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Income Distribution and the New Economic Policy in Malaysia

By

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Hancur badan dikandung tanah
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Abstract

Malaysian politics has long been dominated by tensions arising out of inter-ethnic inequality. However, economic policy in the earlier years of independence took a *laissez-faire* approach. Following the racial riots in 1969, there was a re-think on policy and the New Economic Policy (NEP) was promulgated in 1970. The underlying objective of the policy was to achieve national unity, which entailed improving the economic and social status of the Malay (*Bumiputera*) community *vis-à-vis* the non-Malays (*non-Bumiputeras*), especially the Chinese. The policy also attempted to transfer ownership of industries to the Malay (*Bumiputera*) community to develop a capitalist economy under the control of the Malay (*Bumiputera*) ethnic group. This study argues that, whilst the policy was successful at the outset in generating economic growth and reducing poverty, especially in the rural areas, it became obsolete even for that narrow purpose. The exclusive focus of the policy on inter-ethnic inequality made it insensitive to the problem of intra-Malay inequality. Due to the very success of NEP in the earlier years, the Malay community has become less homogeneous and cross-cutting cleavages have begun to emerge. Also, Malay tolerance of intra-Malay inequality has begun to erode. Many of Malaysia's current economic and political problems can be explained by the failure of income redistribution policy to reflect these changes within the Malay community. The argument is presented here using an analysis of the trends in income distribution. The required data are obtained from the literature and also from the Malaysian Family Life Survey (MFLS).

Table of Contents

List of Tables

List of Figures

Chapter 1

Background, Objectives and Organisation of the Study

1.1 Background of the Study

In 1970, the Malaysian government announced the New Economic Policy (NEP), which was to be carried out in the span of twenty years (1971-1990). The formulation of the NEP came about after the race riots in 1969, which were perceived to be the result of a glaring economic imbalance between ethnic groups, particularly between the Malay and the Chinese. Thus, it is not surprising that the underlying objective of the NEP was to attain national unity and foster nation-building. These objectives were to be achieved through a two-pronged strategy: eradicating poverty irrespective of race, and restructuring the society so as to correct the economic imbalances that exist between ethnic groups. Under the NEP, the government played an active role in raising the Malay income through poverty reduction measures in the rural area and the expansion of employment opportunities in the urban area. The government also played an active role in increasing the share of the Malay corporate wealth targeted to reach 30.0 percent by the year 1990. Thus, the NEP could be viewed as an affirmative action economic policy to advance the Malay socio-economic position, finally reducing the existing imbalances with other ethnic groups. The National Development Policy (NDP) replaced the NEP when it came to end in 1990. While there are adjustments in terms of strategy and priority, nonetheless, the main spirit of the NEP, i.e. to preferentially uplift the economic and social status of the Malay, is still maintained in the NDP.

During the NEP period (and also during the National Development Policy), Malaysia experienced very rapid economic growth. Indeed Malaysia has been recognised as one of the "economic miracles" of East Asia (World Bank, 1993). It is not surprising therefore that the government has highlighted this remarkable economic growth as a vindication of the success of the NEP. It has been argued that the NEP has provided

the basis for socio-political stability in the multiethnic society of Malaysia, which in turn allows the economy to grow rapidly and improve income distribution. In the Second Outline Perspective Plan (OPP2) 1991-2000, it has been claimed that (Malaysia 1991, p. 98):

> *"A remarkable achievement of the NEP was that it significantly improved income distribution without adversely affecting growth. In fact, the economy was able to achieve a high rate of economic growth during the 1971-1990 period on the account of the social and political stability created by the NEP".*

The above claim has raised expectations that ethnicity (i.e. the pro-Bumiputera policy)[1] would remain the cornerstone of economic policy in Malaysia. Indeed, as mentioned above, ethnicity is still the basis in formulating and implementing the NDP (1991-2000). However, continued use of ethnicity as the foundation of economic policy is no longer coherent, and hence could only be undertaken with the risk of greater discontent, paradoxically amongst the Malay community. This discontent is due to the success of the NEP in uplifting the economic position of the Malay as a group. However, this has changed the structure of Malay society because the distribution of income and wealth has changed within it. As a result of the success of the NEP, poverty amongst the Malay has been reduced substantially, a Malay urban working class has emerged, and the Malay middle class and new rich Malay have expanded. Thus the Malays are no longer so homogeneous, economically speaking, as they were in the early years of the NEP. This was expected since the aim of the NEP was to make ethnic groups more equal, regardless of how unequal each group might be within. The NEP was about redistribution between ethnic groups, not individuals. It could not address tension created by intra-group inequality amongst the Malay community.

As a result, while there may have been improvement in the overall income distribution in the country, the problem of intra-ethnic inequality, particularly amongst the Malay, has remained a significant problem throughout the NEP period. It

[1] Bumiputera literally means the "son of the soil". The Malays are the main Bumiputera in Peninsular Malaysia. In Sabah, the main Bumiputera are Kadazan, Bajau and Murut, while in Sarawak they are Iban, Malay, Bidayuh and Melanau. Since this paper concentrates on Peninsular Malaysia, the term "Malay" and "Bumiputera" will be used interchangeably.

seems that intra-Malay inequality could easily have been played down at the onset of the NEP, as the Malay tolerance towards inequality was high, when there was still significant inter-ethnic inequality in the country. Intra-Malay inequality could no longer be played down once the intra-ethnic differences were reduced. A high intra-Malay inequality would lead to the emergence of cross-cutting cleavages,[2] and hence, deeper social and political cleavages would evolve in the society (Rae and Taylor, 1970). The formation of cross-cutting cleavages would deepen socio-political divisions and conflicts would arise not only between the Malays and non-Malays, but within the Malays themselves. Furthermore, the NEP could only be sustained if the tolerance of the Malay towards intra-Malay inequality remained high. However, there is a limit to the societal tolerance towards inequality (Hirschman, 1973). The persistence of high inequality amongst the Malay would be likely to erode their tolerance towards it. Thus, continuation of ethnicity as the basis of economic policy, such as the NEP, would be incoherent and unsustainable.

Therefore, policy with regards to income redistribution has to confront intra-ethnic redistribution. This requires policy reform. For example, if the policy is to be coherent and address effectively the problem of intra-ethnic inequality, the redistribution policy should focus on the poor, regardless their ethnic groups. The problem with this kind of policy reform, however, is that it might be difficult to accomplish since the NEP is articulated in the political rhetoric of ethnicity. When the political sphere is still immersed in ethnicity, the rhetoric of distribution along ethnic lines is expected to continue. In other words, as long as the solution to economic problems is a political one, and as long as political parties continues to pursue inter-ethnic distribution issues to garner and maintain their political support, the issue of intra-ethnic distribution might be difficult to address. The failure to address intra-ethnic distribution issues, in turn, would prove to be socially and politically destabilising, particularly to the Malay community.

[2] Cleavages are the criteria that divide the members of the society into groups. There are three general cleavages: (i) ascriptive or trait (e.g. race); (ii) attitude or opinion (e.g. ideology or preferences); and (iii) behaviour or action (e.g. voting). Cross-cutting cleavages are the extent to which individuals are divided by one cleavages (e.g. race), but will be brought together by another cleavage (e.g. religion). For a more detailed discussion, see Rae and Taylor (1970).

However, despite the significance of the intra-ethnic inequality problem, the current Prime Minister, Mahathir Mohamad, continued to insist that inter-ethnic inequality will remain the main focus of Malaysia's economic policy. Consider the following paragraph, where he re-iterated his stance (Mahathir Mohamad, 1998, pp. 33-34):

> *"The NEP, it must be iterated, was not concerned with making all the bumiputeras earn equally, or share equally, the wealth distributed amongst them. ...The intention of the NEP was to create in the bumiputera community the same division of labour and rewards as was found in the non-bumiputera communities, particularly the Chinese. ... The equitableness was not to be between individuals, but between communities".*

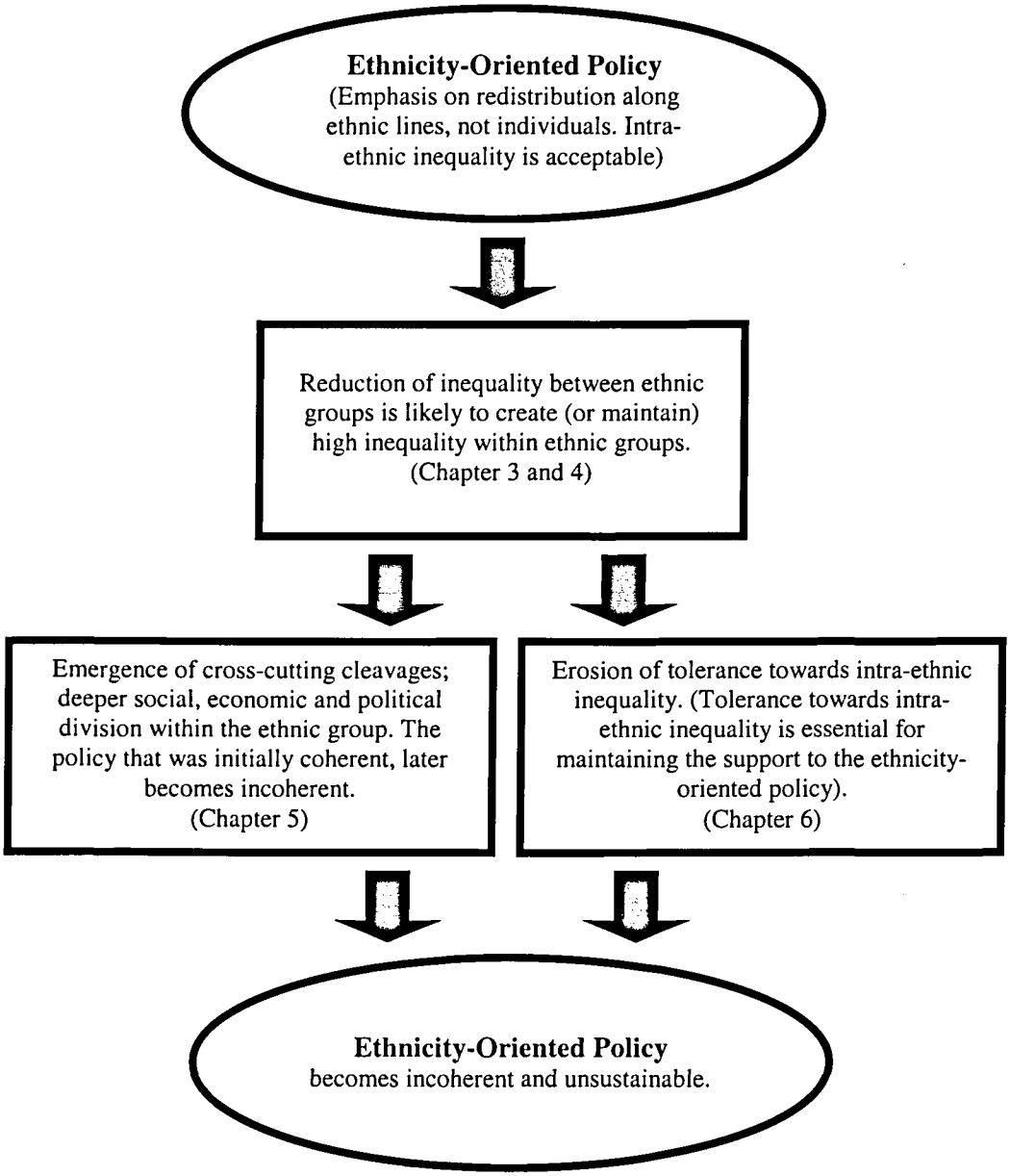
This leads to the central argument advanced in this study. The study argues that the pro-Bumiputera economic policy, i.e. the NEP, has lost its *raison d'être*. While the NEP has been successful in the past in generating economic growth and development of the country in general, and in the development of Malay in particular, it is unlikely to be sustainable due to the following two reasons. First, for the NEP to be sustainable, a coherence of interest amongst the Malay is necessary. This coherence of interest implies that there should be less fragmentation or division within the Malay community. However, since what matters for the NEP is the equality between ethnic groups rather than between individuals, the NEP is more likely to create division amongst the Malays themselves. In fact, as will be seen later in this study, even though declining, there has been a persistent high level of intra-Malay inequality during the NEP period. This suggests that deeper division amongst the Malay community has emerged, and hence the emergence of cross-cutting cleavages (Rae and Taylor, 1977). In other words, there emerged diverse and conflicting interests within the Malay community. In such a situation, it would be difficult for the rhetoric of ethnicity, which views the conflict of economic interest simply in ethnic terms to solve the problem of economic conflict within the Malay community. The ethnicity-oriented policy, such as the NEP, will be impotent to respond to the new problem of inequality. As a consequence, the Malay political party (UMNO) that initiated the NEP (and created the expectations of greater equality in the distribution of income) found that it became a hostage to its own rhetoric. The political rhetoric of ethnicity cannot articulate a coherent response to the new problem of distribution. The contradictions have continued to become more apparent in recent years.

One might argue that the problem of intra-ethnic inequality, particularly amongst the Malays, had existed even at the outset of the NEP. Why has it only now become a matter of concern? Why is it politically and socially destabilising now and not before? The answer to this question lies in the attitude of society with regard to inequality. This leads to the second reason why the exclusive emphasis on inter-ethnic inequality of the NEP would make it unlikely to be sustainable. The socio-political stability during the last three decades or so, which is claimed attributable to the NEP, is a manifestation of the "tunnel effect". The term "tunnel effect" is a term used by Hirschman (1973) to describe the changing tolerance of a society towards inequality. In this regards, the NEP, which is articulated in the political rhetoric of ethnicity, was initially accepted by the majority of the Malay since the existing income inequality did indicate a clear demarcation between the Malay and the Chinese. The majority of the Malay were poor and rural, while the Chinese were rich and urban. Ethnicity, as the cornerstone means of the NEP to solve the economic problem facing the Malay community, then became doubly attractive because it leads to the empowerment of the countryside and the creation of a domestic market for industrial products. Indeed the policy has been successful in securing the support of the Malay for the NEP. Initially, the tolerance of the Malay to intra-Malay inequality was high since the NEP in a sense functioned as the "hope factor" to the Malay. They perceived the NEP would improve their economic condition. However, as intra-Malay inequality remained high over time, there was a shift in the spotlight from inter-ethnic (Malay-Chinese) inequality to intra-Malay inequality. The persistence of high intra-Malay inequality subsequently changed the perception of the Malays towards intra-Malay inequality. Intra-Malay inequality that was tolerable before was no longer acceptable, and the tolerance of it has been eroded. Consequently, towards the end of the NEP period, the support of the Malay community towards UMNO started to fall apart. This is evidenced in the general elections in the 1990s, particularly in the 1999 general election. The results of the 1999 general election showed that UMNO had significantly lost the traditional support of the Malay. Rough estimation revealed that about 70 percent of Malay voted against UMNO (see discussion in Section 6.3 of Chapter 6).

However, it should be mentioned that the erosion of tolerance towards intra-Malay inequality (and consequently the support for UMNO) was not so much that the Malay were under an illusion about the success of the NEP or harboured a "false hope". This is most unlikely since the NEP was actually successful beyond its narrow objective, and reduced overall inequality and poverty in the country. The erosion of the tunnel effect was due to the unintended effect of the NEP. The NEP created an expectation of greater equality not only between ethnic groups (e.g. Malay and the Chinese), but equality within ethnic groups (e.g. intra-Malay) as well. Therefore, while the NEP might have produced rapid economic growth, reduced inequality between the Malay and the Chinese, reduced poverty amongst the Malay, as well as increasing the Malay economic position, the insignificant improvement of intra-Malay inequality during the NEP then became a problem, at least as far as the Malay were concerned. The NEP had been successful in terms of achieving its original objectives, but that success then changed the Malay perception of what constituted success. The "hope factor" or the expectation created by the NEP changed the perception of the Malay that what might have been considered as a success in the past (i.e. achieving the NEP objectives) was viewed now as a failure. This partly explains the recent socio-political tension that has arisen amongst the Malays in Malaysia.

The two arguments described above seem to indicate that the success of the NEP is paradoxical. The paradox is that while the NEP has claimed to achieve remarkable economic growth, and indeed has transformed not only the structure of the economy but also the Malay community, this very success of the NEP has created new problems that leads to its continuation becoming difficult, if not impossible. By neglecting the intra-ethnic inequality problem, the NEP may have planted the seeds of future problems for itself. The economic position of the Malay might have been improved, but the Malays have disintegrated. The government that articulated the NEP in the political rhetoric of ethnicity appears to have become its own captive. This leads back to the central argument of this study that the ethnicity-oriented policy, i.e. the NEP, while it may have been successful in the past, paradoxically is unsustainable (see Figure 1.1.1).

