CHAPTER 2 - LITERATURE REVIEW

2.1 INTRODUCTION

This chapter begins with a brief review of the concepts and measurements of economic growth and poverty before presenting the theoretical framework of the relationship between economic growth and poverty. In order to establish the significance of the relationship, the relevant issues will be discussed highlighting the empirical evidences.

2.2 REVIEW OF CONCEPTS AND MEASUREMENTS

2.2.1 ECONOMIC GROWTH

In the earlier ages, Adam Smith (1976) in his famous written work, 'The Nature and Causes of the Wealth of Nations', has defined economic growth as the increment of production in a society. Over the years, this concept has been defined in more detail but the meaning is similar to Smith's original definition. Economic growth actually means a rate of change in the level of goods production and services within a country over a certain period of time. Therefore, it is also known as the 'real growth' of an economy, the amount of which allows people to survive and prosper.

Nevertheless, economic growth does not necessarily result in the improvement of human welfare. It does increase the potential for human welfare but is not considered a principal index of development. All the same, economic growth has, as much as other factors, transformed an undeveloped, non-industrialised country with low standards of living into a developed, fully industrialised country that usually has a high standard of living. Thus, economic growth creates the possibility of improving societies' welfare by
raising their ability to purchase and to provide adequate basic necessities such as nutrition, health facilities, infrastructure, road and telephone networks, indoor plumbing, electricity, housing, factories, offices, and others.

Basically, the crucial sources of economic growth are the total amount of inputs and technology or knowledge. Thus, an increase in the availability of modal, capital and human resource for production in a society and the enhancement of productivity through technological innovation and human capital investment stimulate the process of economic growth.

Solow (1957, 1994), through the orthodox neoclassical growth theory has supported the important of inputs as a source of growth. Therefore, he indicated that saving rates, population growth, and so forth which are determinants to inputs in a society as factors that affect the economic growth level of a country. The endogenous growth theories established by Romer (1986) and Lucas (1988), on the other hand, has mentioned the importance of ‘Research and Development’ (R&D) contributions to the improvements in technology and stock of knowledge, which in turn results in output growth. The role of investment in human capital was also seen as factor that contributes to the improvements of labour efficiency, in which, stimulates economic growth.\(^8\)

With economic growth, countries will become more industrialized and tend to have features such as; 1) massive increase in the output of various sectors in the economy; 2) more importance placed on manufacturing than agriculture; 3) reduction of limited specialisation and exchange; 4) adequate savings for investment; 5) rapid expansion of population but with available resources and; 6) an increase in standards of

living. The domestic economic structures will gradually transform from the traditional agriculture-based to a more urbanised, and industrially diverse manufacturing and service economy. The usual accompaniment will be the achievement in the value of the country’s net investment, net exports, inflation rate, employment rate, and so forth.

2.2.1.1 Measurement of Economic Growth

Economists generally measure economic growth in terms of output, which is the change of GDP at constant prices. Total growth in GDP actually comprises of changes in the purchasing power of the monetary unit and growth in real production. To obtain growth in real production, which is the real growth of a country, changes in GDP have to be valued at constant prices. Thus, the total is the value of nominal growth minus inflation (changes in CPI).

To consider real growth as a better measurement of living standards, population is an important factor that has to be considered. As defined by Kuznets (1973), economic growth also means ‘a long-term rise in capacity to supply increasingly diverse economic goods to its population’. Consequently, real growth has to allow for population growth. The production of an economy, then, should be divided among the population to obtain the growth of production per person. It is the level of labor productivity that has a strong indication of economic growth and directly determines the standard of living. Therefore, besides real GDP growth, economic growth can also be measured in terms of real GDP per capita growth.

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10 ‘Constant Prices’ are prices of a chosen year, which is fixed and do not vary through the years. In other words, the prices have been adjusted for inflation and that means the purchasing power of one monetary unit does not vary.

Meanwhile, according to Adams (2003), growth can also be measured in terms of changes in the level of mean expenditures (income per person)\textsuperscript{12} calculated from the household surveys. It has a different coverage and does no correspond with the GDP measure of growth that comes from national accounts. Usually, it is closely correlated with observed changes in household expenditures (income). Therefore, problems, such as, errors and omission due to measuring household expenditures as a residual item (as in the national account) were omitted. Hence, survey mean (in the level of mean expenditures) is also suggested measure of economic growth.

\textbf{2.2.2 POVERTY}

Poverty is one of the major socio-economic problems in the study of development. It is not only a kind of deprivation of income but also a deprivation of capabilities such as education, health, human and civil rights. Nonetheless, poverty does not have any single definition that applies to all countries. It can be defined satisfactorily only in terms relative to the society or country in which it is found. Although the term poverty is often used by all, the nature and degree of severity is quite different across country and across time.

In under-developed countries, poverty can be described as a "famine" condition that renders people incapable of obtaining the minimum levels of basic physical needs such as food, clothing, and shelter as well as protection from violence in order to ensure continued survival. This definition is also used to describe poverty of yesteryears. Nowadays and in most industrialized countries, poverty would probably be described as an "underclass" population that is only getting relatively lower income and unable to enjoy life as much as the "upper-class".

Hence, the definition of poverty differs based on the consumption of necessities and the living conditions of households, as well as on the ‘subjective’ perceptions of the overall standard of living. Therefore, I agree with the statements given by Samad (1996) and Keles (1988) that “understanding poverty is a function of time, space and a few other parameters, which would be different in different context”, and “the concept of poverty is both arbitrary as well as relative…. flexible, depending on the norms or standards used to define it”, respectively.  

Although it is difficult to define and interpret the term of poverty, the proper usage and appreciation of its meaning is very important so that it does not gives a distorted perception of the real situation on the standard of living of a country.

Rowntree’s work in 1980s (in Britain) is one of the earliest articulations of the concept of absolute poverty. Together with Booth, Rowntree objectively defined absolute poverty based on the notion of subsistence, which is the minimum needed to sustain life. Those below the subsistence level is said to be experiencing absolute poverty because one does not have enough to live on. Therefore, the attempts to define subsistence is to ensure that people are provided with at least the bare necessities to survive and are able to be removed from absolute poverty.

The concept of relative poverty emerges, then, whereby poverty is seen as more subjective. Poverty is defined as a lack of ‘means’ compared to the ‘means’ of others. The minimum consumption or income requirements are not merely for subsistence or survival, but for leading a fuller communal life (‘United Nation Development Programme’ - UNDP, 1990). According to Schiller (1976), “a person is poor when his income is significantly less than the average income of the population’. Thus, poverty is

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relative and tends to capture some aspects of both absolute poverty and income inequality. It is also income-based and tries to ascertain the lowest level of welfare that is acceptable in a society.

In under-developed or developing countries, absolute poverty is commonly used and considered most appropriate because it seeks to describe poverty as the lack of income needed to acquire minimum necessities of life, which is concerned with the absolute standard of living of a part of its society – the poor. In developed countries, the relative poverty, however, is much preferred since it exists in a situation of comparative deprivation – able to measure the welfare and, wealth and inequality of certain groups in society by dividing the poor and wealthy groups according to their income levels.

Therefore, in Malaysia, poverty has been defined in absolute term. Malaysia’s government perception of poverty is that “poverty is associated with those who are unemployed, under-employed and engaged in activities where productivity is so low that living standards are well below the national average”.\(^{15}\) This definition is based on the prevailing standard of living in Malaysia and not comparable to the standard measure of other countries.

In the recent years, new dimensions were taken into account in defining poverty. Poverty should be understood as, something much broader, rather than simply based on the definition of ‘static monetary measure’ or having a low income as expressed by the term of absolute and relative poverty. The experience of poor people actually extends to include a multifaceted combination of deprivations and unmet needs that prevent them from participating in society in the same ways that others do (Alcock, 1997). The concept of poverty, therefore, needs to take into consideration aspects from material

\(^{15}\) See: Second Malaysia Perspective Plan, 1971-1975
goods to freedom of expression, dignity, self-respect, participation in social life, and others as shown in Figure 2.1.

