2	Liquefied Natural Gas (LNG)	30,448.4	31,463.3	31,513.2	34,565.1	31,677.0	28,224.9	30,359.5	30,235.2	29,261.6	27,312.0	26,925.8
b	Non Oil-Gas Manufacturing	365,071.0	376,035.1	288,680.4	292,826.4	326,729.3	347,429.0	367,208.3	389,145.6	418,368.5	442,902.6	466,264.1
1	Food, Beverages and Tobacco	91,148.7	102,395.8	102,160.3	106,906.1	110,720.6	113,256.6	113,474.7	116,528.6	118,149.3	121,395.6	130,163.9
2	Textile, Leather Products & Footwear	46,914.1	45,111.5	38,404.6	41,670.4	45,020.3	46,966.1	48,484.9	51,483.6	53,576.3	54,277.1	54,944.2
3	Wood Products and Other Wood Products	30,582.5	29,686.2	22,118.9	19,122.2	20,435.5	20,384.0	20,510.3	20,754.3	20,325.5	20,138.5	20,006.2
4	Paper and Printing	18,513.3	20,064.1	19,252.9	19,694.3	20,197.0	19,042.9	20,045.1	21,731.0	23,384.2	23,944.2	24,444.8

5	Fertilizers, Chemical and Rubber Products	40,028.0	41,410.0	34,781.5	38,351.5	41,092.8	43,132.7	45,171.4	50,008.7	54,513.6	59,293.1	61,947.9
6	Cement and Non Metallic Quarrying Products	13,293.2	13,759.5	9,665.1	10,170.5	10,726.7	12,041.1	12,830.6	13,735.9	15,045.2	5,618.1	15,700.1
7	Iron and Basic Steel	11,069.6	11,012.5	8,048.4	8,032.0	9,080.3	9,050.9	8,935.5	8,222.9	8,008.0	7,712.0	8,076.8
8	Transport Equipment, Machinery and Apparatus	110,125.8	108,967.6	51,928.2	46,594.7	66,877.9	80,435.1	94,982.0	103,414.7	121,683.3	136,744.6	147,063.8
9	Other Manufacturing Products	3,395.8	3,628.0	2,320.5	2,284.9	2,578.3	3,119.6	2,773.8	3,265.9	3,683.1	3,779.4	3,916.4
		1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
4	Electricity, Gas & Water Supply	6,211.5	6,979.7	7,191.3	7,785.9	8,374.2	9,058.3	9,868.2	10,349.2	10,897.6	11,584.1	12,263.6
5	Construction	108,463.1	116,444.4	74,009.2	72,593.6	76,688.8	80,080.4	84,469.8	89,621.8	96,334.4	103,483.7	112,762.2
►	**Service Sector:**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
	Service Industry	**593,618.8**	**626,400.5**	**519,304.6**	**512,484.2**	**537,845.6**	**561,592.0**	**589,945.1**	**627,454.3**	**672,068.3**	**725,355.1**	**777,410.2**
6	Trade, Hotel & Restaurant	247,265.0	261,674.8	214,008.1	213,876.4	225,993.6	234,273.0	243,266.6	256,516.6	271,142.2	293,877.2	311,903.5
7	Transport & Communication	66,603.4	71,270.9	60,490.5	60,035.3	65,192.9	70,276.1	76,173.1	85,458.4	96,896.7	109,467.1	124,399.0
8	Finance, Real Estate & Busi. Services	154,787.8	163,971.9	120,304.9	111,651.3	116,776.9	123,085.5	131,523.0	140,374.4	151,123.3	161,384.3	170,495.6
9	Other Services	124,962.6	129,482.9	124,501.1	126,921.2	129,882.2	133,957.4	138,982.4	145,104.9	152,906.1	160,626.5	170,612.1
►	**GDP at 2000 Constant Market Price**	**1,499,442.3**	**1,557,317.1**	**1,314,523.4**	**1,317,061.6**	**1,391,664.7**	**1,442,984.6**	**1,505,216.4**	**1,577,171.3**	**1,656,516.8**	**1,750,656.1**	**1,846,654.9**

TABLE 9:

People employed in Manufacturing industry, and Unemployment, 1988-2007 (in Thousands).

No.	**Year**	**Manufacturing Industry**	**Total Unemployment**	**Rate of Unemployment**
1	1988	5,997	2,106	2.8
2	1989	7,335	2,083	2.8
3	1990	7,693	1,952	2.5
4	1991	7,946	2,032	2.6
5	1992	7,848	2,199	2.7
6	1993	8,784	2,245	2.8
7	1994	10,840	3,738	4.4
8	1995	10,127	6,251	7.2
9	1996	10,773	4,408	4.9
10	1997	11,215	4,197	4.7
11	1998	9,934	5,063	5.5
12	1999	11,516	6,030	6.4
13	2000	11,642	5,858	6.1
14	2001	12,066	8,005	8.1
15	2002	12,110	9,132	9.1
16	2003	10,927	9,531	9.5
17	2004	11,070	10,251	9.7
18	2005	11,953	11,899	11.2
19	2006	11,890	10,932	10.3
20	2007	12,094	10,011	9.1

Source: Statistical Year Book for Asia and Pacific, United Nations Publication, (1988-2002) and BPS OR Bureau of National Statistics Indonesia (2003-2007).

Notes

[1] See Wikipedia on 20/8/2008 at http://en.wikipedia.org/wiki/Deindustrialization

[2] See Africa: Trade Liberalization Causes Deindustrialization at http://www.sunsonline.org/trade/process/followup/1996/03080096.htm

[3] See Indonesia Monetary and Exchange Rate Policy, in the library of congress country studies by CIA World Factbook.

http://www.photius.com/countries/indonesia/economy/indonesia_economy_monetary_and_exchang~14.html

[4] Idem.

[5] See the Letter of Intent (LoI) at Oct, 1997, Jan, 1998, Sept, 1998, Jul, 1999,

http://www.imf.org/external/np/loi/103197.htm

http://www.imf.org/external/np/loi/011598.htm

http://www.imf.org/external/np/loi/091198.htm

http://www.imf.org/external/np/loi/1999/072299.htm

[6] See Wikipedia on 7/9/2008 and website President SBY at;
http://en.wikipedia.org/wiki/Susilo_Bambang_Yudhoyono

http://www.presidensby.info/index.php/eng/pidato/2005/08/30/185.html

[7] See the data on 10/9/2008 at

http://www.tibetan-art-museum-society.org/Indonesia/02.html

[8] See Chapter 3, sub title 3.3 in Growth Policy after the fall of President Suharato

[9] See note number 5