Figure 1.1.1: Ethnic Nationalism (Ethnicity-Oriented Policy) and Income Inequality



1.2 The Research Question and Objective of the Study

The study is motivated by two main reasons. First, some observers of Malaysia's economic development have argued that Malaysia appears to represent one of the success stories of a developing economy [see for example Chowdhury and Islam (1996) and World Bank (1993)]. During the implementation of the NEP (1971-1990), Malaysia has achieved a very rapid economic growth and structural change, together with declining poverty and inequality. While to certain extent these observations are correct, what they fail to see is that these achievements are basically the initial impact of the NEP. As mentioned earlier, the NEP is articulated in the language of ethnicity. The policy appears to be coherent when majority of the Malays were in poverty (i.e. they were basically economically homogeneous) and there is greater tolerance of the Malays towards intra-Malay inequality. When the policy successfully raised income of the Malays and substantially reduced poverty amongst them, the question of intra-Malay inequality come to the surface. It can no longer be ignored. Articulating the policy in the political rhetoric of ethnicity then become internally inconsistent. Thus, along with the economic success, the NEP is also sewing the seeds of future problems for itself.

Second, the study is also motivated by the realisation of the importance of income inequality and poverty in the policy choice debate in Malaysia. Despite its importance, attention to the effect of growth on inequality and poverty, as well as the impact of income distribution on policy choices, seems to have received less attention in recent years. The focus of policy debate is more on the way to sustain the rapid economic growth rather than on how the rapid growth has affected income and wealth distribution. This is regrettable since in the final analysis, whether development has taken place or not, is not so much depend on how fast income have grown, but rather more on who has benefited from that growth.

It is with this motivation that the study seeks to answer the following central question: is the NEP, a policy based on ethnicity, sustainable? Keeping this basic question in mind, the central aim of the study is therefore, to show that despite the success of the NEP in enhancing the economic well-being of the Malay, concomitantly it has also

resulted in greater division amongst the Malay via its effect on income and wealth; and to argue that the tolerance of the Malay towards inequality has changed. This in turn, entails investigation of the patterns and trends of income distribution in Malaysia that will encompass the following aspects:

(i) to examine and analyse the trends and changes in income inequality in Malaysia, covering the overall inequality, within and between area inequality (urban and rural) and also within and between ethnic groups inequality (particularly the Malay and the Chinese);

(ii) to estimate and analyse the contribution and the effect of different sources of income to the overall income inequality;

(iii) to measure and explore the question of polarisation, i.e. the "disappearing middle-class" in Malaysia;

(iv) to assess the extent of poverty in Malaysia and the contribution of different groups of population to total poverty; and

(v) to analyse the political consequences of the trends and changes in income inequality and poverty.

It should be mentioned here that it is not the intention of this study to pass judgment on whether the NEP is good or not for development of the Malay community in particular, and for the country's development in general. What this study intends to do however, is to examine and describe the pattern of income inequality in Malaysia before and after the implementation of the NEP, and then to draw some political implication from the observed pattern of income distribution.

1.3 Literature Review

As can be seen, this study is concerned with income distribution and the New Economic Policy (NEP) in Malaysia. In general, literature with regards to income distribution and the NEP in Malaysia could be divided into two lines of research. First, there are studies that mainly focus their discussions on the trends and patterns of income distribution before and after the implementation of the NEP as well as on the relationship between income inequality and socio-economic development in

Malaysia. Second, there are studies that focus on the politics of the NEP, where implicit in these studies is the assumption that political factors are more prominent in shaping the NEP as well as its implementation. Among others included in the first group are the studies by Snodgrass (1980), Anand (1983), Ikemoto (1985), Perumal (1989), Shari and Zin (1990), Shireen (1998) and Shari (2000), while included in the second group are the work of Milne (1976), Mauzy (1997), Torii (1997) and Stafford (1998).

Snodgrass (1980) examines income inequality in Malaysia from 1957 to 1970. He uses income distribution figures mostly from the government survey data - Household Budget Survey of the Federation of Malaya (1957-58), the Federation Saving Survey (1959), the Socio-Economic Sample Survey of Household 1967-68, the SRM/Ford Social and Economic Survey 1967/68, and the Post Enumeration Survey (PES) 1970. He finds that there has been a substantial increase in income inequality between 1957 (i.e. the year of Malaysia's independence) and 1970 (i.e. the year the NEP was announced). The income of higher income groups is found to grow faster (in percentage terms) than those of the bottom 80.0 percent of the population. Also, income inequality is greater amongst the urban households than amongst the rural households, and the urban household income is double the income of rural households on average. He also found that between 1957 and 1970, the Malay ethnic group experienced the largest increase in income inequality. Furthermore, on average, the non-Malay households earn more than double the income of the Malay households.

Anand (1983) probably has undertaken the most thorough study on income inequality and poverty in Malaysia. He examines income inequality in Malaysia at the onset of the NEP period using income data from the Post Enumeration Survey (PES) 1970. He decomposes income inequality to examine the contribution of inter-ethnic and inter-regional inequalities to total inequality by employing the Theil index of inequality. He found that about 90.0 percent of income inequality arises from inequality within each ethnic group. Similarly, Anand (1983) found that there are large income inequalities within rural as well as within urban households. Urban-rural inequality only explains a small portion of the total household income inequality. Hence, he suggests that policies that aim at reducing inter-ethnic economic imbalance would probably have a

limited impact on reducing the overall inequality. Anand (1983) also estimates the extent of poverty in Malaysia using the income data from the Post Enumeration Survey (PES) 1970. He found that 78.1 percent of poor households are Malay and therefore poverty is overwhelmingly a problem of the Malay. In addition, poverty also is overwhelmingly a rural problem. Anand (1983) calculated that 87.7 percent of poor households are found in the rural areas.

While Snodgrass (1980) and Anand (1983) examine income inequality in the 1957 to 1970 period, Ikemoto (1985) examines income inequality and its decomposition for the period before and after the implementation of the NEP, i.e. between 1957 and 1980. He uses income data from the Household Budget Survey (HBS) 1957/58, the Post Enumeration Survey (PES) 1970, and the Household Income Survey (HIS) 1980. He finds that the Gini index of income inequality has increased between 1957/58 and 1970, but declined between 1970 and 1979. His findings also confirm the results of Anand (1983) that it is intra-ethnic inequality, particularly inequality amongst the Malay and rural households, which contributed a large portion to the total inequality. Thus he concludes that, while the NEP might have been successful in reducing the overall inequality, inequality within each ethnic group is becoming significant.

Perumal (1989) examines income inequality and economic growth in Malaysia for the period of 1957 and 1984. Besides the sources used by Snodgrass (1980) and Ikemoto (1985), he also uses income data from the National Agricultural Census 1977 and Household Income Survey (HIS) 1984. His main focus is on examining the relationship between economic growth and income inequality, i.e. the Kuznet's inverted-U hypothesis. He finds that income inequality has risen from 1957/58, peaks in 1976, and decreases thereafter. He carried out a regression analysis with the Gini index as the dependent variable and GNP per capita as the independent variable. His results suggest that there is a presence of Kuznet's inverted-U hypothesis, where the turning point is estimated to occur in 1976. He argues that the rapid growth of the economy after 1957 has resulted in a significant increase in income inequality due to the widening rural-urban, as well as inter and intra-ethnic, income inequality. This trend continues until the middle of the 1970s, when growth was then associated with a

declining income inequality due to a reduction in both rural-urban as well as inter-ethnic income inequality.

Shari and Zin (1990) examine the trends and pattern of income inequality in the post-NEP period, i.e. between 1970 and 1987. Their main aim was to assess the trend of income inequality since the implementation of the NEP in 1970. Besides the distribution figures already published by the previous authors, they also used the published figures from the Household Income Survey (HIS) 1987. Their studies show that income inequality initially increases in the earlier period of the 1970s, peaks in 1976, and declines thereafter. They argue that the apparent decline in income inequality after 1976 could be explained by the "redistribution through growth" strategy, which underlies the NEP. Most important are the rural development and education programs. They argue that these programs appear to benefit the poorest section of the population, which happens to be in the rural areas. Since the Malay constitute the largest proportion of the rural population, strategies that were aimed at raising the income of the rural household has resulted in the rural and the Malay household incomes increasing at a faster rate than those of the other groups, and hence reduced income inequality over time.

Shireen (1998) examines the trends of income inequality and poverty in Malaysia in the 1980s. She uses income distribution figures from the Household Income Survey (HIS) of 1980, 1984, 1987 and 1989. Unlike the previous authors who examined income distribution only for Peninsular Malaysia, she also examines the trends of income distribution in Sabah and Sarawak. With regards to Peninsular Malaysia, she found that the Gini index of income inequality has consistently fallen throughout the 1980s. This is also true for rural and urban households, as well as for each ethnic group. She also observed that the largest declined in income inequality is amongst the Chinese. Shireen (1998) also performs decomposition of income inequality to its various sub-group components using the Theil index of inequality. Her results confirm the earlier studies that intra-groups (intra-ethnic and intra-area) inequality explain most of the total income inequality.

The most recent study was done by Shari (2000). He examines the trends of income inequality between 1971 and 1995, i.e. during the NEP and the earlier period of the NDP (1991-2000). For the period of the NEP, he uses income inequality figures available from the previous studies, while income inequality figures in the post-NEP (1991-1995) are derived from the Seventh Malaysia Plan (1996-2000). Here, he reviews the trends of income inequality during the NEP period (1971-1990) already studied by Shari and Zin (1990). However, his main focus is on the impact of liberalisation measures implemented since the mid-1980s on income distribution. Shari (2000) shows that the declining trend of income inequality during the NEP period has been reversed in the post-NEP period. Between 1990 and 1995, the Gini index of income inequality has increased, and thus the rapid growth of the economy in the early 1990s is no longer associated with declining income inequality. Furthermore, he also shows that the income gaps between groups have begun to widen after 1990. The Chinese-Malay, and the Indian-Malay, as well as the urban-rural disparity ratios have increased from 1990 to 1995. He argues the increase in income inequality after 1990 might indicate that liberalisation measures did not victimise and alienate all sections of society. He argues that while liberalisation measures might have marginalized the peasant and urban low-income workers, the upper and middle-income groups might have been benefited from them, hence widening the income inequality.

Unlike the above authors, the works of Milne (1976), Mauzy (1997), Torii (1997) and Stafford (1998) focus on the politics of the NEP. These studies in turn fall into two lines of arguments. The first are those who argue that the NEP is shaped by internal (domestic) political forces and power struggle. The work of Milne (1976), Mauzy (1997) and Torii (1997) fall in this category. Milne (1976) and Mauzy (1997) examine the interaction between the Malay and the Chinese political parties (UMNO-MCA) and how it has shaped and determined the implementation of the NEP. They view the political process of the NEP as an inter-ethnic political game where UMNO and MCA become the major players. Among others, Milne (1976) argues that the political influence of the MCA in economic policy-making process diminished substantially when the influential ministerial posts such as the Minister of Trade and Industry and

the Minister of Finance (previously held by the MCA) were later held by UMNO.[3] Thus, since the racial riot in 1969, UMNO has started to consolidate its political hegemony on the economic policy-making process by controlling the influential ministerial posts and is in the position to assert a pro-Malay (Bumiputera) policy.

Mauzy (1997) also follows this line of argument. She argues that UMNO's political hegemony over economic policy-making process has been more entrenched in the 1980 under the Mahathir administration, and therefore the political influence of MCA in economic policy-making is diminishing further. While both Milne (1976) and Mauzy (1997) focus their analysis on the interaction between UMNO and MCA, Torii (1997) on the other hand, examines the extent to which the internal power struggle within the Malay political party (UMNO) itself is the main determinant in shaping and implementing the NEP. He argues that Malay nationalism was at its peak in the 1970s and the Malay nationalist appears to have a major influence in UMNO. It is in the 1970s that the NEP restructuring objective is pursued rigorously. However, Torii (1997) argues that it has been gradually thinned away in the 1980s as the influence of Malay nationalism in UMNO has faded away.[4]

The second line of arguments of the politics of the NEP is the argument put forward by Stafford (1998). He argues that the NEP is shaped by the interaction between external economic forces and the response from the state, rather than by the political demands of the Malay and the Chinese as argued by Milne (1976) and Mauzy (1997) or by the political demands of certain faction within UMNO as argued by Torii (1997). Stafford (1998) argues that the external economic forces limit the ability of the government to rigorously implement and carry out the restructuring objective of the NEP. In other words, in pursuing the NEP restructuring objective, the government is viewed as attempting to balance the desire to realise rapid growth via greater liberalisation of the economy and the desire for uplifting the economic position of the Malay. This balancing action of the government, in turn, shaped the NEP and its

[3] The Minister of Trade and Industry has allocated to UMNO since 1969, while the Finance Minister has also been allocated to UMNO after the resignation of Tun Tan Siew Sin from MCA in 1974.
[4] In the mid-1980s, there were various liberalisation measures undertaken by the government, particularly with respect to attracting foreign investments.

implementation. Therefore, the liberalisation measures undertaken by the government since mid-1980s could be seen in this light.

As seen above, the subject matter of the present study is not really new. The novelty of the present study, however, rests on two aspects. First, it attempts to combine the two lines of research, and second, the data employed in the present study is different from the data employed in the previous studies. This study examines the distributional impact of the NEP on the one hand, and also how the distribution of income explains political interaction between different groups in the Malaysian society on the other. Given the close connection between economics and politics in Malaysia, exploration on the link between the economic and politics of the NEP would be not only interesting, but also useful. In this regards, Gomez and Jomo (1997, p. x) has rightly pointed out that a political economic analysis of the Malaysian economy, deemed necessary because of the link between economics and politics, has become stronger since the 1980s.

As already mentioned, none of the previous studies on income distribution really focus their attention on the game theoretic problems as well as the interaction between different groups in the Malaysian society that arises from the distributional impact of the government policy, i.e. the NEP. On the other hand, studies on the politics of the NEP did not use income distribution as the basis of their argument. This is unsatisfactory since the argument for the formulation of the NEP is the income imbalances between ethnic groups in Malaysia. Besides, the centre of analysis in the studies by Milne (1976, 1986), Mauzy (1997), Torii (1997) and Stafford (1998) is the state. The state is viewed as having to balance the forces that demand the NEP objective to be met and the forces that oppose it. In contrast to these studies, here the individual is the centre of the analysis. It attempts to understand the impact of the NEP on income distribution on the one hand, and the relationship between income distribution and individual behaviour with regards to their political choices on the other. The trend in income distribution is used as the basis to explain individual behaviour with regards to their political choices. The link between income distribution and the political choices of the individual could be found by looking at it from

rational choice perspective as well as by employing Hirschman's (1973) argument on the changing tolerance of society towards income inequality.

With regards to the second aspect, the data employed in the present study is different from the data employed in the previous studies. Most previous studies on income distribution in Malaysia used government survey data that was published in aggregate form. While aggregate data did contribute to understanding changes in income distribution in Malaysia, the factors that contributed to inequality and poverty were difficult to examine from that aggregate data. In this study, besides the income data available so far, additional data from the Malaysian Family Life Survey (MFLS) were employed. It was possible to disaggregate the MFLS income data not only by location (rural-urban) and ethnic groups (Malay, Chinese and Indian), but by the sources of income as well. Thus, the MFLS data permitted analysis to be carried out to identify the factors that contributed to inequality and poverty. Besides, previous studies only examine the contribution of inequality in different population subgroups to total inequality. This study extends the analysis to examine the contribution of inequality from different sources of income to total inequality, the question of polarisation and the contribution of different groups to total poverty. Furthermore, a better poverty index is used in this study besides the head-count ratio and poverty income gap ratio that have been generally used in most of the previous studies as well as in government documentation. Therefore, the broader and deeper analysis on the different income data set (MFLS) undertaken by this study could be used to compare findings from previously studies that used the government survey data, and also used to substantiate and verify the previous findings.

1.4 Methodology and Organisation of the Study

The study will be organised in seven chapters, which consist of four essays related to income distribution and the NEP in Malaysia.

Chapter 1 describes the background, objectives and organisation of the study.

Chapter 2 describes the data and measures used to calculate income inequality and poverty. The study relies on the Malaysian Family Life Survey (MFLS) data, but data that has already been published from previous studies and government documents is used as well. The most commonly used measures of inequality are used here – the Gini, Theil and Shorrock's indices of inequality – where these indices are decomposed to examine the contribution of different population subgroups and different income sources to total inequality. The Wolfson index of polarisation (W) is used to examine the question of polarisation. With regards to poverty measures, besides the usual simple head-count ratio (H) and poverty income gap ratio (I), poverty measures employed in this study includes Sen (S), Clark, Hemming and Ulph Index (P*), and Foster, Greer and Thorbecke (FGT). The FGT index of poverty is decomposed to examine the contribution of different groups to total poverty.

Chapter 3 is the first of the four essays in this study. It examines the trends and changes of income inequality as well as poverty in Malaysia using the MFLS data. Here, a comparison is also made with other previous studies that mostly use the government survey data. Income inequality is decomposed to examine the contribution of between- and within-group inequality to total inequality. The same is also carried out for poverty. The question of polarisation (which does not appear to have been investigated in previous studies) is also examined in this first essay.