'Social Exclusion' is a famous term used to describe wider conceptualizations of poverty. It defines one aspect of deprivation and disadvantages that extend beyond the lack of material resources. People are defined as poor when they are socially excluded, in the aspects of housing, work, place, environment, education, health and so forth, but not materially poor. For instance, in modern society where the sport, cultural and entertainment industries are growing tremendously, those who are deprived of access to facilities would be considered as being deprived (Alcock, 1997).

**Figure 2.1: The Gradual Extension of the Theoretical Scope of Poverty**

Consumption
Consumption + Social Services
Consumption + Social Services + Resources
Consumption + Social Services + Resources + Vulnerability
Consumption + Social Services + Resources + Vulnerability + Dignity
Consumption + Social Services + Resources + Vulnerability + Dignity + Autonomy


'Human poverty' is also a term that defines poverty in wider conceptualisations. Based on three basic dimensions of human development: a long and healthy life; knowledge and a decent standard of living, captured in the 'Human Development Index' (HDI), poverty is seen as deprivation of ability to achieve the standard of these three

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16 'Human Development Index' (HDI) is a summary of composite index that measures a country's average achievements in three basic aspects of human development, includes, longevity as measured by life expectancy at birth, knowledge as measured by a combination of the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio, and a decent standard of living as measured by GDP per capita (PPP US$). See: *Human Development Report, 2003*
basic dimensions. An alternative ‘human poverty’ term includes the rate of long-term unemployment as an additional basic dimension of human development captured in the HDI. It defines poverty as deprivation which incorporates the aspect of ‘social exclusion’.

Besides ‘Social Exclusion’ and ‘Human Poverty’, other concepts of poverty and poor, according to Samad (1996), include; 1) ‘Abject or Extreme Poverty’; 2) ‘Administratively Defined Poverty’; 3) ‘Externality Poverty’; 4) ‘Natural Poverty’; 5) ‘Mass versus Minority Poverty’; 6) ‘Material Poverty’; 7) ‘Moral Poverty’ and; 8) ‘Subjective Poverty’. Each of these constitutes an interrelated network of deprivations (Coates and Silburn, 1970). In future, the terms of poverty will evolve even further to include other aspects of life based on the needs of people.

In Malaysia, the concept of “hardcore” poverty has been used since the mid-1980s. Those who appear consistently among the worst-off groups in terms of poverty (with incomes less than half of the poverty line income) and other socio-indices are defined as ‘hardcore’ poor. They are identified by the government as the poorest among the poor who have much more difficulties securing access to income-earning opportunities and basic amenities and who need direct access to benefits from public sector programs.

Other new forms of poverty in Malaysia are also emerging in other vulnerable groups including single-female headed households, migrants workers, unskilled workers, the ‘Orang Asli’ and other indigenous people of East Malaysia as a result of

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17 A long and healthy life dimension of deprivation is vulnerability of people to death at a relatively age, as measured by the probability at birth if not surviving to age 40 is deprivation. Knowledge dimension of deprivation is exclusion from the world of reading and communication, as measured by the adult illiteracy rate. A decent standard of living dimension of deprivation is lack of access to overall economic provisioning, as measured by the percentage of population not using improved water sources and the percentage of children under five who are underweight. See: Human Development Report, 2003
rapid economic growth, crisis and the development process itself (Yahaya, 2001). The numerous definitions of poverty, even in a single country like Malaysia, thus, imply that the concept of poverty is often complex and multi-dimensional.

2.2.2.1 Measurement of Poverty

Earlier literature on the measurements of poverty is concerned with counting and enumerating the number of poor using some yardsticks. IP indicator which gives the level of poverty in a society where the perception of poverty is accepted to be absolute. The number of poor households refers to the number of households whose level of income falls below a certain poverty line,\textsuperscript{19} which defines the minimum standard of living for a society. It is income-based, and does not capture the true welfare or standard of living of an individual or household. Therefore, it cannot reflect the real situation of poverty arising from costs of living, which can be defrayed by non-monetary means.

With the evolution of the concepts of poverty, a large number of poverty measures relying on wealth distribution as well as social indicators have been developed. Relative poverty is related with the aspect of relative inequality. The measurement of poverty based on this concept is concerned with how the bottom layers (20 per cent or 30 per cent) feature vis-à-vis the rest. This is done by setting the proportion of median income that would contain the bottom line of income level in the society. For instance, the proportion of households or individuals with incomes less than the average income of the bottom 40 per cent of the population or less than half of the median income is estimated.

\textsuperscript{19}‘Poverty Line’ is a level that specifies a minimum calorie intake necessary for sheer physical survival. The calorie level will be converted into a basket of foodstuffs needed for the level, using consumption habits of the reporting society. The foodstuffs are then converted into a monetary sum using the prevailing market prices of the goods. The line can be drawn according to the concepts of extreme and absolute poverty using the calorific standards. According to the World Bank (1993), the poverty lines measure the standard of living (in terms of consumption or income) below which people are deemed to be poor. See: Samad, Syed Abdus. 1996. "Poverty Research: An Asian Review. Kuala Lumpur", Association of Development Research and Training Institutes of Asia and the Pacific, p.12-13.
Socio-economic indicators favor the idea that development or poverty is a normative concept and the indicators are based, to a large extent, on value judgments. It tries to capture the true living standards of households that are not captured in the definition of poverty based on income-based approach described above. In other words, the package of indicators used would be dictated by what the policy-maker feels are the areas of (social) concern in the country at a particular time (Cheong and Fredericks, 1977). In the case of Malaysia, these areas are identified by the Treasury’s Economic Report (1973-73) as: “...education; environmental quality; health; housing; income distribution; public safety; quality of working life”. However, no attempt had been made to specify the actual indicators for each area in the report.

Social exclusion concept of poverty is new forms of poverty that are difficult to be captured empirically. It may be based on subjective feelings (considering oneself to be excluded) or objective considerations (low degree of participation in economic, political or social life and exclusion from mutual aid and solidarity networks and others.). This makes it possible to incorporate in a concrete fashion the theoretical advances leading to the inclusion of the marginalisation phenomenon in the criteria defining poverty.

Although, there are different measurements of poverty, monetary poverty is the one which best captures poverty in all its dimensions. As commented by Razafindrakoto and Roubaud (2003), “Of all forms of poverty, the monetary poverty is the one most highly correlated with the others (indicators)”. People who are poor by one measure tend, generally speaking, to be poor by another. This means that accuracy in measuring

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poverty by incomes, for example, may be useful even though it does not capture all of the elements of poverty that may reasonably be considered relevant.

In Malaysia where poverty is defined using the absolute term, the simple IP measure is used to construct the profile of the poor. The household income continues to be the basis for the poverty measures used by almost all commentators and a single data source. In 1974, the Ministry of Welfare of Malaysia has undertaken an attempt to define the poverty line based on households’ expenditure on basic necessity items.\textsuperscript{21} The ‘Household Expenditure Survey’ (HES) was conducted periodically to obtain the level of households’ expenditure.\textsuperscript{22} The IP, then, is estimated based on the computed PLI using households’ expenditure data and is updated annually using the CPI. For accuracy and consistency, this government’s method of defining poverty is served as basic reference.

Other unofficial ways to define poverty in Malaysia include measuring poverty using: (1) method proposed by Aziz (1964, 1965) which is based on consumption of long cloths that are traditionally worn by Malaysian men and women, a so-called sarong index proposed by; (2) relative terms defined by Lim (1974) for which poor households are seen as those having incomes below the national average; (3) two-alternative methods for defining PLI proposed by Ishak Shari (1978) which are based on proportion of income (Engel Coefficient) spent on food and actual consumption patterns; and (4) various methods for defining PLI such as the highest per capita income level of the

\textsuperscript{21} In short, Malaysia's poverty line income has been defined as an income that is sufficient to purchase: 1) a minimum food basket to maintain a household in food nutritional health and 2) conventional needs in terms of clothing and footwear, rent and power, transport and communications, health, education, and recreation. See: Shireen Mardziah Hashim. 1998. "Income Inequality and Poverty in Malaysia", Rowman and Littlefield Publishers, Inc. pp.149-151.

\textsuperscript{22} The earliest round of HES for which IP can be confidently compared with later periods is from the year 1974. Another was undertaken in 1981 and since 1986, surveys have been conducted biannually except during 1999 when a special once-only survey was conducted to provide more information on the impact of the economic crisis. See: Shireen Mardziah Hashim. 1998. "Income Inequality and Poverty in Malaysia", Rowman and Littlefield Publishers, Inc.
bottom 40 percent, half the average national income, and other official estimates from
the Malaysian government used by Adnand (1983).

2.3 THEORETICAL FRAMEWORK

There is a rich literature about the accepted ideas and theories that link poverty
with economic growth. The great debate since the past decades is whether economic
growth is an effective device for eliminating poverty.

2.3.1 ‘TRICKLE DOWN THEORY’ VERSUS ‘TRADE OFF THEORY’

"Absolute poverty will eventually disappear if only rapid overall economic
growth can be sustained". (Hainsworth, 1978)

Generally, the accepted idea is that economic growth is able to bring about wealth
and prosperity to a population and gradually reduce the number of poor in a society.
The famous ‘trickle down theory’\textsuperscript{23} existed in the 1950s and 1960s, which is a theory
employed to understand the situation of growth ‘spill-over’ effects in a society. The
benefits of economic growth would automatically filter down to the masses, though
rather slowly. Poverty can diminish with growth even the proportional benefits of
growth going to the poor will always be less. Hence, poverty is seen as transitional and
self-correcting problems that would eventually disappear when rapid economic growth
can be sustained.

According to Williamson (1991), the impact of economic growth towards poverty
could be in a direct manner in that growth raises the income of the poor along with the

\textsuperscript{23} The ‘Trickle Down Theory’ states that the benefits of overall GNP growth would automatically filter
down to the masses. In other words, poverty would eventually disappear when rapid economic growth can
of economic development, we often obtain a negative relationship between growth and poverty. See:
1983. This questioned the existence of the "trickle-down" theory.
average. Or in an indirect manner in that growth enables; 1) the poor to save more for crises and old age; 2) the establishment of more financial institutions for savings, credit and insurance facilities to help the poor spread their individual lifetime incomes to cover their lifetime needs; and 3) the richer society to have the ability to transfer more resources to the needy whether by state intervention, private charity, or intra-family transfers.  

However, this direct or indirect (positive) phenomenon – that growth is able to reduce poverty – is not always applicable. Somehow, it is dependent on the conditions of the different countries and their characteristics. The contrasts between country sizes, resource situations, colonial histories, ethnicity and government intervention as well as public policy, which give impact to the pattern of income distribution, will make a country’s possible relationships between economic growth and poverty to be different from others. It is possible that high economic growth of a country increases poverty when its inequality increases so much that the beneficial impact of growth is more than offset by the impact of rising inequality (Kakwani and Pernia, 2002).

"Yet despite this growth of production the problems of widespread poverty seem to have remained as great as ever... As a strategy of development, ‘trickledown’ has seldom worked satisfactorily".

(Griffin, 1978)

Therefore, the ‘Trade-Off Theory’ is of the opinion that economic growth and poverty are two contradictory goals which could not be achieved in any particular society in the process of development.  

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25 Published works like Chamburi and Hallah Piel (1988) have indicated similar ideological stand that supports the trend of “trade-off” between economic growth and equity. Also, the World Bank (1990) has concluded a review of some countries’ experience suggesting that there exists a “trade-off” between growth and poverty, although it is not a critical one. See: World Bank. 1990. World Development Report 1990: Poverty, New York: Oxford University Press.
equity “trade-off”, the ‘Trade-Off Theory’ asserts that rapid growth is bad for poverty eradication because the poor would be bypassed and marginalized by the structural changes of modern growth. And, the concentrated efforts to lower poverty would require public expenditures that would necessitate a reduction in the rate of growth.  

The higher the per capita income and the faster the rate of growth, the better the rich can organize to protect and enhance their interests, but the poor will gradually be entrapped by a variety of ‘vicious cycles of poverty’. The poor would have unequal access to resources of all kinds, have unequal bargaining powers (in most situations), face barriers to enter many occupations, and eventually build up psychological disabilities. Consequently, inflation, taxes, recession, diseases, family catastrophes, and so forth would render the poor incapable of making much self-improvement.

Ultimately, there are two contradictory views on the relationship between growth and poverty. The application of either one of the views, either ‘trickle down’ or ‘trade off,’ is basically dependent on several specific factors that represent the characteristics of a particular country. Mainly, the definition of poverty, the rate and patterns of growth and the trend of inequality in income distribution are factors that play a great role in causing the differential context explained by both theories.

2.3.2 ABSOLUTE POVERTY

For ‘Trickle Down Theory’ to be applicable, poverty should be measured in the absolute term. If poverty were measured in other terms, especially in relativity that

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concerns on the aspects of inequality, the impact of growth towards poverty as implies by the ‘trickle down theory’ would not necessarily be significant.

For example, assume that poverty is measured in two-terms, absolute poverty and poverty gap in a society with income distributed normally. The increase of individuals’ income at 10 per cent in a society with a poverty line of RM 525 would cause the rich with income at the higher quintiles, RM 5,000 per month to be raised to RM 5,500 per month, and the poor with income at the lower quintiles, RM 500 per month to raise to RM 550 per month. The rate of absolute poverty has decreased, but poverty gap between the rich and the poor has widened from RM 4,500 (RM 5,000-RM 500) to RM 4,950 (RM 5,500-RM 550).

The effectiveness of economic growth in eliminating poverty definitely differs when poverty is measured in different terms. Since the measurement of poverty changes across times based on the evolution of its dimensions such as economy, social and politics, the existence of growth-poverty relationship, thus, tends to vary rather simply as explained by the ‘Trickle Down Theory’. The concept of poverty, basically, has differed largely from the originally defined absolute term, especially when social criteria has been adopted to guide the development of poverty measurement.

2.3.3 HIGH AND SUSTAINABLE RATE OF GROWTH

The rate of economic growth and its sustainability actually determines the extent of the benefits of growth that accrue to the poor. As commented by Tahir and Ali (2000), “poverty declined in India during the phase of high-income growth. Thus, decline in poverty is predominantly attributable to the growth factor, although redistribution policies did play a significant role too”. Similarly, according to Osmani (2000), “.... rising per capita income will generally lead to lower poverty, especially if
the rate of growth is sustained at a reasonably high rate, which on current evidence would mean not less than 2-3 per cent per annum”.

Basically, it is understood that the higher the rate of growth and its sustainability, the more income would be available in a country to be distributed among its people. No matter how the trends of income distribution are, whether biased against- or for the poor; there would still be a portion of income to be distributed to the poor. However, without a high rate of growth, a well distribution policy that favors the poor would not make sense since there would be a lack of income to be distributed. What happens then would be the vicious cycle of poverty, that the poor remains poor.