Chapter 4 is the second essay of this study, an extension of the first essay (Chapter 3). It examines the contribution of different sources of income to total inequality, again an investigation not previously carried out.

Chapter 5 and 6 are the third and fourth essay of this study, respectively. These essays examine the political implications of the trends and pattern of income distribution. Using the rational choice framework, these two chapters attempt to show why the pro-Malay economic policy (NEP), while successful in bringing the Malay into the mainstream economic activities, has however become incoherent, and hence unsustainable. Nevertheless, the lines of argument in these two chapters are different. Chapter 5 examines how the NEP emerged from Malay nationalism and also how the nationalist approach to the Malay economic problem has resulted in the neglect by the

NEP of intra-Malay inequality. Consequently, there is a persistent high intra-Malay inequality, and cross-cutting cleavages begin to emerge. Thus, the nationalist argument for continuation of inter-ethnic redistribution becomes incoherent.

Chapter 6, on the other hand, examines why intra-Malay inequality has become a problem now, and not at the earlier period of the NEP even though evidences show that intra-Malay inequality is actually high at the earlier period. In other words, intra-Malay inequality is tolerable in the earlier period of the NEP, but not in the later period. This has been reflected in the decline of support from the Malay community to UMNO, a party that initiated the NEP. The main proposition here is that this is a manifestation of the Hirschman (1973) "tunnel effect", i.e. there has been a changing tolerance towards inequality amongst the Malay.

Chapter 7 is the final chapter. It summarises the main arguments and concludes the study.

Chapter 2

Data and Measures

2.1 Introduction

This chapter describes the sources of data as well as the measures that will be employed to evaluate the level of inequality and poverty in Malaysia. Most studies on income inequality and poverty in Malaysia have employed the government survey data undertaken by the Department of Statistics, Malaysia. The Department of Statistics (Malaysia) periodically conducts a survey of household income from which figures regarding income inequality are published. This study however employs a different set of income data, which is available from the Malaysian Family Life Survey (MFLS).

With regard to measures of income, the most commonly used indices of income inequality are used here, namely the Theil, Gini and Shorrock's indices of inequality. The Theil index is decomposed to examine the contribution of different population subgroups to total inequality, while the Gini and Shorrock's indices are decomposed to examine the contribution and effect of different income sources to total inequality. Another related aspect, which escapes the discussion on income inequality in Malaysia, is the question of polarisation. Here, the Wolfson index of polarisation (W) is used. With regard to poverty, better poverty measures than the usual head-count and poverty income gap ratios are considered here. These are the Sen (S), Clark, Hemming and Ulph (P*), and Foster, Greer and Thorbecke (FGT) indices of poverty. The Foster, Greer and Thorbecke (FGT) index of poverty is decomposed to examine the contribution of different groups to total poverty.

The chapter is organised as follows. Section 2.2 describes the MFLS data and other sources of data employed in the study. Section 2.3 discusses the various measures of inequality, while Section 2.4 deals with the measure of polarisation. The final section, i.e. Section 2.5, discusses measures of poverty.

2.2 The Sources of Data

2.2.1 The Malaysian Family Life Survey (MFLS)

The present study employs household income data from the Malaysian Family Life Survey (MFLS), which was conducted in Peninsular Malaysia by the RAND Corporation, USA. There are two surveys – the MFLS1 and the MFLS2.[1] The MFLS1 was fielded in 1976-1977, while the MFLS2 was fielded in 1988-89 as a follow-up survey to the MFLS1. The main purpose of the MFLS1 was "to provide data for estimating the magnitude of key economic and biomedical relationships affecting birthspacing, family size, and breastfeeding patterns of families in Peninsular Malaysia" (Terry Fain and Tan Poh Keong, 1982, p. 1), while the purpose of the MFLS2 "was to enable study of household behaviour in diverse setting during a period of rapid demographic and socio-economic changes" (Haaga et.al, 1993, p.1). In both surveys, information was collected through interviews on fertility related events, marriage, employment, migration, income and wealth, attitudes and expectations regarding family size and composition, community characteristics, time allocation and transfers of resources. Thus, the information gathered in both surveys seems not only suitable for demographic related studies such as fertility, family planning, marriage and migration as the surveys intended, but also appropriate for studies on income distribution since information on income and wealth was also collected.

[1]The first Malaysian Family Life Survey (MFLS1) was funded by the U.S. Agency for International Development. The MFLS1 was conducted by the RAND Corporation in collabouration, initially, with the Department of Statistics of the Government of Malaysia, and subsequently, with Survey Research Malaysia Sdn. Bhd. For more information about the survey, see Butz and Da Vanzo (1978). The second Malaysian Family Life Survey (MFLS2) was a colloborative project between RAND and the National Population and Family Development Board of Malaysia, with the support from the National Institute of Child Health and Human Development (USA) and the National Institute on Ageing (USA). For more information about the MFLS2, see Peterson (1993).

The household samples in both the MFLS1 and the MFLS2 were selected from a sampling frame designed by the Malaysian Department of Statistics. It should be mentioned that the household samples of the MFLS included only households with at least one ever-married woman aged 50 years or younger, i.e. one who had been married at least once, regardless of her present marital status. Therefore, the household samples of the MFLS were not fully representative of the entire population of Peninsular Malaysia. However, it is most likely that households that did not fall within the MFLS sampling criteria were small and insignificant. Therefore, even though the household samples of the MFLS might not be fully representative of the entire population of Peninsular Malaysia, nonetheless analysis of the MFLS data would still provide useful information on the distribution of income in Malaysia.

The relevant data used in the analysis is taken from the following questionnaires of the MFLS1: MF1 (Household Roster), MF4 (Female Time Budget), MF5 (Male Time Budget), and MF6 (Income and Wealth). On the other hand, the data from the MFLS2 is taken from these questionnaires: MF25 (Household Economy), MF21 (Household Roster), and MF26EB and MF27COMM (Community Level Data). There is a total of 1263 and 1512 households in the MFLS1 and MFLS2 samples, respectively. Households with incomplete data are omitted. The number of household samples left for analysis in the study totals 1245 for MFLS1 and 1507 for MFLS2. The household samples in the MFLS can be classified according to their location (i.e. rural or urban) and their ethnic groups. When comparing between ethnic groups, households classified as "Other races" are omitted. "Other races" constitute only about 0.1 percent of the total respondents.

The MFLS gathered information generally on all income received by the household – cash and non-cash income, which included the value of self-activities such as housework products and services for own consumption. Income data was collected on agricultural production, ownership of animals, businesses owned, services performed, gifts from non-household members, inheritance or dowries received, income from insurance, pensions, retirement programs and interest; income received from renting rooms, houses or land; ownership of land; and possession of durable goods. Thus, the concept of income used in the MFLS was fairly broad and the income data could also

be classified according to its sources. Here household income, which refers to total annual income received by each household, is broadly grouped into the following sources:

(i) Paid employment – refers to income before tax received from work, which is mainly wages and salaries, including bonuses as well as payments in-kind;

(ii) Self-employment – refers to gross income from self-employment including income from agriculture and business activities;

(iii) Rent (from property such as housing, and land), interest and dividends;

(iv) Pensions and employment provident funds (EPF);

(v) Remittances;

(vi) Welfare payment and zakat[2];

(vii) Inheritance, gifts and dowries;

(viii) Home produce and consumption, and

(ix) Others

Thus, the MFLS data sets allow analysis to be carried out not only to examine within- and between-group contribution, but also to examine the contribution of different source of income to total inequality.

Table 2.2.1 below shows the proportion of MFLS household samples by ethnic groups as well as by location (rural-urban). Table 2.2.2 on the other hand shows the MFLS rural and urban household samples by ethnic groups. It was estimated that the population in Peninsular Malaysia in 1988 was made up of 58.0 percent Malays, 32.0 percent Chinese and 10.0 percent Indian (See Haaga, J.G. et.al 1993, p.5). Other ethnic groups made up less than 1.0 percent. Therefore, with regards to the MFLS2 (1988/89), the household samples appear to be fairly representative of this distribution of ethnic groups.

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[2] According to the *Shariah* (Islamic Law), zakat is a compulsory payment that is due to the poor from the wealth of well-to-do Muslims.

Table 2.2.1: MFLS Data: Number and Percentage of Households of the MFLS Sample, 1976/77 and 1988/89.

	MFLS1 (1976/77)		MFLS2 (1988/89)	
	No.	%	No.	%
Rural Households	722	57.99	965	64.03
Urban Households	523	42.01	542	35.97
Malay Households	591	47.47	911	60.45
Chinese Households	496	39.84	399	26.48
Indian Households	147	11.81	184	12.21
Others	11	0.88	13	0.86
Total Households	1245	100.00	1507	100.00

Table 2.2.2: MFLS Data: Number and Percentage of the MFLS Rural and Urban Household Samples by Ethnic Groups, 1976/77 and 1988/89.

	MFLS1 (1976/77)		MFLS2 (1988/89)	
	No.	%	No.	%
Rural Households	722	100.00	965	100.00
Malay	435	60.25	688	71.30
Chinese	201	27.84	182	18.86
Indian	76	10.53	86	8.91
Others	10	1.39	9	0.93
Urban Households	523	100.00	542	100.00
Malay	156	29.83	223	41.14
Chinese	295	56.41	217	40.04
Indian	71	13.58	98	18.08
Others	1	0.19	4	0.74

Table 2.2.3 summarises the MFLS household income data – the total, mean, median, standard deviation and the number of household samples. Table 2.2.4 compares the household income statistics from the MFLS data with the government survey data reported in Shari (2000). Interesting enough, a comparison of the mean, median as well as income shares of the MFLS data with the figures reported in Shari (2000) shows that both sources appears to produce more or less comparable figures. Thus, while the MFLS household samples might not be as representative as the government survey, nonetheless, it can still provide useful information on the income distribution in Malaysia.

Table 2.2.3: MFLS Data: Summary of Household Income Data, 1976/77 and 1988/89.

	Total	Mean	Median	Standard Deviation	n
1976/77					
By Population Groups					
All Households	7759289	6232	3840	9825.113	1245
Rural Households	2988184	4139	3106	4641.70	722
Urban Households	4771105	9123	5425	13633.07	523
Malay Households	2242982	3795	2647	4095.55	591
Chinese Households	4389536	8850	5747	12368.83	496
Indian Households	1089441	7411	4220	13636.27	147
By Income Sources					
Paid Employment	4555731	3659	2224	5829.11	937
Self-Employment	2769058	2224	118	8147.67	769
Rent,Interest and Dividends	97192	78	0	703.81	127
Pensions and EPF	10182	8	0	107.98	14
Welfare Payment/Zakat	1080	1	0	22.72	5
Remittance	67750	54	0	306.80	347
Inheritance, Dowries and Gifts	11889	10	0	145.33	15
Home Consumption & Production	219338	176	0	670.08	286
Others	27069	22	0	194.20	80
TOTAL	7759289	6232	3840	9825.11	1245
1988/89					
By Population Groups					
All Households	19849517	13172	9000	15173.74	1507
Rural Households	10527669	10910	7310	13669.17	965
Urban Households	9321848	17199	12738	16811.23	542
Malay Households	10160719	11153	7200	14006.95	911
Chinese Households	6902714	17300	12140	16583.30	399
Indian Households	2462786	13385	10465	10261.18	184
By Income Sources					
Paid Employment	11877028	7881	5400	10834.35	1141
Self-Employment	4843315	3214	0	8136.25	706
Rent, Interest and Dividends	642061	426	0	2566.96	271
Pensions and EPF	661656	439	0	4382.66	107
Welfare Payment/Zakat	4293	3	0	56.50	19
Remittance	996128	661	0	2613.74	542
Inheritance, Dowries and Gifts	130184	86	0	520.87	67
Home Consumption & Production	480715	319	0	1409.66	428
Others	214137	142	0	1498.53	106
TOTAL	19849517	13172	9000	15173.74	1507

Table 2.2.4: A Comparison of Mean, Median and Income Share of Household Income from the MFLS Data and Previously Reported Data.

	Shari (2000)			MFLS	
	1976	**1987**	**1990**	**1976/77**	**1988/89**
All Households					
Mean	514	1074	1163	6232 (519)	13172 (1098)
Median	313	738	808	3840 (320)	9000 (750)
Income share of:					
Top 20%	57.7	51.2	50.4	57.88	51.77
Middle 40%	31.2	35.0	35.3	32.21	34.90
Bottom 40%	11.1	13.8	14.3	9.91	13.34
Rural Households					
Mean	392	852	927	4139 (345)	10910 (909)
Median	262	629	697	3106 (259)	7310 (609)
Income share of:					
Top 20%	54.5	48.3	47.1	51.65	52.47
Middle 40%	33.7	36.7	37.1	37.20	34.06
Bottom 40%	11.8	15.0	15.8	11.15	13.47
Urban Households					
Mean	830	1467	1591	9123 (760)	17199 (1433)
Median	495	1004	1104	5425 (452)	12738 (1062)
Income share of:					
Top 20%	55.9	50.8	50.6	57.79	48.41
Middle 40%	32.2	35.0	35.1	31.68	36.29
Bottom 40%	11.9	14.2	14.3	10.53	15.30
Malay Households					
Mean	345	868	931	3795 (316)	11153 (929)
Median	233	612	677	2647 (221)	7200 (600)
Income share of:					
Top 20%	53.8	50.2	49.5	53.91	53.72
Middle 40%	34.5	35.7	35.7	35.66	33.24
Bottom 40%	11.7	14.1	14.8	10.42	13.04
Chinese Households					
Mean	787	1430	1582	8850 (738)	17300 (1442)
Median	480	1021	1137	5747 (479)	12140 (1012)
Income share of:					
Top 20%	56.0	48.9	49.2	55.70	48.65
Middle 40%	31.4	36.0	35.7	32.78	35.71
Bottom 40%	12.6	15.1	15.1	11.52	15.64
Indian Households					
Mean	538	1089	1201	7411 (618)	13385 (1115)
Median	329	799	881	4220 (352)	10465 (872)
Income share of:					
Top 20%	52.4	47.2	47.7	58.00	43.07
Middle 40%	33.0	35.9	35.8	28.11	39.06
Bottom 40%	14.6	16.9	16.5	13.89	17.87

Note:
The mean and median income reported by Shari is the current monthly household income. The mean and median income of the MFLS data reported here is the current annual household income. The current monthly household income of the MFLS figures is given in parenthesis.

2.2.2 Other Sources of Data

Since the MFLS data is only available for two periods – 1976/77 and 1988/89 – to get a better picture on the trends and changes in income inequality over a longer period, the study has also relied on the readily available figures on income inequality and poverty. Readily available figures on income inequality such as the Gini index, income shares and poverty incidence have been obtained from official government documents such as the Outline Perspective Plan (OPP) and Malaysia Five-Year Plans. In addition, published figures on income inequality and poverty have been obtained from the previous studies. Among those who have studied income distribution in Malaysia are Snodgrass (1980), Anand (1983), Ikemoto (1985), Perumal (1989), Shari and Zin (1990), Shireen (1998) and Shari (2000). These studies, in turn, have used readily available data from official government documents or from the government surveys listed below:

a. Household Budget Survey (HBS) of the Federation of Malaya 1957/58 (Department of Statistics).

b. The Socio-Economic Sample Survey of Households 1967-1968 (SES) (Department of Statistics).

c. Survey Research Malaysia/Ford Social and Economic Survey 1967/68 (Survey Research Malaysia Sendirian Berhad).

d. The Post Enumeration Survey (PES) of the 1970 Population Census, (Department of Statistics).

e. Household Expenditure Survey 1973 (HES) (Department of Statistics).

f. National Agricultural Census 1977 (NAC) (reference year 1976).

g. Household Income Survey (HIS) 1980 (reference year1979) (Department of Statistics).

h. Household Income Survey (HIS) 1984 (Department of Statistics).

i. Household Income Survey (HIS) 1987 (Department of Statistics).

j. Household Income Survey (HIS) 1989 (Department of Statistics).

In addition, other data such as that on economic performance and elections that is relevant to the study has come from various relevant sources. These include official publications and reports such as Annual Economic Report of the Ministry of Finance, Bank Negara Malaysia Annual Report, Monthly Statistical Bulletin of Bank Negara Malaysia. Data published by international institutions such as the International Monetary Fund and The World Bank has also been used.

2.3 Measures of Inequality

There are many measures of inequality that have been proposed in the literature, and each measure has its own strengths and weaknesses. An index of inequality is a scalar measure of an array of numbers describing different aspects of distribution. Thus there is loss of information in constructing any index of inequality. This study, therefore, has reported a number of commonly used measures – Gini, Shorrocks, Theil and Wolfson indices -- to capture different aspects of inequality. The Gini, Shorrocks, and Theil indices of inequality are decomposable into its various components. In general, the decomposition of an income inequality index can be divided into two categories. First, when the income data can be classified into different mutually exclusive and exhaustive groups, it is possible to examine how much of the total inequality is due to "intra-group" inequality and how much is due to "inter-group" inequality. For this purpose, the study has used the Theil index of inequality, which is then decomposed to its "intra-group" and "inter-group" contribution. Decomposition of the Theil inequality index provides a measure of the amount of contribution of the different groups to total inequality. The inter-group component is defined as the inequality index when intra-group income differences are suppressed. Hence, it is the level of inequality resulting from income disparities between different groups. On the other hand, the intra-group component is the level of inequality resulting from intra-group income differences, i.e. when between-group income differences are suppressed.

Second, when income is derived from different sources such as labour, capital and transfers, it is possible to examine the contribution of inequality in the income sources to total inequality. For this purpose, the study has considered two measures of inequality, which are decomposed to examine the contribution of different sources of income to total household income inequality. The first measure is the usual Gini inequality index. Here, the Gini decomposition is performed following the method described by Yao (1997). The second measure is Shorrock's index of inequality, that is a variance measure, explained in Shorrocks (1982). The calculation of Theil, Gini and Shorrock's indexes, as well as their decomposition is explained below.

2.3.1 Theil index

Consider a population that consists of n number of households. Let $y = (y_1, y_2, \ldots, y_n)$ denote an income distribution among the n households, where y_i is the income of household i (i=1, 2, ...,n). Let also the arithmetic mean income of the distribution be μ, i.e. $\mu = 1/n\ (\Sigma y_i)$, where i=1, 2,..., n. Theil index is then expressed as follows:

[1] $T(y,n)=(1/n)\ \{\ \sum \{\ [y_i/\mu]\ [\ln\ (y_i/\mu)]\ \}\ \}$, where i=1,2,...,n.

Now, suppose that the households can be classified into m groups. There are n_k households in each group, where k=1,...,m. Let household income in group k be denoted by $x^k = (x^k_1, \ldots, x^k_{nk})$, and let μ_k denote their arithmetic mean income, i.e. $\mu_k = 1/n_k(\Sigma x^k)$, where k=1, 2, ..., m. The groups are mutually exclusive and exhaustive, which means that no household is a member of more than one group, and that the sum of n_k for all groups taken together is equal to the total number of households, n, and that union of the sets $\{x^k\}$ is the set $\{y_i\}$. The Theil index, T(y,n), can then be decomposed as follows:

[2] $T(y,n) = [\ \sum (\mu_k/\mu)\ T(x^k,n_k)\ (n_k/n)\ ] + \{\ \sum (\mu_k/\mu)\ (\ln\ (\mu_k/\mu))\ (n_k/n)\ \}$

where k=1,...,m; and $T(x^k,n_k) = (1/n_k)\ \{\ \sum \{\ [x^k_i/\mu_k]\ [\ln\ (x^k_i/\mu_k)]\ \}\ \}$, where k=1, 2, ..., m and i=1,2, ..., n.

The Theil index of equation [2] can be broken down into two parts, T_W and T_B, as follows:

$T(y,n) = T_W + T_B$

where $T_W = [\sum (\mu_k/\mu)\, T(x^k, n_k)\, (n_k/n)]$, and $T_B = \{ \sum (\mu_k/\mu)\, (\ln (\mu_k/\mu))\, (n_k/n) \}$.

The first part, T_W, can be interpreted as the "intra-group" (within-group) inequality contribution to inequality, while the second part, T_B, can be regarded as the "inter-group" (between-group) contribution to inequality. The percentage contribution of within-group inequality is then derived by taking the ratio of Tw to T(y,n) and multiplying by 100. Similarly, the percentage contribution of between-group inequality is derived by taking the ratio of T_B to T(y,n) and multiplying by 100.

2.3.2 Shorrock's Index and Decomposition

Once again, consider a population that consists of n number of households, i=1, 2, ...,n. Their income is derived from k sources, say sources r = 1, 2, ...k. Let y_i^r be the income derived from source r by the i^{th} household. The aggregate income for that i^{th} household, y_i, is the sum of y_i^r, summed over r=1, 2, ..., k. Let also the symbols μ and μ_r represent the arithmetic mean of y_i and y_i^r respectively. If I is the index of inequality of y_i, then Shorrocks (1982) demonstrates that,

[1] $C_r^A = I\{z_1, \ldots, z_n\}$, where, $z_i = y_i^r + (\mu - \mu_r)$, for i=1,...,n, and

[2] $C_r^B = I\{y_1,\ldots,y_n\} - I(w_1,\ldots,w_n)$, where $w_i = (y_i - y_i^r - \mu_r)$, for i=1,...,n.

C_r^A could be interpreted as the value of inequality index if income in all other sources other than source r were equally distributed. In other words, C_r^A is the inequality index if the only source of income differences arose from source r. C_r^B on the other hand, could be interpreted as the decline in inequality index when income from source r is equally distributed, while all other income source remain unaffected. Shorrocks

(1982) also demonstrates that the two components, C_r^A and C_r^B, can be unambiguously separated if the inequality measure selected comes from a limited class of measures, such as the square of coefficient of variation. Therefore, the inequality index I can be decomposed into the contribution of each income source. The aggregate inequality then is the sum of these components over the entire range of the income sources, r=1, 2,...k, i.e.

[3] $I\{y_1, y_2, \ldots, y_n\}=\sum S_r(y_1,\ldots,y_n;y_1^r,\ldots,y_n^r)$, where Shorrock (1982) has demonstrated that;

[4] $S_r(y_1,\ldots,y_n;y_1^r,\ldots,y_n^r) = (1/2)(C_r^A + C_r^B)$.

The fractional contribution of source r to the total inequality is S_r/I, and the percentage contribution could be obtained by multiplying this amount by 100. The inequality index, I, considered here is the C-Square, i.e. the square of coefficient of variation.

Besides examining the contribution of each source, it is also interesting to calculate the likely impact of each source on total income inequality. Thus, it would be worthwhile to estimate the proportion of inequality that would remain if the only source of income differences is from source r, while inequality in the rest of the sources were eliminated; and also to estimate the proportion of inequality that would remain if the income from source r were equally distributed while the distribution of the rest of the sources remains unchanged. Let the former be denoted α^r, while the latter β^r. Following Jenskins (1995) and Papatheodorou (1998), α^r and β^r are calculated as follows:

[5] $\alpha_r = C_r^A/I$ and

[6] $\beta_r = (I - C_r^B)/ I$

2.3.3 The Gini Index and Decomposition

The most commonly used measure of income inequality is the Gini coefficient. It is the ratio of the difference between the line of complete equality and the Lorenz curve to the triangular region underneath the diagonal (line of complete equality). The Lorenz curve plots the percentage of the population on the horizontal axis, starting with the poorest, while the vertical axis is the percentage of total income. The Gini coefficient is exactly one-half of the relative mean difference, which is defined as the arithmetic average of the absolute values of differences between all pairs of incomes (Sen 1997, pp. 30-31), i.e.

$$[1]\ G = (1/2n^2\mu)\ \{ \sum_i \sum_j |y_i - y_j|$$

If income is arranged in a descending order, i.e. $y_1 \geq y_2 \geq \ldots \geq y_n$, then the above expression is reduced to the following:

$$[2]\ G = 1 + (1/n) - (2/(n^2\mu)[y_1 + 2y_2 + \ldots + ny_n]$$

One of the attractions of using the Gini coefficient as an inequality index is that "it is a very direct measure of income difference, taking into account the differences between every pair of incomes" (Sen 1997b, p. 31). In most other measures of inequality, only the distance between the mean value and income levels is considered in the expression of inequality.

When the total income is divided into a number of sources, the Gini coefficient measuring the total income inequality can be decomposed into its various sources. Yao (1997) develops a new decomposition approach which is simple to follow and applicable regardless of how the population is grouped. Following Yao (1997), consider a population that is divided into n groups. Let m_i denote the mean income of group i (i=1,2,...,n), m the mean income of the total population, p_i the population share of group i, and w_i, where $w_i = p_i m_i/m$, is the income share of group i in total income. Yao (1997) expresses the Gini index measuring total income inequality as follows:

$$[1]\ G=1-\sum_{i=1}^{n} p_i(2Q_i-w_i)\ ,\ i=1, 2, \ldots, n.$$

where $\sum_{i=1}^{n} p_i=1$, $\sum_{i=1}^{n} w_i=1$, $w_i=p_i m_i/m$, and

$Q_i=\sum_{k=1}^{i} w_k$, for k = 1, 2, ..., n, is the cumulative income share from group 1 to group i,

and p_i and w_i follow an ascending order of m_i ($m_1 \leq m_2 \leq \ldots \leq m_n$). Now, suppose that the total income is derived from F sources. Let $w_{fi}=p_i m_{fi}/m_f$ denote the income share of group i in the total income arising from factor f (f=1,2,...,F), where p_i is defined as above, m_f is the population mean income of factor f, and m_{fi} is the mean factor income of group i. If p_i's and w_{fi}'s are arranged so that they strictly follow a monotonically ascending order of group mean factor income m_{fi}'s (or $m_{f1} \leq m_{f2} \leq \ldots \leq m_{fn}$), the Gini coefficient for income source f is defined as follows:

$$[2]\ G_f=1-\sum_{i=1}^{n} p_i(2Q_{fi} - w_{fi})$$

where

$\sum_{i=1}^{n} pi=1$, $Q_{fi} = \sum_{k=1}^{i} w_{fk}$ is the cumulative income share from group 1 to i with p_i's and

w_i's following $m_{f1} \leq m_{f2} \leq \ldots \leq m_{fn}$. If p_i's and w_{fi}'s follow an ascending order of group mean total income, m_i's, instead of group mean factor income, m_{fi}'s, the same equation can be used to calculate the factor concentration ratio, C_f , as below:

$$[3]\ C_f= 1-\sum_{i=1}^{n} p_i(2Q_{fi} - w_{fi})$$

with p_i's and w_{fi}'s following $m_1 \leq m_2 \leq \ldots \leq m_n$. Substituting equation [3] into equation [1], the Gini index can then be decomposed as:

$$G = \sum_{f=1}^{F} w_f C_f$$

where,

$$\sum_{f=1}^{F} w_f = \sum_{f=1}^{F} m_f/m = 1$$

In other words, the Gini index of total income is the weighted average of concentration ratios. Thus, the decomposition of the Gini index only involves the factor concentration ratio, C_f's, and the factor income shares in total income, w_f, and does not involve the calculation of factor Gini index, G_f's. Dividing the factor concentration ratio, C_f, with the total Gini index, G, gives the relative concentration coefficient, g_f, which is defined as follows:

$$[4]\ g_f = C_f/G, \text{ and } \sum_{f=1}^{F} w_f g_f = 1$$

If the ordering of mfi's is exactly the same as that of mi's, then $C_f=G_f$. If the ordering of mfi's is different from that of mi's, Yao (1997) demonstrates that $C_f < G_f$. The relative concentration ratio, g_f, shows the effects of income source f on total inequality. If the g_f value for an income factor is greater than unity, that income factor is said to be an inequality-increasing factor, which means that, *ceteris paribus*, an enlarged share of that income factor will lead to an increase in total income inequality. On the contrary, if the g_f value of an income factor is less than unity, that income factor is said to be an inequality-decreasing factor. The percentage contribution of an income source can then be obtained by multiplying the $w_f g_f$ value of the income source by 100.

2.4 Measure of Polarisation

Wolfson (1994, 1997) has shown that inequality measures such as the Gini index are unable to capture the distributional changes with regards to changes in the share of income held by the middle-income group. As a result, analysis that examines only the inequality aspect of income distribution might have missed relevant aspects of how the distribution has really changed. It is for this reason that Wolfson (1994, p. 358) has suggested that measures that captures the changes with regards to the middle of the distribution, i.e. the question of polarisation, should be included when examining distribution of income. Thus, the question of polarisation merits investigation.

Hypothetically, polarisation can be perceived as signifying two aspects of distributional changes – "spreadoutness" and bimodality (Wolfson 1997, p.402). Spreadoutness signifies that there are fewer individuals or households with middle level income, i.e. the distribution is spreading out from the middle. Bimodality, a concept that is related to "spreadoutness", denotes the clustering of formerly middle level incomes at either higher or lower levels. Thus, polarisation is said to exist when income is largely concentrated in both end of the distribution, with less in the middle.[3] Distribution X is said to be more polarised than distribution Y if income distribution in X is more bimodal in the sense that it contain more poor and rich, but fewer people in the middle. In this sense, polarisation can also be perceived as the degree by which a population is divided between the "haves" and the "have-nots" (Ravallion and Chen, 1997, p.366).[4]

[3] It might be for this reason that the concept of polarisation is also known as the "disappearing middle-class" phenomenon.

[4] A more polarised distribution does not necessarily imply that the distribution is more unequal. This could happen if there is a transfer of income within the poorest half of the population as well as in the other richest half, such that the gainers are poorer than the losers. In this case, inequality will decrease, but polarisation might increase. To take an example given by Ravallion and Chen (1997, p.367), suppose there are four people with incomes £1, £2, £3 and £4. We take £0.50 from the person with £2 and give it to the person with £1, and we take £0.50 from the person with £4 and give it to the one with £3. Thus the new distribution is £1.50, £1.50, £3.50 and £3.50. Obviously inequality has fallen, because gainers are poorer than losers. However polarisation has increased, in the sense that the distribution is now more sharply divided into "rich" and "poor" than previously.

Here, a measure of polarisation developed by Wolfson – called the Wolfson index of polarisation (W) – is considered. Wolfson (1994, 1997) developed a measure of polarisation that is based on the Lorenz curve. His derivation of the polarisation measure begins with the demonstration that both the Lorenz curve and the polarisation curve could be derived from a cumulative density function (cdf) for a distribution of income (Figure 2.4.1a). The derivation of the Lorenz curve shown in Figure 2.4.1c involves one intermediate step between the cumulative density function (cdf) and the Lorenz curve. This step involves exchanging the axes of the cumulative density function (cdf) of Figure 2.4.1a so that population percentiles are ranged along the horizontal axis and income along the vertical axis, followed by dividing each individual income by the mean income. The result of this transformation is as in Figure 2.4.1b.

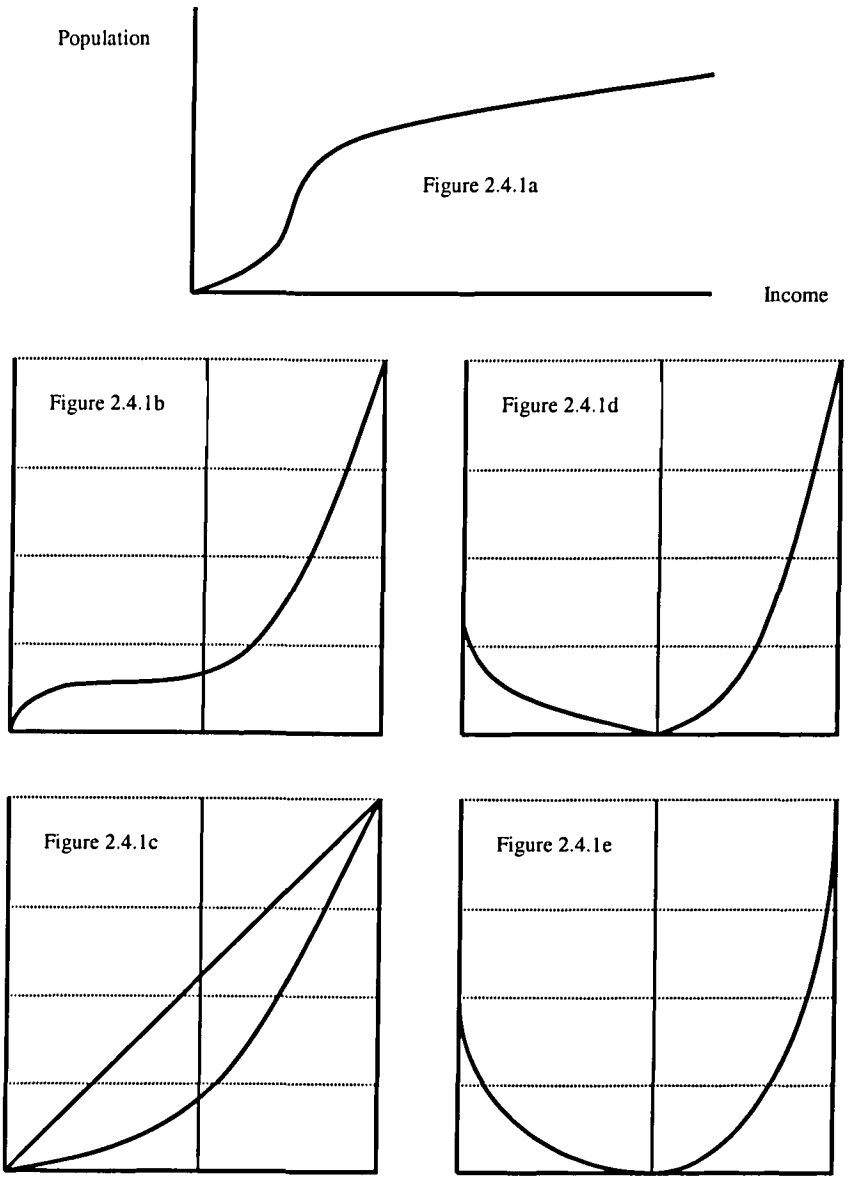
Integrating the curve in Figure 2.4.1b from the origin to the right will result in the Lorenz curve as in Figure 2.4.1c. The derivation of Wolfson's polarisation curve also follows a similar and parallel path of graphical transformation of the cumulative density function (Figure 2.4.1a) as with the derivation of Lorenz curve. It begins with exchanging the axes of the cumulative density function (Figure 2.4.1a), so that population percentiles are ranged along the horizontal axis and income along the vertical axis, but then continues with the following order of operations:

i. individuals' income is normalised by dividing by the median (rather than the mean as in the derivation of Lorenz curve);

ii. the horizontal axis is then shifted up to touch the resulting median-normalised parade at the mid-point of the horizontal axis, the 50^{th} population percentile, which is now equal to one as a result of the normalisation; and

iii. the curve for the 50 percent of the population with income below the median, i.e. the curve that now lies below the horizontal axis, is then flipped around the horizontal axis.