To prove the important influence the sustainability of high-growth has towards poverty reduction, observation can be done on the occurrence of economic crises. As shown in Figure 2.2 for the case of Eastern Europe, economic crisis has affected the real income of individuals that would have great negative impacts towards poverty changes.\textsuperscript{28} Notice that, if there is a recession in an economy at time period $t$, the impact of growth in reducing poverty is no longer represented by the linear hypothetical line (black line) but the dotted line in time period $t+1$ (when the effect of worsening income distribution is not taken into consideration). Assume that recipients below income $Y_0$ are considered as poor. Thus, due to recession, elasticity of poverty with respect to growth (that increases the level of real income) has increased. At the income level of $Y_0$, percentage of the poor at the time of recession is higher at $P_1$ as compared to $P_0$ before the recession.\textsuperscript{29}

\textsuperscript{28} Milanovic (1998) found that a decline in income of 10 per cent increased poverty headcount from 5 per cent to 6 per cent. See: Pablo Rodas-Martini. 1999. “Income Inequality Within and Between Countries: Main Issues in the Literature”, Human Development Report 1999 – “Globalisation with a Human Face”, pp.382.

Economic crisis, thus, has reduced the ability of growth to reduce poverty. Hence, growth rate is an important factor contributing to the reduction of poverty. In order to successfully reduce poverty, a country should, therefore, focus on the stability of its economy - that is to maintain the trend of high and sustainable growth rate. No matter “how” well the policies of income distribution are functioning in a country, a lack of continuous growth would not provide adequate income or wealth to be distributed (to the poor) in that particular country (Lim, 1978).

2.3.4 THE PATTERNS OF GROWTH

"Poverty reduction impact of a certain rate of growth depends crucially on the pattern of that growth, with rural growth usually being more efficient than urban growth, and agriculture growth more efficient than manufacturing growth". (Danielson, 2001)

The patterns of growth, therefore, determine the progress of poverty reduction in a country. As argued by Osmani (2000), “... the most rapid rate of growth may not
always be the best growth strategy...". The important thing is actually the "patterns of growth" that incorporates together the effects of the rate of growth and distribution of income. It does not only affect poverty for given rates of growth, but also affects poverty through its influence on the rate of growth itself.

There are different patterns of growth, growth that emphasises the progress of rural or urban sector, manufacturing or agriculture rural, and primary, secondary or tertiary sector. Basically, growth in agriculture or rural sectors is more poverty-reducing than growth in manufacturing (or urban sectors) since most of the poor lives in rural areas and actively participates in agriculture growth. The poor can actually benefit from agricultural growth through increases of income and expansion of employment opportunities as well as falling prices of food.

A study by Ahluwalia (1978) indicated that there existed a significant negative relationship between agriculture growth and rural poverty in seven of the fourteen states in India from 1957 to 1977 (Ahluwalia, 1978). Ravallion and Datt (1996), using aggregate time series data, found that poverty measures have responded far more to rural economic growth than urban economic growth in India.31 They also found that "primary" and "tertiary" sector growth had a greater impact on poverty than "secondary" sector growth.

Manufacturing growth was argued to have a minor impact on poverty reduction. Growth in the manufacturing sector, usually in the urban areas, is argued to be so small

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30 According to Osmani, a growth strategy may be defined as a set of policies designed to promote economic growth by allocating resources, either indirectly by molding the structure of incentives, or directly by redistributing resources between different owners of factors of production. Depending on the allocation of resources induced, any given growth strategy will lead to a certain rate of growth and a certain distribution of income among individuals. See: Osmani, Siddiquur Rahman. 2000, “Growth Strategies and Poverty Reduction”, Asian Development Review, Asian Development Bank, vol.18, no.2, pp.85-130

31 See: Ravallion, Martin and Datt, Gaurav. 1999. When is Growth Pro-Poor? Evidence from the Diverse Experiences of India’s States. Washington DC: The World Bank, p.3. According to Ravallion and Datt et al. (1996), "rural (urban) economic growth" refers to growth in mean consumption in rural (urban) areas.
that its realistic growth rates are not enough to affect the amount of poverty in rural areas substantially (Danielson, 2001). Therefore, manufacturing growth effects on poverty reduction tends to be smaller than the effects from agriculture growth. Timmer (1997), in a cross-country study found that 1.0 per cent increase in agriculture production leads to a 16.1 per cent increase of incomes in the bottom quintile of the population and manufacturing growth of one per cent only leads to an increase of 1.16 per cent in incomes of the bottom quintile.\textsuperscript{32}

However, in middle-income countries and low-income Asian countries, manufacturing growth (urban sectors growth) has proved to be an important source of poverty reduction since manufacturing sector is growing more rapid than the agriculture sector (Danielson, 2001). It has much more impact on employment (and thus direct poverty reduction). Increasing productivity in manufacturing seems crucial and this enables the poor to be benefited in two distinct ways: (1) the demand for wages increases, so wage earnings increase and (2) food process are likely to fall, which is likely to benefit the poor as well.

While growth is generally good for the poor, some growth is more poverty-focused than others (Danielson, 2001). Since the rate of growth itself is predicated on the patterns of growth, the evaluation of alternative growth strategies in terms of their impact on poverty should then be made by asking what kinds of growth patterns, broadly defined, are induced by each strategy. The most pro-poor pattern of growth will always provide a lasting basis for poverty reduction.

\textsuperscript{32} Timmer (1997) cross-country study includes data for 27 countries and spanning a period of 32 years (1960 to 1992). See: Danielson, Anders. 2001. "When Do the Poor Benefit From Growth, and Why?" Background paper to Sida’s Poverty Project presented at the Poverty and Growth Workshop, Lidingo, August 8th.
2.3.5 THE IMPACTS OF INCOME DISTRIBUTION

"Interaction between income distribution, poverty, and growth can be used to forecast important goals like poverty reductions rates." ... "What is interesting about this exercise is that is accounts for direct and indirect (through income distribution) effects of growth on poverty...". (Pablo Rodas-Martini, 1999)

The statement above simply implies the importance of income distribution in evaluating the effectiveness of economic growth towards poverty reduction. Basically, the more equal income distribution is in a society, the better economic growth would be in reducing the level of poverty, and vice versa.

For example, assume that there are two different types of income distribution (more equal and less equal) in a society when poverty line income (PLI) fell at RM 220 per month. As shown in Figure 2.3, income distribution with high inequality (income gap between the rich and the poor at RM 370 (RM 430-RM 60) per month) and low inequality (income gap between the rich and the poor at RM 230 (RM 430-RM 200) per month) is represented by curve (a) and (b) (in black line), respectively. Notice that distribution of income in case (a) has more percentage of people below the poverty line as compared to case (b). Hence, the higher income inequality in a society, the higher would be the rate of (absolute) poverty.

**Figure 2.3 – Income Distribution With High and Low Level of Income Inequality**

![Diagram showing income distribution with high and low levels of income inequality](image-url)
Assume that economic growth has increased and raised the income level of every individual in the society at a same percentage rate. Thus, the income distribution line in case (a) and (b) would be shifted to the right equally, and is represented by the respective dotted curve line. The result is that the percentage of households with income more than the PLI has increased both in case (a) and (b). However, the large 50 per cent of households in case (a) are still at the average income level that is below the PLI. But in case (b), the 30 per cent of households, with the previous income level lesser than the PLI, has exceeded the PLI with the increase of economic growth. Hence, higher reduction of poverty due to economic growth exists in case (b) where distribution of income is more equal (the inequality is lower).

The influence of income distribution on growth-poverty relationship can actually be well explained by ‘Inverted-U Kuznets Hypothesis’ and ‘Induce Growth Argument’ as well as ‘Growth-Elasticity Argument.’