Figure 2.4.1: Graphical Development of Lorenz and Polarisation Curves.



Source: Wolfson (1997, p.405).

The result is a curve as shown in Figure 2.4.1d. For any population percentile along the horizontal axis, Figure 2.4.1d shows how far its income, expressed as a proportion of the median, is from the median. The curve in Figure 2.4.1d therefore indicates the degree of spread of income distribution from the middle (50^{th} population percentile). A less spread-out distribution, i.e. one with a larger middle class, will have a curve that is lower.

Figure 2.4.1d however does not capture the second notion of polarisation, which is bimodality, since a progressive transfer wholly on one side of the median will result in a second curve that crosses the first. To overcome this problem, Wolfson performed a simple transformation of Figure 2.4.1d that makes it simultaneously sensitive to both distributional attributes – spreadoutness from the middle and bimodality. This involves integrating the curve in Figure 2.4.1d out in both directions from the mid-point along the horizontal axis (where by construction the height of the curve is zero) to get the "cumulative spreadoutness" or polarisation curve shown in Figure 2.4.1e. The area under this polarisation curve, W, is the measure (index) of polarisation.

Both the Lorenz (Figure 2.4.1c) and polarisation curves (Figure 2.4.1e) can actually be brought together in one graph as shown in Figure 2.4.2. Figure 2.4.2 shows the usual Lorenz curve. The only addition here is that there is a tangent line to the Lorenz curve at the 50^{th} population percentile, with the vertical axis extended down to meet this tangent line. Wolfson demonstrated that if the vertical axis of the polarisation curve in Figure 2.4.1e is renormalized by multiplying it by the ratio of the median to the mean, and then tilting the horizontal axis until it has the same slope as the tangent line to the Lorenz curve at the 50^{th} population percentile, the transformed polarisation curve is identical to the Lorenz curve.

It can be shown that, W, the area under the polarisation curve of Figure 2.4.1e, i.e. the scalar indicator of the extent of polarisation or the size of the middle class, is a simple transform of the lightly shaded area in Figure 2.4.2. The lightly shaded area in Figure 2.4.2 between the tangent line and the Lorenz curve is,

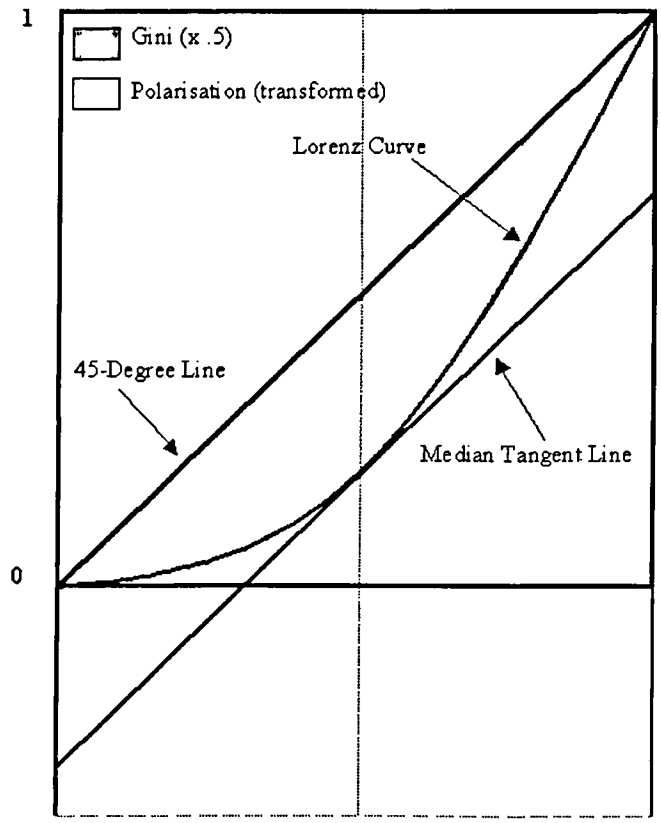
[1] T – Gini/2

The area under the polarisation curve of Figure 2.4.1e, W, is

[2] $W = (T\text{-}Gini/2)/(m/\mu)$

where m/μ is the slope of the tangent line to the Lorenz curve at the 50th population percentile; m is the median; u is the mean; and T is the area of the trapezoid defined by the 45 degree line and the median tangent. T in turn equals the vertical distance between the Lorenz curve and the 45-degree line at the 50th population percentile. This in turn is equal to the difference between 50 percent and the income share of the bottom half of the population, which is denoted by 0.5 – L (0.5). For a perfectly equal distribution of income, W has a value of zero, which is its minimum value. For a perfectly bimodal distribution, W has a value of 0.25, which means half of the population has zero income and the other half has 2μ (with the median being equal to μ in this case).

Figure 2.4.2: Wolfson Measure of Polarisation Based On the Lorenz Curve



Source: Wolfson (1997, p.407).

In order to have an index that has a similar range of values as the Gini, i.e. between 0 and 1, Wolfson arbitrarily defined W as having four times the area discussed so that the Wolfson polarisation index became as follows:[5]

[3] $W = 2(2T\text{-}Gini)/(m/\mu)$

Thus, Wolfson's index of polarisation (W), like the Gini index, has a value between 0 and 1. As mentioned above, the value 0 indicates that there is no polarisation, while the value 1 indicates a complete polarisation. Zero polarisation occurs in a situation where there is complete equality, while complete polarisation occurs when half of the population has zero income and the other half has twice the mean.

2.5 Measures of Poverty

A decline in income inequality does not necessarily imply that there will be an improvement in the standard of living of the poorest section of the households. Even when there has been a decline in income inequality, one cannot conclude with certainty that there is also a reduction in poverty, since it is possible to have an improvement in the overall income inequality, but the poorest section of the households could become poorer or at least remain the same. For instance, inequality index can show an improvement if there is a transfer of income from the richest to the less rich people amongst the rich, with no change to the poor section of the society. Therefore, the question is: what happens to the poorest section of the households? The question of poverty needs examination. There are basically two steps to poverty assessment (Sen 1997b, p.165). The first is to identify who are the poor among the population, and the second is to gather the relevant data describing the poor to arrive at an aggregate poverty index of the population.

[5] Ravallion and Chen (1997, p.369) expressed Wolfson's index of polarisation, W, as follows: $W = 2(\mu^* - \mu^L)/m$; where μ^* is the distribution-corrected mean income (given by the actual mean times 1 minus the Gini index), μ^L is the mean income of the poorest half of the population, and m is the median income.

The most common approach to identify the poor is by defining the income poverty line, i.e. the borderline of income that separates the poor from the non-poor. Thus, those incomes falls below the poverty line are considered to be the poor. While this approach seems simple, it actually involves complex and difficult conceptual issues. The problem is determining the appropriate poverty line. There are different perceptions on poverty, and therefore various suggestions on how to define the poverty line. Indeed, there is often disagreement on how to define the poverty line. Basically there are two approaches: the absolute approach and the relative approach. The absolute approach defines the poverty line independent of the standard of living of the general population. This approach involves a concept of a minimum standard of living, i.e. the minimum level of consumption (for instance nutritional requirement) for survival. Thus, the poverty line is the estimated cost of the bundle of goods necessary to ensure that the basic minimum requirements are met. The difficulty however is to identify what these minimum requirements are. Usually this refers to physical requirements for survival, for example, nutritional requirements. Thus, one of the most important components of basic requirements is food expenditure, which is usually based on food energy intake level. In addition, a certain amount of non-food items such as housing and clothing is also included.

The relative approach however, defines the poverty line in relation to the general standard of living that prevails in the society. This approach defines a person as being poor when his or her income is significantly below the national average. One relative measure defines poverty as the situation at the lower end of the income distribution scale, for example the bottom 10 or 20 percent. However, using this definition, poverty will only be diminished if complete equality of income is achieved, since the bottom 10 or 20 percent will surely always exist whenever income is not equally distributed. Besides, this relative approach to poverty is also likely to give no indication on the quality of life of the poor.

With regards to income poverty line in Malaysia, it is surprising to find that income poverty lines were not officially published until the publication of the Mid-Term Review of the Fifth Malaysia Plan in 1989, where the official income poverty line in 1987 as mentioned in the Mid-Term Review of the Fifth Malaysia Plan was RM350

for a household of 5.14 persons in Peninsular Malaysia (Shireen, 1998, p. 151). This is quite surprising since poverty eradication is one of the main objective of the NEP, and poverty incidence has been reported in various government official documents long before. Shireen (1998) however has taken the trouble to estimate the income poverty line from 1978 to 1990, using the income poverty line estimated by Mahbob (1976) as her point of reference.[6] She derived her estimation of the income poverty line by updating annually, component by component the Mahbob (1976) income poverty line. Table 2.5.1 below shows her estimation of the income poverty line.

Table 2.5.1: Income Poverty Line in Peninsular Malaysia (current prices), 1977-1990.

Year	Poverty Line Income (RM)
1977	252.36
1978	264.47
1979	273.08
1980	287.33
1981	318.07
1982	339.98
1983	352.34
1984	353.00
1985	352.47
1986	353.40
1987	356.17
1988	366.02
1989	375.98
1990	389.41

Notes: (1) 1977-1983: household size of 5.4 persons; 1984-1990: household size of 5.14 persons. (2) The government has changed the average household size in 1993 to 4.8 persons.
Source: Shireen (1998, p. 153).

Shireen (1998, p.153) claimed that her estimation is "very close to those given by the EPU" and is fairly correct. In this study, the income poverty line estimated by Shireen (1998) is employed, which is RM252.36 for a 5.4 member household in 1977 and RM366.02 for a 5.14 member household in 1989. While this could be a source of disagreement, it is nonetheless sufficient for the purpose of the present study.

Once the income poverty line has been determined, the next step is to determine how much poverty exists with reference to it. Below we discuss the measures of poverty that are mostly used in the literature and in this study.

[6] Unpublished EPU paper by Mahbob (1976) estimated that the income poverty line in 1976 was RM252.36 for a household of 5.4 persons in Peninsular Malaysia (See Shireen 1998, p.151).

2.5.1 Head-Count Ratio (H)

One of the simplest and the most widely used measures of poverty is the "head-count ratio", or the poverty incidence. The head-count ratio is basically the proportion of total population whose income falls below the specified poverty line. Thus, suppose there are n households, whose income is $y_1, y_2, \ldots, y_n$. Let z be the income poverty line, and there are m households with income $y_1, y_2, \ldots, y_m$, that are less than (or equal to) z, then the head count ratio (H) is simply the ratio of m to n, i.e.

$$H(y,z) = m/n$$

However, one of the shortcomings of the head-count ratio is that it fails to take into account the extent to which the income of the poor falls below the income poverty line. The poor who are just below the income poverty line and the poor who are really in destitution are treated as the same by the head-count ratio. In other words, it ignores the "depth" as well as the "distribution" of poverty (Sen 1997b, p.168). Thus, the poverty-income gap ratio might be preferred.

2.5.2 Poverty-Income Gap Ratio (I)

The poverty-income gap measures the sum of the shortfall in income of each of the poor from the poverty line. Thus, it measures the depth of the poor person's poverty. If the income of the i^{th} poor person is y_i, and the income poverty line is z, then the poverty-income gap is $z-y_i$. If the total income unit that are poor is m, then the aggregate gap of all of the poor would be the summation of all individual income gap, i.e.,

$$I = \sum (z-y_i),\ i=1, 2, \ldots, m.$$

The advantage of the poverty-income gap is that it identifies the total amount of income needed to lift all the poor up to the poverty line, i.e. the minimum amount of income needed to wipe out poverty. Since the above expression ignores the number of

people falling below the poverty line, the poverty-income gap ratio is preferred. It is a normalised version of the poverty-income gap, to make it independent of the number of the poor (as well as the currency in which poverty income is recorded). The poverty-income gap ratio is obtained by normalising the above expression by dividing it by the factor mz;

$I = \sum (z-yi)/(mz)$, i=1, 2, ..., m.

Yet shortcomings of this index remain. The poverty-income gap ratio still ignores the distribution of income among the poor, i.e. how the total income gap is divided among them. For instance, a transfer of income from the poorest household to a less poor household, but leaving the recipient household still below the poverty line would not be reflected in a change of the index. Thus, both H and I indices are "best seen as partial indicators of poverty" (Sen 1997b, p.169). To overcome the problem, Sen (1997) proposes a distribution-sensitive of poverty measure, which is discussed below.

2.5.3 Sen Index (S)

Sen (1997b) proposed an improvement on the poverty measure by combining a measure of distribution among the poor (G_p) with the head-count ratio (H) and the poverty-income gap ratio (I). Thus, this index introduces a welfare function, which is sensitive to income distribution among the poor. The Sen index is defined as follows:

$S = H [I - (1- I) \{1 - G_p (m/(1+m))\}]$

For a large number of poor, the Sen index is reduced to,

$S = H [I + (1- I) G_p]$.

A problem with the Sen index is that a transfer from a poor household to a less poor household could decrease the index if the latter crosses the poverty income line

resulting from the transfer. This property of Sen index might be tolerable if both households were just a little bit below the poverty line and were close to each other. This might be tolerable since the transfer contemplated to enable the less poor household to cross the poverty income line were likely to be small. However, if the household that loses out suffers significantly as a result of the transfer, the decrease of the index would be questionable. Clark, Hemming and Ulph (1981) have suggested a partial remedy to the problem of the Sen index, which is explained below.

2.5.4 Clark, Hemming and Ulph Index (P)*

A partial remedy to the problem of the Sen index suggested by Clark, Hemming and Ulph (1981) is to make the greater is the sacrifice of the household making the transfer to enable someone to cross over the poverty line, the lesser is the amount, if there is any, of poverty reduction. Thus, if there is a transfer from a poor person to a less poor person who is near to the poverty line, such that the latter crosses the poverty line, the poverty index may be decreased. However, the poorer the person making the transfer, the lesser the power of that transfer is to reduce the poverty index. An index, P*, which was suggested by Clark, Hemming and Ulph (1981) that holds such properties is defined as follows:

$$P^* = 1 - [\, H \{(1-A)(1-I)\}^{(1-\varepsilon)} + (1-H)^{(1/(1-\varepsilon))}$$

where A is the Atkinson index over the income distribution of those who fall below the poverty line. The Atkinson index is defined as below:

$$A = 1-(y_e/\mu_p)$$

where y_e and μ_p are equivalent and mean income, respectively, for the poor. The equivalent income, y_e, is defined as that income which makes the utility function equal to the mean of the utility of the poor. Thus,

$[y_e]^{(1-\varepsilon)} = (1/m) \sum[y_i]^{(1-\varepsilon)}$, summed over i=1,,...,m.

The Atkinson index is defined for a particular utility function in these calculations:

$U(y_i) = (1/\beta)[y_i]^{(1-\varepsilon)}$, where i=1,2,...,m, those below the poverty line.

To ensure the concavity of the utility function, the parameter ε must be less than unity. The parameter ε is regarded as an inequality aversion parameter in the Atkinson index of inequality. It can be regarded as a poverty aversion parameter in the context of P* index because here what is being considered is income distribution among the poor.

2.5.5 Foster, Greer and Thorbecke index (FGT)

All of the above poverty indices are not decomposable in the sense that they do not necessarily establish sensible relationships between subgroup poverty and overall poverty with a view to determining how much each subgroup contributes to total poverty. Foster, Greer and Thorbecke (1984) proposed an index, which was not only designed to overcome this shortcoming, but also generalised the H and I poverty indices. The FGT index is defined with respect to the parameter $\alpha \geq 0$ as follows:

$FGT(\alpha) = \sum (z - y_{ij})^{\alpha}/nz^{\alpha}$, summed over i=1,...,m.