‘Inverted-U Kuznets Hypothesis’ investigates the impact of growth on inequality. It is produced by Kuznets (1955), which claims that as a country develops, its income distribution changes, in that income inequality increases in the early stages of development, reaches its peak and then, declines in the later stages of development. Countries are in the process of transitioning from mainly rural-based economies toward urban-based ones. Inequality first increases when the process of industrialization starts with workers migrate to the cities. Until most workers are in the urban sector, inequality tends to decrease with additional traditional migration. Noticeably, the relationship between economic growth and income inequality varies across time (in “inverted U”

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shape): positive correlations in the beginning, then, zero correlations and finally, negative correlations.\textsuperscript{34}

The ‘Induce Growth Argument’ and ‘Growth-Elasticity Argument’, however, explain the correlation between poverty and income inequality. According to Ravallion (1997), the former states that the higher income inequality may reduce growth rates and make growth more difficult to reduce poverty. Whereas, the latter states that higher income inequality would only earn the poor a smaller share of income, making the reduction of poverty slower at a time when growth is assumed to benefit all levels of income in similar proportions (Martini, 1999).\textsuperscript{35} High-income inequality is agreed by both arguments to be a factor that inhibits the effectiveness of growth in reducing poverty. The higher the rate of income inequality, the higher would be the rate of poverty.\textsuperscript{36}

Taking income inequality into consideration, economic growth can be expected to reduce poverty more if inequality falls. This expectation is confirmed by previous studies cited by Bruno, Ravallion, and Squire (1998). Their analysis using a sample of 20 developing countries produced a statistically significant coefficient of -2.28 for the growth variable and 3.86 for the inequality variable when the rate of change in poverty

\textsuperscript{34} Cline’s (1975) analysis that used cross-country data (from 43 developing countries), which were collected by Adelman and Morris (1973), showed a statistically significant “U-relationship between relative inequality and per capita income, although the degree of explanation was low, with $R^2 = 0.12$. Scenery and Syrquin (1975), using a cross-country study (1950-1970) of more than 100 countries, also confirmed the Kuznets’ hypothesis. The estimated regression equation showed the turning point of inequality to be around a per capita income of $300$ (in US$, 1964$). The same case happened in a study done by Ahiuwalia (1976) using a sample of developing and socialist countries. The results showed that there were turning points for 40 developing countries in their (different) income shares of the various income groups. For information about Scenery and Syrquin (1975) and Ahiuwalia (1976), see: Perumal, Muniappan. Feb 1985. \textit{Economic Growth and Poverty in Peninsular Malaysia: An analysis of The Distributional Effects of Economic Growth, 1957-1980}. PhD. Thesis, School of Modern Asian Studies, Griffith University.


\textsuperscript{36} Studies done by Londono and Szekely (1997b) and Osberg and Xu (1997) supported well this reasoning. Their analysis results show clear positive correlation between poverty levels and the Gini coefficients (in Latin America and developed countries). See: Martini, Pablo Rodas-. 1999. “Income Inequality Within and Between Countries: Main Issues in the Literature”, \textit{Human Development Report 1999} – “Globalisation with a Human Face”, pp.380.
is regressed on both the change in growth (change in survey mean) and the change in inequality (as measured by GC). This implies that even small changes in the overall distribution of inequality can lead to sizeable changes in the incidence of poverty. The impact of growth on income inequality formulated by Kuznets’ hypothesis, thus, shed a light directly on the growth-poverty relationship. The outcomes, however, corresponded with the theory of “trickle-down”, justifying increasing inequalities and persistent poverty as inevitable but transitional and self-correcting problems.

Nevertheless, income inequality might not necessarily be in the shape of “inverted-U” through the periods of economic growth and increases in the level of income inequality might not necessarily raise the percentage of poverty in a society. Deiniger and Squire (1996; 1998) findings using a large cross-country data set detected no statistically significant link between income and distribution in 80 per cent of cases. Fields has shown that inequality and poverty change need not go in the same direction in a country. Poverty may decline while inequality increases. Therefore, the impacts of growth towards poverty, in consideration of income inequality effects, could vary from the results as implied by the ‘trickle-down theory.’

The ‘Backwash Hypothesis’ by Backwash (1964) analyzed the effects of income inequality towards the growth-poverty relationship and came out with contrary results. It states that economic status of a meaningful number of people is relatively unaffected by the process of economic growth because the usual type of income distribution is always “biased against” the poor. That is, individuals in the lower income class would obtain a smaller percentage of income increase as compared to the higher income class.

individuals in a society. Income inequality tends to increase across time dismissing the validity of Kuznets "inverted-U" hypothesis. Its effect will be so high that it outweighs the growth effect. Thus, although economy continues to grow, poverty will also rise.

2.4 REVIEW OF EMPIRICAL EVIDENCE

2.4.1 CROSS-SECTIONAL EMPIRICAL STUDIES

Most of the panel studies on economic growth and poverty issues since the early 1970s supported the argument that growth is an effective element in reducing poverty. The 'Trickle Down Theory' generally is applicable to most countries, especially in the case of developing countries.

In 1971, Ahluwalia of the World Bank did one of the earliest estimates of the magnitude of poverty in some LDCs. Through his analysis, he observed, "the problem of poverty is directly related to the level of per capita income, although skewed distribution patterns are also important". LDCs with a low-level of real income (real 'Gross National Product' - GNP) would usually have a high level of absolute poverty. Similarly, in the subsequent study on the 'same sample' of 36 LDCs chosen earlier in Ahluwalia's study, Sundram (1983) obtained results implying that poverty level varies

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40 See: Gallaway, Lowell. 1973. "Poverty in America". Grid. Inc. Columbus, Ohio. 43214, pp.43. However, Gallaway (1973) has rejected the application of Backwash's hypothesis for the case of United States. His empirical results indicate that growth is actually in favour of the low-income groups since there is a clear evidence of reductions in income inequality of the post-war period of 1959-1969 in United States.

41 Ahluwalia analysis found that: 1) 13 Asian countries 14 African countries and 17 Latin American countries obviously have high rate of absolute poverty, 36.1 per cent and 56.4 per cent, 28.4 per cent and 43.6 per cent, and 10.8 per cent and 17.4 per cent respectively when arbitrary poverty lines were US $50 and US $75 per capita in 1971 dollars, respectively, and 2) poverty incidence for 36 countries (with GNP per capita converted to comparable units of purchasing power using 'Kravis factors') was about 60 per cent or more in countries with the lowest level of real GNP when poverty level was set at a different level, at 200 ICP - "International Comparison Project" (corresponds to the 46th percentile of the Indian income distribution dollars in the 1975). Cited by Perumal. 1985. "Economic Growth and Poverty in Peninsular Malaysia: An analysis of The Distributional Effects of Economic Growth, 1957-1980". PhD Thesis, School of Modern Asian Studies, Griffith University or see: Ahluwalia, 'Income Inequality' pg. 11
directly with the level of per capita income. The Gini Ratio for the LDCs, meanwhile, shows that poverty level varies inversely with the extent of inequality in the income distribution.

Knowles (2001) analyzed the influence of income distribution on the relationship between growth and poverty. The realization was that there is a significant negative effect of inequality on growth. Therefore, he concluded that the influence of inequality over the growth-poverty relationship is important. The growth-poverty relation is rather complex and is also related to the level of and changes in inequality. Thus, in order for the growth to be effective in eliminating poverty – to obtain “pro-poor growth” – one has to consider the interrelation between growth, inequality and poverty, which has remained much debated.

In 2000, a study done by the Secretariat of ESCAP examined the interface between absolute poverty, inequality and growth through a regression analysis. The hypothesis that economic growth helps to reduce poverty is validated by regression results based on cross-country data from the region. The results of the regression suggest that the level of IP depends on the total income and its

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44 Countries included in the sample are Bangladesh, China, Indonesia, Malaysia, India, Pakistan, the Philippines, the Republic of Korea, Sri Lanka, and Thailand; the 22 observations are for the time periods corresponding to growth spells of the selected countries. See: Note by the Secretariat. 2000. “Growth with Equity: An Overview of Policy Lessons From The Experiences of Selected Asian Countries”, Paper presented at the Workshop on Growth With Equity: Policy Lessons From the Experiences of Selected Asian Countries, Seoul, 15-17 June 1999, Poverty and Development Division, May.
45 The regression coefficient of growth in GDP per capita is statistically significant with the right sign, i.e. 1 per cent growth in GDP per capita tends to reduce poverty by about 0.83 per cent. The Gini coefficient has the right sign, which shows that an increase in inequality leads to higher poverty. However, the coefficient is not statistically significant. In the earlier study by the Economic and Social Commission for Asia and the Pacific (1998), the coefficients of GDP growth per capita and the percentage change in the Gini index were found to be statistically significant with the right signs. The sample in the present regression is relatively large and some of the data observations are more up-to-date. See: Note by the Secretariat. 2000. “Growth with Equity: An Overview of Policy Lessons From The Experiences of Selected Asian Countries”, Paper presented at the Workshop on Growth With Equity: Policy Lessons
distribution within a country. Either an increase in income or improvement in its distribution should reduce poverty.

Ravallion (1997) estimated the growth elasticity of poverty using high-quality distributional data for 23 developing countries at two points in time and noted that for any given rate of growth, the power of growth to reduce poverty was nearly doubled as one moved from the least equal to the most equal country in the sample. Despite the fact that growth is an effective element in eliminating poverty, those countries experiencing an increase in living standards has a much larger annual reduction of poverty when inequality is falling. This suggests that declines in income inequality further help the ability of growth to reduce poverty. In other words, when income inequality increases, the impact of growth towards poverty reduction is dampened.

The significant results of Ravallion and Datt (1992) in quantifying the relative contributions of growth and redistribution to changes in poverty using a decomposition analysis showed that changes in poverty in all of the countries such as Bangladesh, China, India, Indonesia, Malaysia, Pakistan, the Philippines, Sri Lanka and Thailand (Sen, 1996) between the mid-1980s and the late 1990s were found mainly due to the effects of growth. Only in five countries (India, Indonesia (rural), Malaysia, Pakistan

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From the Experiences of Selected Asian Countries, Seoul, 15-17 June 1999, Poverty and Development Division, May

Ravallion (1997) showed that poverty declines in response to an increase in the rate of growth and found the elasticity to vary considerably with the initial distribution of income. For instance, at the lowest Gini index in the sample (0.25), growth elasticity of poverty (as measured by the headcount index) was 3.33, while at the highest Gini Index (0.59) it was 1.82. See: Osmani, Siddiquir Rahman. 2000. "Growth Strategies and Poverty Reduction", Asian Development Review, Asian Development Bank, vol.18, no.2, pp 85-130.

From the household survey data in a sample of 50 developing countries over the period of 120 spells, he estimated that only 1 percent growth would result in a 2.5 per cent reduction in the incidence of poverty on average. See: Nanak Kakwani, Shahidur Khandker and Hyun H. Son. 2000. "Poverty Equivalent Growth Rate: With Application To Korea and Thailand", WIDER Conference 2003.

Decomposition Analysis: A method of decomposing total change in poverty between two time periods into effects of two components: economic growth and distribution changes. The growth component measures the change that would occur in poverty if the distribution at the reference date remained unchanged while income grew. The redistribution component captures the impact of change in inequality on poverty if mean income at the reference remained fixed. See: Thorbecke, E. and Charumilind, C. 2002. "Economic Inequality and Its Socioeconomic Impact". World Development, Vol.30, No.9.
and Sri Lanka) were found that declination in income inequality has helped poverty reduction. Through the analysis, Ravallion and Datt concluded that economic growth was sufficiently strong enough to outweigh the distributional effect.49

Adams (2003) through his analysis using new data from 50 developing countries and 101 intervals examines the extent of the impact of economic growth in reducing poverty. He showed that economic growth is an important factor in reducing poverty50 and income distributions do affect the effectiveness of growth in reducing poverty. However, the trend of income distributions of being relatively stable over time caused high and continuous growth to be the essential element needed to further reduce poverty. Adams clarified, "it was the present rates of economic growth of the developing countries that are simply too low – at an average of 2.66 per cent per year – to make a meaningful dent in poverty."

Bergsman in his 1979 study of growth and equity in 16 SIC,51 realised that income levels of the poor have increased in virtually almost every SIC. Therefore, he concluded, "rapid GDP growth can be very good at alleviating absolute poverty".52 To him, the effect of income distribution – that does not improve or even gets worse – would not be able to influence reduction of poverty because it is overtaken by the effects of rapid increases in growth. Although middle-income countries have high

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49 A study covering countries such as China (rural), Indonesia, Malaysia, Philippines and Thailand by Ajuha and others (1997) supported the result obtained by Ravallion and Datt.
51 SIC are the middle-income, less developed countries with important manufacturing sectors.
52 See: J.Bergsman, "Growth and Equity in Semi-Industrialized Countries", World Bank Staff Working Paper, No.351, 1979, pg.91
unequal distributions of income, their absolute poverty remained low (less than the absolute poverty in poor countries) due to the impact of continuous economic growth.\textsuperscript{53}

Squire (1993) in his econometric study using the international poverty line of $1 per person per day, yielded the result that a 1-percentage point increase in the growth rate reduced the poverty headcount ($1 per person per day) by 0.24 percentage points. In a similar econometric study done by Bruno, Ravallion and Squire (1998) for 20 developing countries from 1984 to 1993 showed that the 10-percentage point increase in growth (measured by survey mean income) can be expected to produce a 2.12 per cent decrease in the proportion of people living in poverty ($1 per person per day). So, this again confirms that the higher the growth rate is, the more would the expectation of reduction in poverty be.

Meanwhile, Warr (2000), in analyzing statistical evidence on the relationship between IP and economic growth in six economies: India, Indonesia, Malaysia, Philippines, Taipei, China and Thailand, found that the effect of a unit of growth of real GDP per person has on the decline of total IP was very similar across six countries. Due to the fact that the sectoral composition of growth was very different for the six economies, he suggested that the sectoral composition of growth might be a less important issue in determining its poverty-reducing capacity than was previously thought.

Dollar and Kraay (2002) argued that ‘good is for the poor’ based on their analysis using a large sample of 92 countries spanning the past four decades. Average incomes

\textsuperscript{53} Mexico and Brazil are examples of countries with high-income inequality but low absolute poverty (as compared to absolute poverty in poor countries). And the reason behind this is believed to be due to continuous economic growth. See: J. Bergman, “Growth and Equity in Semi-Industrialized Countries”, World Bank Staff Working Paper, No.351, 1979.
of the poorest fifth of society rise proportionately with average incomes. This implies that growth, generally, does benefit the poor, as much as anyone else. However, growth was highlighted as not all that is needed to improve the lives of poor. Income distribution might play an important role in affecting poverty reduction. Several determinants of growth such as good rule of law, openness to international trade, and developed financial markets are identified to have little systematic effect on the share of income that accrues to the poor. Several “pro-poor” policies such as formal democratic institutions and public expenditure on health and education are identified to have no systematic respond to the growth of income of the poor.

2.4.2 TIME SERIES ANALYSIS OF EMPIRICAL STUDIES

In an individual country’s time series studies, most of the research, especially the recent ones, have concluded that growth plays an important role in reducing poverty. Other aspects, such as income distribution, the rate and sustainability of growth as well as definition of poverty, were identified by most of the studies as important factors in affecting the growth-poverty relationship.

One of the early studies in 1970s by Gallaway (1973) argued that economic growth have played and likely to play a substantial role in eliminating poverty in United States, especially when poverty is defined in absolute terms during the years 1947 to 1968. Growth does have some small impact on relative poverty since it appears to be

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54 The results of basic specification analysis by Dollar and Kraay indicate that income of the poor increase by 1.07 per cent with every 1.0 per cent increase of mean income. The general relationship between growth and poverty, therefore, is one-to-one. See: Dollar, David. and Kraay, Aart. 2002. *Growth is Good for the Poor*. The World Bank: Development Research Group, p.20, March.