For α=0, the head-count ratio is obtained, i.e. FGT(α)=H. For α =1, the FGT(α)=HI where I is the poverty-income gap ratio. It becomes more interesting for α =2, where the above expression becomes the following:

$FGT(\alpha=2) = H [I^2 + (1-I)^2 (CV_m)^2]$

where CV_m is the coefficient of variation of the income of those who fall below the poverty line, which is defined as below;

$(CV_m)^2 = \sum(\mu_m - y_i)^2/ (\mu_m)^2$.

Here, μ_m is the mean value of the income of the poor, and y_i, i=1,2,...m, is the income of the i^{th} individual among the poor. Thus, as can be seen above, for α =2, the FGT(α) index has taken into account the income distribution among the poor. To see how decomposing the FGT(α) poverty index could be done, suppose that there are k mutually exclusive and exhaustive subgroups of the sample population. Group j contains n_j number of individuals, and the sum of n_j for j=1,...,k is equal to n, the total population. Not all individuals in any subgroup may have income below the poverty line, which is z. They are only m_j number of poor individuals in group j. Thus the sum of m_j for j=1,...k is equal to m, the total number of the poor individuals in the sample. Those who fall below the poverty line is given by:

$$FGT(\alpha) = \sum (n_j/n)\, FGT_j\, (\alpha).$$

The FGT index for subgroup j of the above equation is given by:

$$FGT_j\, (\alpha) = [\, \sum (z - y_{ij})\,]/[n_j z^{\alpha}],$$

summed over the counter j=1,2,...,k, where y_{ij} is the income of the i^{th} person whose income is below z in the j^{th} subgroup. The percentage contribution to total poverty index of the j^{th} group is given by $[(n_j/n)FGT_j(\alpha)]/ FGT(\alpha) * 100$.

Chapter 3

Income Inequality and Poverty: Evidence from the Malaysian Family Life Survey (MFLS) Data

3.1 Introduction

Many have investigated the question of income inequality and poverty in Malaysia. Among others, there are the studies by Snodgrass (1980), Anand (1983), Ikemoto (1985), Perumal (1989), Faaland et.al (1990), Shari and Zin (1990), Shireen (1998) and Shari (2000). These studies use income distribution figures provided by the government survey data such as the Household Budget Survey (HBS) of the Federation of Malaya 1957/58, the Socio-Economic Sample Survey of Household 1967-1968 (SES), the Post Enumeration Survey 1970 (PES), the Household Expenditure Survey 1973 (HES), the National Agricultural Census 1977 (NAC), and various Household Income Surveys (HIS). Here, a different income data set from the previous studies is used: the income data from the Malaysian Family Life Survey (MFLS).

The MFLS data set consists of information that could be used to carry out an analysis of income inequality as previously achieved. Furthermore, using the MFLS data set, the present study also attempts to examine the question of polarisation, an aspect of income distribution that appears to have never been investigated before. Besides, this study also employs a better poverty index than in the previous studies. The commonly used measures of poverty in the previous studies as well as in government documents are the head-count ratio and poverty-income gap. These measures have shortcomings for gauging poverty [see for example Fields (1994), Sen (1997b) and Zheng (1997)]. Using the information provided in the MFLS data set, better measures of poverty - the Sen index (S), Clarke, Hemming and Chu (P*) index, as well as Foster, Greerer and Thorbecke (FGT) index - are calculated. Thus, analysis on income distribution of the income data set available from the MFLS not only allows comparison to be made

between the findings of the present study with the previous studies, but also allows the present study to complement and substantiate the findings of the previous studies.

The MFLS data is available for two periods – 1976/77 and 1988/89. As such, the MFLS data analysis only gives a snapshot view of the changes of income inequality between these two dates. To get a better picture of the trends and changes in income inequality over a longer period, this chapter will also rely on published income distribution figures that are readily available in the government documents as well as in the previous studies. Nevertheless, the changes of income inequality and poverty between these two periods covered by the MFLS data are likely to capture the changes in income distribution during the New Economic Policy (NEP), which is implemented in the 1971-1990 period.

This chapter is organised into five subsections. Following this introduction, the following Section 3.2 will examines income inequality of the overall, rural-urban, and each ethnic group, as well as the contribution of between-group and within-group inequality to total inequality. Section 3.3 examines the question of polarisation, while section 3.4 analyses the extent of poverty. Section 3.5 summarises as well as concludes the chapter.

3.2 Income Inequality

This subsection reports the results of the analysis on income inequality of the MFLS data and compares the results of this study with the findings of the previous studies. The examination of income inequality covers the overall inequality, inequality within and between areas (urban and rural), and also inequality amongst and between ethnic groups. Furthermore, the contribution of between- and within-group inequality to total income inequality is also examined. Measures of inequality as well as decomposition of income inequality to the between- and within-group contribution presented here has been discussed in Chapter 2.

3.2.1 The Overall Income Inequality

Table 3.2.1 below reports the distribution of household income from the MFLS data analysis. It shows that between 1976/77 and 1988/89 household incomes increased, as indicated by the increase in the mean household income. The results also suggest that between 1976/77 and 1988/89, there was a reduction in the overall income inequality as indicated by the fall in the Gini, Shorrock's and Theil index of inequality. For example, the Gini and Shorrock's indices of inequality fell from 0.5418 and 2.4852 in 1976/77 to 0.4666 and 1.3271 in 1988/89, respectively. It can also be seen that the middle and lower income groups increased their income share, while the upper income group lost out. Thus, between 1976/77 and 1988/89, i.e. between the earlier and towards the end of the NEP period (1971-1990), income inequality generally improved.

Table 3.2.1: MFLS Data: Distribution of Household Income, 1976/77 and 1988/89.

	1976/77	**1988/89**
Gini Index (G)	0.5418	0.4666
Shorrock's Index	2.4852	1.3271
Theil Index	0.5889	0.4055
Income share of:		
Top 10%	41.76	35.65
Top 20%	57.88	51.77
Middle 40%	32.21	34.90
Bottom 40%	9.91	13.34
Mean	6232	13172
Median	3840	9000

Table 3.2.2 and Figure 3.2.1 below show the figures on income distribution in Malaysia as reported in previous studies and government documents. It suggests that income inequality initially increased at the beginning of the first half of the 1970s, reaching a peak in 1976, and declined thereafter until it reached the lowest level in 1990, and started to deteriorate again after 1990. Thus, it seems that the results from the MFLS data analysis reported above fell within this longer trend of income inequality in Malaysia. It could be observed from Table 3.2.2 that, while there was a reduction in income inequality during the 1970-1990 periods, it never fell back to the pre-NEP level. The lowest Gini coefficient during the implementation of the NEP

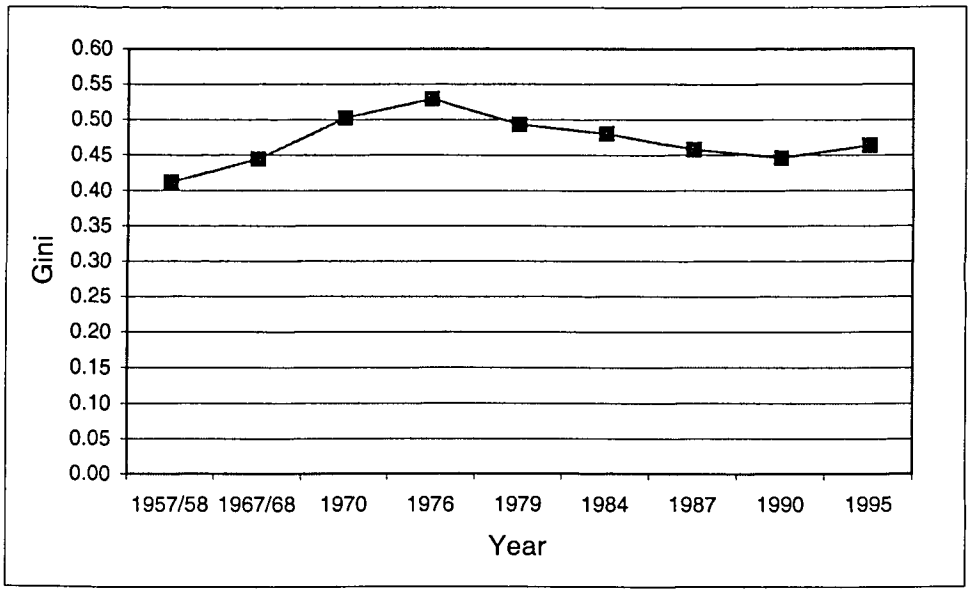
(1971-1990), which is 0.445 in 1990, was still higher than the Gini coefficient in 1957/58 and 1967/68. It also appears that the middle and lower-income shares increased, while income share of the upper income group declined. However, the top 20 percent of the population still held more than half of the total household income, which is also found in the MFLS data analysis.

Table 3.2.2: Overall Household Income Distribution in Peninsular Malaysia, 1957-1995.

	Mean (RM per month)	Median (RM per month)	Gini Coefficient	Income Share of: Top 20%	Middle 40%	Bottom 40%
1957/58	215	156	0.412	48.6	35.5	15.9
1967/68	140	154	0.444	51.3	34.4	14.3
1970	264	166	0.513	55.7	32.9	11.5
1976	524	313	0.529	57.7	31.2	11.1
1979	693	436	0.508	55.7	32.4	11.9
1985	1095	723	0.480	53.2	34.0	12.8
1987	1074	738	0.456	51.2	35.0	13.8
1990	1163	808	0.445	50.4	35.3	14.3
1993	n.a.	n.a.	0.459	n.a.	n.a.	n.a.
1995	2007	n.a.	0.464	n.a.	n.a.	n.a.

Note:
n.a. = not available
Source: Snodgrass (1980), Malaysia (1990, 1996) and Shari (2000).

Figure 3.2.1: Trends of Gini Coefficient, 1957 to 1995.



Besides examining how Malaysia performed in terms of income distribution between the periods available, it might be interesting to have a rough idea on how Malaysia performed in terms of income distribution compared to other countries. Table 3.2.3 shows income inequality in Malaysia was comparable to income inequality of some Latin American countries. Table 3.2.4 shows income inequality in the early 1970s for sixteen selected countries that were more or less at the same level of development and Borda score[1]. It can be observed that the performance of Malaysia in terms of income inequality is not that impressive. Income inequality in Malaysia was worse compared to developing countries in Asia such as Taiwan, Sri Lanka, India, South Korea, and Philippines, and also to some developing countries in Latin America such as Venezuela, Chile and Argentina. Income share of the lower income groups was lower, while the income share of the high-income group was higher in Malaysia, compared to the countries mentioned above. Only three of the sixteen countries (Peru, Honduras and Brazil) selected in Table 3.2.4 had an income distribution (in the late 1960s and early 1970s) that was more uneven than Malaysia.

The recent ranking by Jong-Il You (1998) also showed that the ranking of Malaysia in terms of income inequality has not changed much (see Table 3.2.5 below). Compared to the eight "East Asian Miracles" countries, Malaysia stood out the last. Besides, among the 66 countries listed and compared by Jong-Il You (1998), Malaysia ranked 49 out of 66, i.e. ranked in the bottom third. Indeed, when ranked among the countries classified as the upper-middle income group, Jong-Il You (1998) found that Malaysia had the highest income inequality. Therefore, while Malaysia has been describes as one of the "East Asian Miracles" (World Bank 1993), its performance in terms of equitable distribution of income has unfortunately never been that extraordinary. A rough comparison with other countries reveals that, while there has been a reduction in income inequality in Malaysia, the level of income inequality could still be considered relatively high.

[1] The Borda's method of rank-order scoring gives points equal to the rank value of each country in each criterion of comparative ranking. This produces a complete ordering based on all the criteria taken together in terms of lowness of the sum of ranks (Borda score).

Table 3.2.3: Gini Coefficient of Selected Latin American Countries and Malaysia.

Country	1979-1981	1989
Argentina	0.389	0.461
Brazil	0.574	0.625
Colombia	0.578	0.515
Costa Rica	0.451	0.410
Panama	0.376	0.446
Uruguay	0.452	0.420
Venezuela	0.512	0.498
Malaysia		
Government Survey Data	0.508 (1979)	0.445 (1990)
MFLS data	0.544 (1976/77)	0.473 (1988/89)

Source: (i) Fiszbein and Psacharopoulos (1995, p. 73, Table 3-1) in Lustig (1995); (ii) Shari (2000).

Table 3.2.4: Comparisons of Income Inequalities between Selected Countries.

	Share of:				
Country	Bottom 20%	Bottom 40%	Bottom 60%	Bottom 80%	Borda Score
Taiwan (1971)	8.7	21.9	38.5	60.8	4.0
Sri Lanka (1969-1970)	7.5	19.2	34.7	56.6	10.0
Yugoslavia (1973)	6.5	18.4	36.0	60.0	11.0
India (1964-65)	6.7	17.2	31.5	51.1	17.0
South Korea (1976)	5.7	16.9	32.3	54.7	18.0
Argentina (1970)	4.4	14.1	28.2	49.7	25.5
Chile (1968)	4.4	13.4	27.2	48.6	27.5
Philippines (1970-1971)	3.7	11.9	25.1	46.1	34.0
Costa Rica (1971)	3.3	12.0	25.3	45.2	37.5
Turkey (1973)	3.4	11.4	23.9	43.4	42.0
Mexico (1977)	2.9	10.3	23.5	45.5	45.5
Venezuela (1970)	3.0	10.3	23.2	46.0	45.5
Malaysia (1970)	**3.3**	**10.6**	**22.8**	**43.5**	**46.5**
Peru (1972)	1.9	7.0	18.0	39.0	59.5
Honduras (1967)	2.3	7.3	15.3	32.2	60.0
Brazil (1972)	2.0	7.0	16.4	33.4	60.5

Source: Meier (1984, p. 79, Table 1).

Table 3.2.5: Ranking of Income Inequality Between Selected Countries.

Country	IR	Rank	Country	IR	Rank	Country	IR	Rank
Hungary	3.2	1	Finland	6.0	23	Australia	9.6	45
Bulgaria	3.5	2	Italy	6.0	24	UK	9.6	46
Poland	3.9	3	Ghana	6.3	25	Venezuela	10.3	47
Rwanda	4.0	4	China	6.5	26	Peru	10.5	48
Bangladesh	4.1	5	Israel	6.6	27	**Malaysia**	**11.7**	**49**
Japan	4.3	6	Algeria	6.7	28	Costa Rica	12.7	50
Nepal	4.3	7	Morocco	7.0	29	Mauritania	13.2	51
Spain	4.4	8	Canada	7.1	30	Dominican R.	13.2	52
Sri Lanka	4.4	9	Denmark	7.1	31	Mexico	13.6	53
Netherlands	4.5	10	Jordan	7.3	32	Colombia	15.5	54
Belgium	4.6	11	Philippines	7.4	33	Zimbabwe	15.6	55
Sweden	4.6	12	France	7.5	34	Botswana	16.4	56
India	4.7	13	Tunisia	7.8	35	Senegal	16.7	57
Pakistan	4.7	14	Jamaica	8.1	36	Chile	17.0	58
Ethiopia	4.8	15	Thailand	8.3	37	Kenya	18.2	59
Indonesia	4.9	16	Switzerland	8.6	38	Lesotho	20.7	60
Uganda	4.9	17	Bolivia	8.6	39	Honduras	23.5	61
Taiwan	5.2	18	Hong Kong	8.7	40	Tanzania	26.1	62
Korea	5.7	19	New Zealand	8.8	41	Guinea-Bissau	28.0	63
Germany	5.8	20	Zambia	8.9	42	Panama	29.9	64
Cote d' Ivoire	5.8	21	USA	8.9	43	Guatemala	30.0	65
Norway	5.9	22	Singapore	9.6	44	Brazil	32.1	66

Note:
IR (Inequality Ratio) = income share of the top quintile/income share of the bottom quintile.
Source: Jong-Il You (1998, Table 1, p. 40).

What the above findings show is that there is no doubt that income inequality in Malaysia declined from 1976/77 to 1988/89. This has been indicated by both the MFLS data analysis of this study as well as the analysis of government survey data in previous studies. Indeed, the success in reducing inequality during the implementation of the NEP has been regarded as one of Malaysia's economic successes (Malaysia 1991, p. 98). However, it appears that when a comparison is made with other countries, the success appears not to be that extraordinary. Income inequality in Malaysia appears to be still relatively high when compared to other countries at a similar stage of development. Indeed, the achievements in reducing income inequality could have been much better given the fact that the economy is growing rapidly, and hence Malaysia is in a better position to undertake redistribution programs. Furthermore, Malaysia's success in reducing income inequality might not be much to be admired when income inequality after 1990 is taken into account. As already shown earlier, after 1990, income inequality in Malaysia began to increase.

3.2.2 Rural and Urban Income Inequality

Table 3.2.6 reports the rural and urban household income distribution from the MFLS data analysis. It shows that between 1976/77 and 1988/89, both rural and urban household income increased quite significantly. However, while the rural household income significantly increased, there is no significant improvement in the distribution of rural household income between 1976/77 and 1988/89. The Gini index for rural households only fell from 0.4824 in 1976/77 to 0.4708 in 1988/89, i.e. a very marginal improvement in rural income inequality. The Shorrock's index of inequality on the other hand showed that there was a worsening income inequality among the rural households. Besides, it appears that the rural upper and lower income groups gained their income shares at the expense of the rural middle-income group.

On the contrary, income inequality among the urban households improved quite dramatically. The Gini index for the urban household decreased from 0.5343 in 1976/77 to 0.4230 in 1988/89, while the Shorrock's index fell from 2.2333 to 0.9554. It also appears that income share of the urban upper income group fell, while income share of the urban middle and lower-income groups increased. Thus, figures in Table 3.2.6 implies that the fall in the overall income inequality could be mainly attributed to the fall in urban income inequality, since there was almost no improvement in the rural household income inequality.

Table 3.2.6: MFLS Data: Distribution of Rural and Urban Household Income, 1976/77 and 1988/89.

	1976/77		**1988/89**	
	Rural	Urban	Rural	Urban
Gini Index (G)	0.4824	0.5343	0.4708	0.4230
Shorrock's Index	1.2578	2.2333	1.5699	0.9554
Theil Index	0.4240	0.5673	0.4300	0.3239
Income share of:				
Top 10%	34.81	41.37	36.86	32.66
Top 20%	51.65	57.79	52.47	48.41
Middle 40%	37.20	31.68	34.06	36.29
Bottom 40%	11.15	10.53	13.47	15.30
Mean	4139	9123	10910	17199
Median	3106	5425	7310	12738

A comparison of the results from the MFLS data (Table 3.2.6) with the results reported in the previous studies (see Table 3.2.7) shows that there seems to be a conflicting view with regard to rural household income inequality. The MFLS data analysis shows that there is lack of improvement in rural income inequality between 1976/77 and 1988/89. However, the results from previous studies and government documents indicate that rural income inequality improved. The Gini index reported from previous studies fell from 0.500 in 1976 to 0.427 in 1987, while the Gini calculated from the MFLS data only fell marginally from 0.4824 in 1976/77 to 0.4708 in 1988/89. Besides, in the previous study it was found that both the lower and middle-income groups increased their income shares, while the upper income group lost out. The result from the MFLS data analysis however shows that the upper and the lower income groups incresed their income share at the expense of the middle-income group. With regards to urban households income inequality, however, the result from the MFLS data analysis appears to be in agreement with the results reported in the previous studies.

Table 3.2.7: Distribution of Rural and Urban Household Income in Peninsular Malaysia, 1970-1995.

	1970	1976	1979	1984	1987	1990	1995
Urban Households							
Mean Income (RM per month)	432	843	1121	1541	1467	1617	2596
Median Income (RM per month)	265	506	611	1027	1004	n.a.	n.a.
Gini Coefficient	0.494	0.512	0.503	0.466	0.449	0.445	n.a.
Income Share of:							
Top 20%	55.0	55.9	55.6	52.1	50.8	50.6	n.a.
Middle 40%	32.8	32.1	32.1	34.5	35.0	35.1	n.a.
Bottom 40%	12.2	12.0	12.3	13.4	14.2	14.3	n.a.
Rural Households							
Mean Income (RM per month)	202	385	590	824	853	951	1300
Median Income (RM per month)	139	257	382	596	629	n.a.	n.a.
Gini Coefficient	0.463	0.500	0.466	0.444	0.427	0.428	n.a.
Income Share of:							
Top 20%	51.0	54.5	53.2	49.5	48.3	47.1	n.a.
Middle 40%	35.9	33.7	34.4	36.4	36.7	37.1	n.a.
Bottom 40%	13.1	11.8	12.4	14.1	15.0	15.8	n.a.

Note:
n.a.=not available
Source: (i) Snodgrass (1980); (ii) Shari and (1990); (iii) Malaysia (1990, 1997); (iv) Perumal (1989); (v) Shireen (1998).

The explanation for this conflicting result could arise from the differences between the MFLS data and the government survey data used in the previous studies, such as the concept of income being employed, and also on the sample selected as well as the size of the sample. With regards to the concept of income used, it appears that the concept in the MFLS data is fairly comprehensive (see Chapter 2), and indeed fairly similar to the concept and definition of income found in the Post-Enumeration Survey (PES), which is used by Anand (1983). Thus, differences in the concept of income used could be ruled out as the source of the conflicting results.

It is worth mentioning again that the household samples in both the MFLS1 and MFLS2 were selected from a sampling frame designed by the Malaysian Department of Statistics. Thus the sampling frame of the MFLS was the same as the sampling frame of the government survey. The differences therefore might only lie with the household samples selected and their size. The household samples of the MFLS include only households with at least one ever-married woman aged 50 years or younger, i.e. one who has been married at least once, regardless of her present marital status. Thus, households that do not contain a woman who has been married once, or contain an ever-married woman over the age of 50, were not included in the sample. However, it could be argued that most households are likely to contain at least one ever-married woman aged 50 years or younger. Therefore, even though the MFLS samples excludes households that do not contain a woman who has been married once, or contain an ever-married woman over the age of 50, the probability of this occurring will be low. Thus, while the degree of representativeness of MFLS samples might be less than that of the government survey, nonetheless the aggregate data of both MFLS and government survey might not be significantly different from each other. This might explain why a comparison of the mean and median income, as well as income shares of the various income groups between the MFLS data and the government survey data shows that they are quite similar (see Chapter 2).

It also should be noted that the results are different only with regards to rural household inequality. With regard to the urban household inequality, there seems to be a similarity between the MFLS and the figures reported in the previous studies. Therefore, while the sample of the MFLS is relatively small and not as fully

representative as the government survey, there is no strong reason to believe that the findings from the MFLS data with regards to the rural income inequality are wrong, and hence to be disregarded. As far as the rural income inequality is concerned, the results from the MFLS data analysis has thrown some doubt on the prevailing perception in the previous studies that income inequality amongst the rural households has improved between the early NEP period and towards its end.

With regards to income inequality between the urban and rural household, there is evidence that the income gap between the rural and urban household has been narrowing in the NEP (1970-1990) period. Table 3.2.8 and Table 3.2.9 below show the urban-rural disparity ratio - the ratio of the mean income between the urban and rural households, which signifies the income gap between the rural and urban households. The urban-rural disparity ratio calculated from the MFLS data fell from 2.204 in 1976/77 to 1.576 in 1988/89, while the urban-rural disparity ratio calculated from the figures reported in the previous studies fell from 2.19 in 1976 to 1.70 in 1990.

Table 3.2.8: MFLS Data: Urban-Rural Disparity Ratio in Peninsular Malaysia, 1976/77 and 1988/89.

Year	Urban-Rural Disparity Ratio
1976/77	2.204
1988/89	1.576

Source: Calculated from Table 3.2.6.

Table 3.2.9: Urban-Rural Disparity Ratio in Peninsular Malaysia, 1970-1995.

Year	Urban-Rural Disparity Ratio
1970	2.14
1976	2.19
1979	1.90
1984	1.87
1987	1.72
1990	1.70
1993	1.75
1995	2.00

Source: Calculated from Table 3.2.7 and Shari (2000, Table 4, p.121).

The decline in the urban-rural disparity ratio implies that between 1976/77 and 1988/89, rural household income increased at a faster rate than the urban household income. In other words, rural household income seemed to be catching up with the urban household income, and subsequently, improving the income gap between them. However, in the post-NEP period (post-1990), the urban-rural disparity ratio was reversed, i.e. it rose to 2.00 in 1995. Thus in the post-NEP, it seems that the urban household income rose at a faster rate than the rural household income, thus widening the income gap between them.

3.2.3 Income Inequality Within and Between Ethnic Groups

Table 3.2.10 below reports the distribution of household income by ethnic groups from the MFLS data. It seems that income distribution among the Malays followed quite a similar pattern with the distribution of rural household income (see Table 3.2.6 above). This should be obvious since the majority of the Malay lives in rural areas. Between 1976/77 and 1988/89, the Gini index showed that there was only a marginal improvement in income inequality amongst the Malay households, while the Shorrock's index showed that income inequality amongst the Malay worsened. On the other hand, there was quite a substantial improvement in income inequality amongst the Chinese and Indians. These observations are still within the long-term trend of inequality (see Table 3.2.11 below).

Table 3.2.10 also shows that the relative position of the Malay in terms of income inequality changed. In 1976/77, household income amongst the Malay was more evenly distributed than among the Chinese and Indians. In 1988/89, however, the distribution of household income amongst the Malay was the most unevenly distributed when compared to that amongst the Chinese and Indians. Besides, for the Chinese and Indian households, the income share of their middle and lower-income groups increased, while the income share of their high-income group declined. On the contrary, for the Malays, the high-income group and the lower-income group increased their income share, while the middle-income group lost out. Thus, while the Chinese and the Indians made a significant improvement in the distribution of

income, the Malay did not show any significant improvement, and in fact became the most unequal of the ethnic groups. This seems to be interesting given the fact that there was an explicit redistribution policy in favour of the Malays. What these results imply is that, while the redistribution policy of the NEP might have benefited the Malays, the benefit was distributed unevenly among them. The Malay lower and upper income group gained more than the Malay middle-income group. This might partly explains why income inequality amongst the Malay did not show much improvement.

Table 3.2.11 below shows the household income distribution of the three major ethnic groups in Malaysia - the Malay, Chinese and Indian - that have been reported in the previous studies. With the exception of a slight decrease of income of the Chinese and the Indians in 1987, Table 3.2.11 suggests that throughout the NEP (1970-1990) period, the income of the three ethnic groups increased. Between 1970 and 1976, income inequality amongst the Malay households initially increased, and declined thereafter until 1984. However between 1984 and 1987, income inequality amongst the Malay household increased slightly, before it started to decline in 1990.

Table 3.2.10: MFLS Data: Distribution of Household Income by Ethnic Group in Peninsular Malaysia, 1976/77 and 1988/89.

	1976/77			1988/89		
	Malay	**Chinese**	**Indian**	**Malay**	**Chinese**	**Indian**
Gini Index (G)	0.5009	0.5130	0.5146	0.4810	0.4249	0.3620
Shorrock's Index	1.1645	1.9534	3.3855	1.5772	0.9189	0.5877
Theil Index	0.4389	0.5200	0.6376	0.4418	0.3246	0.2281
Income share						
Top 10%	36.43	39.77	46.52	37.54	32.68	27.07
Top 20%	53.91	55.70	58.00	53.72	48.65	43.07
Middle 40%	35.66	32.78	28.11	33.24	35.71	39.06
Bottom 40%	10.42	11.52	13.89	13.04	15.64	17.87
Mean	3795	8850	7411	11153	17300	13385
Median	2647	5747	4220	7200	12140	10465

Table 3.2.11: Household Income Distribution by Ethnic Groups in Peninsular Malaysia, 1970-1995.

	1970	1976	1979	1984	1987	1990	1995
MALAY							
Mean Income (RM per month)	177	345	513	852	868	940	1600
Median Income (RM per month)	122	233	332	581	612	n.a.	n.a.
Gini Coefficient	0.466	0.494	0.470	0.469	0.477	0.428	n.a.
Income Share of:							
Top 20%	52.5	53.9	52.6	51.9	50.2	n.a.	n.a.
Middle 40%	34.8	34.3	35.5	34.8	35.7	n.a.	n.a.
Bottom 40%	12.7	11.8	11.9	13.3	14.1	n.a.	n.a.
CHINESE							
Mean Income (RM per month)	399	787	1094	1502	1430	1631	2895
Median Income (RM per month)	269	480	636	1024	1021	n.a.	n.a.
Gini Coefficient	0.455	0.505	0.473	0.452	0.430	0.423	n.a.
Income Share of:							
Top 20%	52.6	56.1	52.8	51.1	49.2	n.a.	n.a.
Middle 40%	33.5	31.3	35.3	34.9	35.7	n.a.	n.a.
Bottom 40%	13.9	12.6	11.9	14.0	15.0	n.a.	n.a.
INDIAN							
Mean Income (RM per month)	310	538	776	1094	1089	1209	2153
Median Income (RM per month)	195	360	522	770	799	n.a.	n.a.
Gini Coefficient	0.463	0.458	0.452	0.417	0.402	0.394	n.a.
Income Share of:							
Top 20%	54.2	52.6	50.8	48.4	47.2	n.a.	n.a.
Middle 40%	31.5	32.7	36.3	35.3	35.9	n.a.	n.a.
Bottom 40%	14.3	14.7	12.8	16.3	16.9	n.a.	n.a.

Source: (i) Snodgrass (1980); (ii) Shari and Zin (1990); (iii) Malaysia (1990, 1996).

Income inequality among the Chinese appeared to follow the trends of the overall income inequality, with an initial increase between 1970 and 1976, but a decline thereafter. As for the Indians however, in contrast with the experience of the Malay and the Chinese there has been a consistent decline throughout this period, from 1970 to 1990. The picture for the Malay community is more complex. There was no decrease in income inequality from 1970 to 1987. Inequality worsened. Improvement occurred between 1987 and 1990. The government stopped publishing intra-ethnic (as well as rural and urban) distribution figures that were readily made available until 1990. It is likely that intra-ethnic inequality worsened for at least the Malay ethnic group.[2]

[2] This could be foreseen from the acknowledgement of the government that inequality improvement in the last two decades have not occurred evenly for all the three major ethnic groups. Income inequality, even amongst the Bumiputera, is still high (Malaysia 1991, p.100). The latest published figure in the Mid-Term Review of the Seventh Malaysia Plan shows that the overall inequality in 1997 increased to 0.470. Information on intra-ethnic inequality is still unavailable in the Mid-Term Review of the Seventh Malaysia Plan. Even though it is possible that intra-Malay inequality could fall given that inequality amongst the Chinese and Indian increased, the probability of this is likely to be small. It is more likely that intra-Malay inequality is also rising as the overall inequality.

It appears that during the NEP (1970-1990) period the Malay household income rose at a faster rate than that of the Chinese and the Indians. Thus, even though income inequality amongst the Malay was the highest of the three ethnic groups, nonetheless income inequality between the Malay and the other ethnic groups improved. Table 3.2.12 and Table 3.2.13 show that there was a decline in the income disparity ratio between the Chinese as well as the Indians and the Malay. However, after 1990, the income gap between the Chinese and the Malay started to increase again. It should be noted that, while there was a narrowing in the income gap between the Malay and the Chinese, as well as with the Indians, the income of the Malay nonetheless was still considerably less than that of the Chinese and the Indians.

Table 3.2.12: MFLS Data: Income Disparity Ratio Between Ethnic Groups, 1976/77 and 1988/89.

	1976/77	**1988/89**
Chinese-Malay	2.332	1.551
Indian-Malay	1.953	1.200
Chinese-Indian	1.194	1.292

Source: Calculated from Table 3.2.10.

Table 3.2.13: Income Disparity Ratio Between Ethnic Groups, 1970-1995.

	1970	**1976**	**1979**	**1984**	**1987**	**1990**	**1993**	**1995**
Chinese-Malay	2.25	2.28	2.13	1.76	1.65	1.74	1.78	1.81
Indian-Malay	1.75	1.56	1.51	1.28	1.25	1.29	1.29	1.35
Chinese-Indian	1.29	1.46	1.41	1.37	1.31	1.35	n.a	1.34

Source: Calculated from Table 3.2.11 and Shari (2000, Table 4, p.121).

Using the MFLS data, the analysis was taken further to examine income distribution amongst each ethnic group by their location, i.e. rural and urban. The results are presented in Table 3.2.14. It can be seen that, with the exception of the Indian, both the Malay and Chinese rural households experienced a worsening income distribution. It also appears that the upper-income as well as the lower-income groups of both the Malay and Chinese rural households increased their income share significantly at the expense of their rural middle-income groups. On the contrary, between 1976/77 and 1988/89, income inequality among the urban households improved across all ethnic groups. The income share of the urban upper-income group declined, while income share of the urban middle and lower-income groups increased across all ethnic groups.

Thus figures in Table 3.2.14 partly explain the observation that there was not much improvement in income inequality amongst the rural household, nor amongst the Malay households. It seems that there was not much change in rural household income inequality since there was not much change in income inequality amongst the rural Malay, Chinese and Indians. Likewise, the reason for the lack of any perceptible improvement in the Malay income inequality was associated with the lack of improvement in income inequality amongst the rural Malays, although the urban Malay income inequality declined marginally.

Table 3.2.14: MFLS Data: Distribution of Rural and Urban Household Income by Ethnic Groups, 1976/77 and 1988/89.