55 The elasticity of poverty with respect to median family income obtained was about -1.4, which indicated that a one per cent increase in median family income produced a 1.4 per cent decrease in poverty. The elasticity estimate is derived by fitting a log linear multiple regression equation of the form: \( \log P = \log a + b \log Y + c \log U + e \), where P denotes the poverty rate, Y is median family income, U is the unemployment rate, and e is a random error term. See: Gallaway, Lowell. 1973. "*Poverty in America*", Grid. Inc. Columbus, Ohio. 43214, pp.52.
biased in favor of the lower tail of the income distribution. However, if the poverty gap definition is used, growth has nothing to contribute to eliminate poverty. Therefore, to Gallaway, it was the approach of defining poverty that determines the potential contribution of economic growth as a policy approach to eliminate poverty. Overall, the analysis rejected the existence of the "Backwash" phenomenon in United States indicating that the poor will benefit from the process of growth due to distribution effects that 'biased in favor of' the poor.

Nanto did another study on growth and poverty in the early 1970s in Japan. His results showed that 90 per cent of the decline in the level of absolute poverty in Japan between 1963 and 1977 was contributed by the growth in average incomes, while the remaining 10 per cent was due to the reduction in inequality in the size of income distribution. Meanwhile, during the period of 1970 to 1990, Hyungpyo (2000) found that there was a drastic shrink in absolute poverty, from 36.6 per cent to 7.2 per cent which was mainly attributed to the rapid economic growth accompanied by the relatively even distribution of income. Noticeably, the measurement used for poverty was also in the absolute term.

The recent study by Bigsten, Kebede and Shimeles (2003) that investigated the impact of growth on poverty in Ethiopia by analyzing panel data covering 1994 to 1997 emphasised on the importance of income distribution in affecting the growth-poverty

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56 Between 1947 and 1965, relative share of the top 5 per cent of the income distribution declined from 17.2 to 15.8 per cent and share of the bottom quintile rose from 5.0 to 5.3 per cent. Noticeably, declination in inequality has contributed little to the change in the relationship between poverty rate and median family income. See: Gallaway, Lowell. 1973. “Poverty in America”, Grid. Inc. Columbus, Ohio. 43214, pp.53.

57 The calculation of the poverty rate is on the basis of Fuchs’ suggestion that one-half of the median income be used as a poverty criterion. The result is an increase in the poverty rate from 19.7 per cent in 1947 to 32.7 per cent in 1979 when one-half of the median income increases from $2,629 to $7,237. See: Gallaway, Lowell. 1973. “Poverty in America”, Grid. Inc. Columbus, Ohio. 43214, pp.50.


relations. By decomposing changes in poverty into growth and redistribution components, the potential poverty reduction due to increased real per capita income has been, to some extent, counteracted by worsening income distribution.\(^60\)

Meanwhile, in South Korea, studies done by Hyungpyo in 1990 and Ravallion and Datt in 1996 respectively showed that both growth and redistribution component contributed to poverty reduction in those countries. Over the past four decades, the growth in mean consumption accounted for 80 per cent of the cumulative decline in poverty, while redistribution accounted for the remaining 20 per cent. The poverty-reducing effect of distribution was most visible in the first half of 1960s when inequality fell significantly. However, the substantial fall in poverty since the mid-1970s has been almost entirely the result of growth.

A study that sought to assess the extent of Vietnam’s economic success in reducing poverty by Glewwe, Gragnolati and Hassan (2002) provided evidence that the impressive growth of the country in the 1990s resulted in enormous poverty reduction during the period of 1992-93 to 1997-98, given the small rise in inequality.\(^61\)

Due to the importance of growth rate’s magnitude in reducing poverty, economic crisis undeniably would give tremendous negative impacts towards poverty reduction. As seen in the case of Thailand, Vilmosiri (2000) found that the 1997-98 financial crisis has reversed the trend of poverty reduction in the country. The number of poor, which had been continuously declining before the crisis, was estimated to have increased by 22.3 per cent after the crisis.

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\(^60\) The increase in inequality in an economy coming out of a long civil war is not surprising. The sectors that were most depressed during the conflict were transaction-intensive sectors that tend to be lucrative in peacetime (Collier, 1999). They rebounded, and the limited groups involved in these activities saw large income improvements, leading to increased inequality that would have been difficult and even inappropriate to counter through economic policy. See: Bigsten, Arne., Kebede, Bereket. and Shimeles, Abebe. 2003. “Growth and Poverty Reduction in Ethiopia: Evidence from Household Panel Surveys”, *World Development* Vol.31, No.1, pp. 87-106.

In Pakistan, a study done by Sayyid and Salman (2000) shows that an increase in real per capita income was the dominant factor for poverty reduction in the late 1970s and throughout the 1980s. Typically, an improved growth performance leads to faster improvement during the initial stages of development when the IP is high. As the incidence falls, any further reduction as a result of a given rate of growth is likely to be slower because those remaining below the poverty line are likely to belong to a more “hard-core” group.

2.4.3 EMPIRICAL STUDIES ON MALAYSIA

Early studies in Malaysia were done mainly to show how the poor and the rich shared in economic growth by looking into the size of income distribution in Peninsular Malaysia (due to insufficient data from the East Malaysia). Only recently that studies began to emphasise on the direct linkage between growth and poverty as well as the role of income distribution in influencing the relationship. Undeniably, growth has played an important role in reducing poverty in Malaysia.

In early 1974, Hirshman commented that “...in terms of income, the rich got richer and the poor got poorer in Peninsular Malaysia from 1957 to 1970...”. Poverty gap between the upper and lower income groups gradually widened. This caused the poor to become relatively poorer. And, in the absolute term, the actual income of the

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62 The analysis of correlations and co-variances for the relationship between growth and poverty indicated that, on average, the growth in each sector contributed to the reduction of poverty during the data period, 1959/60 and from 1963/64 to 1992/93, and the effects used to be greater in urban than rural areas (where agriculture is the dominant sector). See, Sayyid Tahir and Salman Syed Ali. 2000. “Growth With Equity: Policy Lessons From the Experience of Pakistan”. Paper presented at the Workshop on Growth With Equity: Policy Lessons From the Experiences of Selected Asian Countries, Seoul, 15-17 June 1999, Poverty and Development Division, May.


64 Over this period of 13 years, the upper half of households, mostly the top 20 per cent, received all of the increases in household income. See: Perumal. 1985. Economic Growth and Poverty in Peninsular Malaysia: An analysis of The Distributional Effects of Economic Growth, 1957-1980. PhD. Thesis, School of Modern Asian Studies, Griffith University.
poor has decreased. This finding supported the application of 'Absolute Impoverishment Hypothesis' more than the 'Trickle Down Theory'. However, it could have been supportive to the latter theory, since 'trickle-down' process usually happens in the later stages of development. In the beginning stages, it would basically be increases in inequality, relative poverty and absolute poverty.

The analysis of poverty based on income levels and relative income distribution by Lim (1978) from 1957 to 1970 in West Malaysia, however, indicated that throughout the 13-year period, absolute poverty and income level of the poor fell. This conclusion is quoted by the Malaysian Government as being controversial since it is difficult to reconcile this finding with the fact that the per capita GNP was growing at a rate of 2-4 per cent per annum".  

Muniappan (1985) had done a more thorough study on the relationship between growth and poverty by examining as well the impact of income distribution. Using the measurement of absolute poverty, he showed that there existed a statistically significant "inverted-U" shaped relationship between per capita GNP and relative inequality in Peninsular Malaysia during the period of 1957-1979. This initial widening of relative inequality, however, did not exclude the possibility of the poor gaining in absolute terms. Overall, Muniappan’s findings revealed that the benefits of rapid economic growth “trickled down” to the poorer segments of the population, albeit at a slower pace, in comparison with the rich during the periods of 1957-1970 and 1970-1976.

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Raising the average income level of the population would have a positive effect on the poverty problem.\textsuperscript{67}

Ahuja and others (1997) showed that between 1973 and 1989 there was a 19.1 per cent decline in the head-count index. Of that figure, 16.4 per cent was attributed to the growth component while 3.9 per cent resulted from the redistribution component with the residual being -1.2 (=19.1 - 16.1 - 3.9). This showed the gradual importance of growth in determining the extent of reduction in poverty as compared to the previous years. This result is consistent with the statement given in the ‘Mid-Term Review of the Fourth Malaysia Plan’, that the income of the poor has increases in absolute and relative terms during the 1970s.

In 1998, Shireen Hashim used different measurement of poverty, including ‘1P’, ‘poverty gap’ and ‘Sen Index,’ to look at the poverty profile in Malaysia in 1989. Her analysis suggests that poverty has been a predominantly rural and agriculture phenomenon in Malaysia.\textsuperscript{68} The agriculture sector of rural states was mainly the largest contributor to GDP. Indirectly, the linkage was that, poverty level tends to be high in states where GDP yielded high.

\textsuperscript{67} According to Muniappan, therefore, the poor actually gained from economic development. The proportion of households falling below the poverty line (in real terms) declined from about 40 per cent in 1957/58 to 38 per cent in 1970 and to 34 per cent by 1976. An analysis of economic growth using Fields' decomposition procedure showed that about 38 per cent of the income growth (or incremental GNP) from 1957/58 to 1970 was from poor households, compared to 32 per cent from 1970 to 1976.

\textsuperscript{68} According to Shireen et al. 1998. “With the exception of Terengganu, the states with the largest levels of poverty by the three poverty measures – Terengganu, Sabah, Kedah, Kelantan and Sarawak – were predominantly rural states, with more than 70 per cent of the households in these states living in rural areas. In the case of Kedah, Sarawak and Sabah, more than 80 per cent of households were located in rural areas. In terms of contribution of GDP, the agricultural sector was the largest contributor in these states with the exception of Terengganu and Sarawak where petroleum and timber were important. Even though agricultural sector did not account for the largest share of GDP in Terengganu and Sarawak, 72.9 ad 56.2 per cent of GDP respectively were derived from the agricultural and mining sectors together in 1990. Thus, primary sector accounted for more than half of GDP in the two states.” See: Hashim, Shireen M. 1998. “Income Inequality and Poverty in Malaysia”, Rowman and Littlefield Publishers, Inc., United States, p. 178.
Ragayah Haji Mat Zin (2000) has also stated that the high growth rate of Malaysia’s economy is associated with the rapid reduction in IP. The period between 1976 and 1984 saw the fastest decline in IP when the economy grew at a more rapid rate. In the period of 1997 financial crisis that reduced Malaysia’s GDP growth rate, IP among Malaysians has raised (to 7 per cent or 342,500 households). Although overall income inequality in Malaysia fluctuated (increased and decreased) since early 1970s, the IP has continued to fall. This is because the importance of growth outweighed the effects of income distribution in Malaysia.

In 2001, Jomo mentioned that “rapid economic growth, led by export-oriented manufacturing in the 1970s, and since the late 1980s, along with increased public spending in the 1970s, quickly reduced poverty”. Income inequality, however, seems to have grown in 1960s, declined in the 1970s and 1980s and increased again since then (Jomo and Ishak, 1986; Hashim 1997, Jomo, 2001). Thus, he concluded that “growth helped to reduce poverty overall (except in the mid-1980s) though income inequality has worsened”.

Similarly, Nair (2000) stated that “commendable progress in poverty eradication was largely due to the rapid economic growth rates which contributed significantly to poverty reduction...”. Meanwhile, economic crisis has had adverse impacts on poverty reduction in Malaysia with overall IP increased from 6.8 per cent to 7.6 per cent between 1997 and 1998 while the incidence of poverty increased from 1.4 per cent to 1.5 per cent over the same period.

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71 Nair, Sulochana 2000. Poverty In the New Millennium – Challenges For Malaysia. Kuala Lumpur: Faculty of Economic and Administration, University Malaya.
A study by Roslan (2002) argued that government intervention under the NEP which has been successful in generating economic growth and development of Malaysia has significantly reduced poverty, particularly poverty amongst the Malay ethnic group.\textsuperscript{72} Overall income inequality as well as inter-ethnic and rural-urban inequality has also declined. However, intra-ethnic inequality, particularly intra-Malay inequality emerged as a new dimension of inequality in the 1990s. Government intervention that is articulated in the political rhetoric of ethnicity would be incoherent to solve this new problem of inequality.

Recently, Khan (2002) that focused on the contrasting experiences of Malaysia and Pakistan regarding poverty reduction suggesting that Malaysia, unlike Pakistan, was able to sustain rapid economic growth with equally impressive reduction in poverty.\textsuperscript{73} The reasons were due to the high and sustainable economic growth of Malaysia and the successffulness of Malaysia government’s in implementing poverty reduction programs. In Pakistan, growth-poverty links were weak due to the highly unstable economic growth and the failure of the government to pursue relevant policies to effectively reduce poverty. This again supported the argument that growth is an effective element in reducing poverty.

\textbf{2.5 CONCLUSION}

Economic growth means a rate of change in the level of production of goods and services within a country over a certain period of time and is measured in terms of real GDP, real GDP per capita and mean expenditure (income) growth. Poverty, on the other

\textsuperscript{72} In period of 1957 to 1970, there was a reduction in the incidence of poverty from 51.2 per cent to 49.3 per cent. Among the Malays, incidence of poverty has declined from 70.5 per cent to 65.9 per cent. See: Roslan, A.H. 2004 (online available). *Income Inequality, Poverty and Development Policy in Malaysia*. Universiti Utara Malaysia: School of Economics, March.

\textsuperscript{73} The impressive record of poverty reduction in Malaysia was from 50 per cent of the population in 1970 to 8 per cent in 2000. See: Khan, Mahmood Hasan. 2002. *When is Economic Growth Pro-Poor? Experiences in Malaysia and Pakistan*. IMF Working Paper, IMF Institute, May.
hand, simply means that people are "deprived" of various necessities in life, either socially or economically, in absolute or relative terms. The measurements of poverty are, among others, IP, relative poverty, Sen Index, poverty gap index, and others.

Through the theoretical framework review, it is understood that the relationship between economic growth and poverty was and still is under much debate. The ‘Trickle-Down Theory’ can be applicable as some fraction of the total benefits from economic growth will always trickle down to the poor. Nonetheless, the ‘Trade-Off Theory’, believing that economic growth and poverty are two contradictory goals and the poor would be bypassed in the process of rapid growth, also seems reasonable. The application of either one theory in a particular country actually depends on the influence of several country specific factors such as definition of the poverty concept, the rate of growth and its patterns and inequality trends in income distribution. Basically, ‘Trickle-Down Theory’ would be applicable in a particular country when poverty is defined in the absolute term and the country has achieved rapid growth rate and low-income inequality.

The review of empirical evidences generally shows that growth is an effective element in reducing poverty. Most of the studies, especially cross-country growth studies, suggest that growth has a strong correlation with poverty reduction. In Malaysia, empirical evidences mostly imply that growth benefited the poor especially in the later development stages – late 1970s onwards. Absolute poverty showed a reduction that gradually increases whereas changes in relative poverty corresponds with the changes in the trend of inequality. The overall effects of poverty concept, rate of growth and income inequality on the growth-poverty relationship are consistent with the discussions given earlier in the theoretical parts.