	1976/77			1988/89		
	Malay	**Chinese**	**Indian**	**Malay**	**Chinese**	**Indian**
Rural Households						
Gini Index (G)	0.4880	0.4254	0.3542	0.4878	0.4328	0.3419
Shorrock's Index	1.0402	0.9182	1.4246	1.9306	1.0132	0.4264
Theil Index	0.4106	0.3328	0.3105	0.4790	0.3431	0.1931
Income share						
Top 10%	34.83	33.26	30.31	38.93	34.63	25.89
Top 20%	51.51	48.54	43.54	54.18	49.71	41.11
Middle 40%	38.02	36.50	35.63	32.68	35.51	39.29
Bottom 40%	10.47	14.96	20.83	13.13	14.79	19.60
Mean	3044	6351	4645	10142	14184	10586
Median	2202	4944	3447	6531	10200	8850
Urban Households						
Gini Index (G)	0.4589	0.5339	0.5574	0.4324	0.4042	0.3513
Shorrock's Index	0.8894	2.0224	3.1388	0.8675	0.8092	0.5728
Theil Index	0.3577	0.5568	0.6822	0.3222	0.2915	0.2177
Income share						
Top 10%	33.98	41.05	50.20	31.20	32.31	26.84
Top 20%	51.03	57.16	63.64	48.89	47.35	41.14
Middle 40%	35.53	32.63	25.08	36.93	35.79	39.80
Bottom 40%	13.44	10.22	11.28	14.18	16.85	19.06
Mean	5890	10553	10372	14272	19913	15841
Median	4007	6545	5339	10102	14820	13414

Table 3.2.15 below shows the income disparity ratio between ethnic groups by location. It is clear from Table 3.2.15 that the income gap between the Malay and the Chinese, as well as that between the Malay and the Indians in both the rural and urban areas showed an improvement. For instance, the Chinese-Malay disparity ratio in the

rural areas declined from 2.086 in 1976/77 to 1.399 in 1988/89, while in the urban areas the ratio declined from 1.792 to 1.395. These figures imply that the income of the Malay is catching up with the income of the Chinese (as well as with the Indians) in both the rural and urban areas.

Table 3.2.15: MFLS Data: Income Disparity Ratio Between Ethnic Groups by Location, 1976/77 and 1988/89.

	1976/77	1988/89
Rural Households		
Chinese-Malay	2.086	1.399
Indian-Malay	1.526	1.044
Chinese-Indian	1.367	1.340
Urban Households		
Chinese-Malay	1.792	1.395
Indian-Malay	1.761	1.110
Chinese-Indian	1.017	1.257

Source: Calculated from Table 3.2.14

Besides examining the income gap between ethnic groups, it is also interesting to examine the urban-rural income gap for each ethnic group. Table 3.2.16 below reports the urban-rural income disparity ratio by ethnic groups, which is calculated from Table 3.2.14. It is apparent that urban-rural income disparity narrowed for all ethnic groups. The urban-rural income disparity ratio of the Malay for example, declined from 1.935 in 1976/77 to 1.407 in 1988/89. Thus, between 1976/77 and 1988/89, not only was there a narrowing income gap between urban and rural households, and also between ethnic groups, but was a narrowing urban-rural income gap for each of the major ethnic groups as well.

Table 3.2.16: MFLS Data: Urban-Rural Income Disparity Ratio by Ethnic Groups, 1976/77 and 1988/89.

	1976/77	1988/89
Malay	1.935	1.407
Chinese	1.662	1.404
Indian	2.233	1.496

Source: Calculated from Table 3.2.14.

3.2.4 Decomposition of Income Inequality by Population Sub-Groups

The income disparity ratio, which is used above to indicate the extent of income inequality between different groups, however simply reflects the mean income differences between these different groups. The ratio therefore fails to take into account the differences in income within the group. Thus, there is a need to investigate the extent to which inequality between and within groups contributes to total inequality. For instance, the disparity ratio has shown that the income gap between the rural Malay and the urban Malay (see Table 3.2.16 above) narrowed quite significantly. Why then was this decline in the urban-rural income gap never reflected in a significant reduction in income inequality amongst the Malay?

Besides, as observed earlier, even though the overall income inequality declined from 1976 up to the end of the NEP period, when compared to other countries at the same level of development, it could be argued that Malaysia did not show a really remarkable performance in terms of income inequality as it did in terms of economic growth. This raises an interesting question. Why is it, despite the rapidly growing economy, and hence being in a better position to carry out redistribution programmes under the NEP,[3] Malaysia did not make a really significant improvement in terms of total income inequality? The explanation for this probably lies in part in the growing role of intra-group inequality. Thus, while there might have been a reduction in inter-group inequality during the NEP period, simultaneously there also might have been an increase in intra-group inequality. The reason for this is fairly obvious - the NEP is more concerned with reducing inter-group rather than intra-group inequality. Thus, the impact of the reduction in inter-group inequality on the total inequality will be minimal if there is simultaneously a significant increase in intra-group inequality. The reduction in total inequality as a result of the decline in inter-group inequality will be offset by the increase in intra-group inequality. The contribution of between- and within-group inequality to total inequality, which will be examined below, will shed some light on this argument.

[3] High economic growth is a prerequisite for the implementation of the NEP since redistribution under the NEP is designed to be from newly created rather than existing wealth.

Table 3.2.17 below reports the decomposition of the Theil index to its inter- and intra-area inequality contribution to total inequality. It is clear that in both 1976/77 and 1988/89 the contribution of rural-urban inequality to total inequality was significantly small compared to the contribution of inequality within the rural and urban household. Furthermore, Table 3.2.17 also indicates that the contribution of rural-urban inequality to total inequality significantly declined, while the contribution of inequality within the rural and urban household increased. This implies that the role of inequality between rural and urban households in explaining the changes in total inequality became less importance. On the contrary, inequality within rural and urban household not only important, but also became increasingly crucial in explaining the total inequality between 1976/77 and 1988/89.

Table 3.2.17: MFLS Data: Theil Index and the Contribution of Inter- and Intra-Area (Rural-Urban) Inequality to Total Inequality, 1976/77 and 1988/89.

	1976/77		1988/89	
	Theil index	**% Contribution**	**Theil index**	**% Contribution**
Inter-Area	0.0766	13.02	0.0254	6.25
Intra-Area	0.5121	86.98	0.3802	93.75
Total	0.5887	100.00	0.4055	100.00

Table 3.2.18 below reports the contribution of inter- and intra-ethnic inequalities to total inequality. It shows that the contribution of inter-ethnic inequalities to total inequality was relatively small compared to the contribution of intra-ethnic inequalities. This implies that it was inequalities within each ethnic group that explained most of the total inequality. Moreover, not only have intra-ethnic inequalities explained most of the total inequality, they have also become more important between the periods under study.

Table 3.2.18: MFLS Data: Theil Index and the Contribution of Inter- and Intra-Ethnic Inequality to Total Inequality, 1976/77 and 1988/89.

	1976/77		1988/89	
	Theil index	**% Contribution**	**Theil index**	**% Contribution**
Inter-Ethnic	0.0756	12.85	0.0196	4.99
Intra-Ethnic	0.5130	87.15	0.3734	95.01
Total	0.5887	100.00	0.3931	100.00

Therefore, both Table 3.2.17 and Table 3.2.18 suggest that it is intra-groups inequality that contributed the most to total inequality. Indeed, it became more crucial in explaining total inequality between 1976/77 and 1988/89. On the other hand inter-group inequality was less important in explaining the changes in total inequality. Thus, based on the above findings, it could be argued that the decline in the overall income inequality between 1976/77 and 1988/89 was due to the reduction in inter-group inequalities, i.e. a decline in income inequality between the rural and urban households, as well as inequality between ethnic groups. However, since simultaneously there was an increase in intra-group inequality, i.e. inequality within the rural and urban households, as well as inequality within each ethnic group, the reduction in total income inequality was not as great as it would have been if there had been no increases in intra-groups inequality. This explains why even though total income inequality declined between 1976/77 and 1988/89, it nevertheless still remained quite high.

The Theil decomposition analysis was also carried out further to examine the contribution of inter-ethnic and intra-ethnic inequality to the rural and urban income inequality. Table 3.2.19 below reports the results. As found above, figures in Table 3.2.19 also suggest that the main determinant of both the rural and urban income inequality was inequality within-ethnic groups rather than inequality between-ethnic groups. In fact, as found above, the contribution of inter-ethnic inequality to both the rural and urban income inequality declined, while the contribution of intra-ethnic inequality increased over the period under study. This provides the explanation for the marginal decrease in rural household income inequality observed earlier. The decline in total rural income inequality was only marginal due to the significant increase in intra-ethnic inequality. As indicated in Table 3.2.19, the contribution of intra-ethnic inequality to total rural inequality increased quite substantially, i.e. from 86 percent in 1976/77 to 98 percent in 1988/89.

Table 3.2.20 below reports the contribution of rural-urban inequality to total inequality for each ethnic group. As can be clearly seen from Table 3.2.20, the contribution of rural-urban inequality to total inequality across all ethnic groups was relatively small compared to the contribution of intra-area inequality. Indeed inter-

area inequality contribution to each ethnic group inequality declined between 1976/77 and 1988/89. On the other hand, the contribution of intra-area inequality to total inequality of the ethnic groups was large and increased between 1976/77 and 1988/89. Table 3.2.20 also suggests that the contribution of inter-area inequality to the Malay income inequality significantly declined from 11.4 percent in 1976/77 to 2.7 percent in 1988/89. The decline seems relatively more significant compared to the Chinese and the Indian. Besides, the increase in the contribution of intra-area inequality to total inequality of the Malay is also more significant compared to that of the Chinese and the Indians. Therefore, the Malay experienced quite a huge decline in inter-area (rural-urban) inequality. However, this huge decline in inter-area inequality of the Malay was not manifested in a huge decline in their total income inequality since simultaneously there was also quite a huge increase in intra-area inequality amongst them.

Table 3.2.19: MFLS Data: Theil Index and the Contribution of Inter- and Intra-Ethnic Inequality to Total Inequality by Location, 1976/77 and 1988/89.

	1976/77		1988/89	
	Theil index	**% Contribution**	**Theil index**	**% Contribution**
Rural Households				
Inter-Ethnic	0.0588	13.87	0.0096	2.24
Intra-Ethnic	0.3650	86.13	0.4206	97.76
Total	0.4238	100.00	0.4303	100.00
Urban Households				
Inter-Ethnic	0.0293	5.16	0.0118	3.90
Intra-Ethnic	0.5378	94.84	0.2897	96.10
Total	0.5670	100.00	0.3014	100.00

Table 3.2.20: MFLS Data: Theil Index and the Contribution of Inter- and Intra-Area (Rural and Urban) Inequality to Total Inequality by Ethnic Groups, 1976/77 and 1988/89.

	1976/77		1988/89	
	Theil index	**% Contribution**	**Theil index**	**% Contribution**
Malay Households				
Inter-Area	0.0499	11.36	0.0120	2.71
Intra-Area	0.3889	88.64	0.4299	97.29
Total	0.4388	100.00	0.4418	100.00
Chinese Households				
Inter-Area	0.0283	5.44	0.0138	4.25
Intra-Area	0.4916	94.56	0.3108	95.75
Total	0.5199	100.00	0.3246	100.00
Indian Households				
Inter-Area	0.0758	11.90	0.0195	8.54
Intra-Area	0.5618	88.10	0.2086	91.46
Total	0.6376	100.00	0.2281	100.00

For comparison, Table 3.2.21 below shows the contribution of inter-ethnic and inter-area inequality to total inequality reported in the previous studies. It shows that the results found in this study are in conformity with the findings in other studies such as of Ikemoto (1985) and Shireen (1998). Thus, evidence shows that income inequality in Malaysia is largely explained by intra-ethnic and intra-area (within group) rather than inter-ethnic and inter-area (between group) inequalities. The implication of the results is that, since intra-ethnic and intra-area inequality is the main determinants of income inequality, the aim to reduce the overall income inequality in Malaysia will only be effective if the focus is more on improving intra-ethnic and intra-area (within group), rather than inter-ethnic and inter-area (between group) inequality.

Table 3.2.21: A Comparison of Inter-Groups Contribution to Income Inequality (%).

	Ikemoto (1985)		**Shireen (1998)**			**MFLS Data**	
	1970	**1979**	**1984**	**1987**	**1989**	**1976/77**	**1988/89**
Inter-Ethnic	18.0	11.1	8.4	7.3	8.7	12.85	4.99
Inter-Area	16.0	9.7	11.3	9.0	9.7	13.02	6.25

Source: (i) Ikemoto (1985, Table IVD, p. 355); (ii) Shireen (1998, pp. 94-98).

3.3 Polarisation

This subsection examines the question of polarisation. In general, the concept of polarisation is related to the degree by which the population is divided between the "haves" and the "have-nots" (Ravallion and Chen, 1997, p.366). Polarisation occurs when the income is largely concentrated in both end of the distribution, with less in the middle. Thus, distribution X is said to be more polarised than distribution Y if income distribution in X is more bimodal in the sense that it contain more poor and rich, but fewer people in the middle. It is in this sense that the concept of polarisation is also known as the "disappearing middle-class" phenomenon.

It is important to examine polarisation alongside inequality since inequality measures such as the Gini index employed above are not able to capture all the distributional changes that might have taken place, and which might be of concern and importance in policy making. Wolfson (1994, 1997) demonstrates that inequality measures such as the Gini index are unable to capture changes in the share of income held by the

middle-income group. Thus, analysis that examines only the inequality aspect of an income distribution miss relevant aspects of how the distribution has really changed. Therefore, there is a need to investigate the question of polarisation, which is a new aspect that has emerged in the discussion of income inequality in the recent literature [See for instance Wolfson (1994, 1997); Levy and Murnane (1992); Jenkins (1995)]. Indeed, Wolfson (1994, p. 358) suggests that when examining a distribution of income, measures related to polarisation should be included. Here, the analysis on the question of polarisation is done by employing an index that has been proposed by Wolfson (1994), which has already been discussed in Chapter 2.

Table 3.3.1 below shows Wolfson's polarisation index (W) calculated from the MFLS data. Between 1976/77 and 1988/89, Wolfson's polarization index (W) for all households decreased from 0.4836 to 0.4209. Thus, it seems that there is no evidence that the Malaysian society has become more polarised between the two periods under investigation. Therefore, generally speaking, between the 1976/77 and 1988/89, the decline in overall income inequality observed earlier is followed by a decrease in polarisation. Furthermore, there is also no evidence of polarisation amongst the rural and urban households, or amongst the three major ethnic groups.

Table 3.3.1: MFLS Data: Wolfson's Index of Polarisation (W), 1976/77 and 1988/89.

	1976/77	**1988/89**
All Households	0.4836	0.4209
Rural Households	0.4255	0.4060
Urban Households	0.4976	0.3684
Malay Households	0.4795	0.4352
Chinese Households	0.4364	0.3706
Indian Households	0.3613	0.3380

The analysis is extended further to examine the question of polarisation amongst the three major ethnic groups by their location. The Wolfson index of polarisation (W) of each ethnic group by location is reported below in Table 3.3.2. The results show that there was no evidence of polarisation amongst the urban households of the three ethnic groups. However, the Wolfson index of polarisation (W) shows that there was evidence of marginal increase in polarisation amongst the rural Chinese and the rural

Indian households. The Wolfson's polarisation index (W) for the rural Chinese increased from 0.3366 in 1976/77 to 0.3648 in 1988/89, while the Wolfson's polarisation index for the rural Indian increased from 0.2627 to 0.2898. Therefore, the rural Chinese and Indians became more polarised in 1988/89 than in 1976/77. In contrast with the rural Chinese and Indians, while there was no significant improvement of income inequality amongst the rural Malay, nevertheless they did not become more polarised.

Table 3.3.2: MFLS Data: Wolfson's Index of Polarisation (W) by Location and Ethnic Groups, 1976/77 and 1988/89.

	1976/77	1988/89
Rural Households		
Malay	0.4863	0.4137
Chinese	0.3366	0.3648
Indian	0.2627	0.2898
Urban Households		
Malay	0.4507	0.4381
Chinese	0.4861	0.3315
Indian	0.4445	0.2936

However, while the Wolfson polarisation index (W) does not indicate any increase in polarisation within the Malay (and rural) households, another indicator for polarisation, i.e. the income share of the "middle" income group, shows contrary results. Table 3.3.3 below calculates the income share of the variously defined middle-income group by population subgroups (see also Table 3.2.6, Table 3.2.10, and Table 3.2.14). In general, the results shown in Table 3.3.3 mostly agree with the results shown in Table 3.2.1 and Table 3.2.2 above. For instance, Table 3.3.3 shows that the income share of the middle-income group for the total household increased between 1976/77 and 1988/89. Thus, it confirms the calculated Wolfson polarisation index (W) that there was no evidence of increase polarisation within the total number of households. It also confirms the results for the urban as well as for the Chinese and Indian households.

Table 3.3.3: MFLS Data: Income Share of the Middle Income Group, 1976/77 and 1988/89.

	1976/77			1988/89		
	Middle 20%	**Middle 40%**	**Middle 60%**	**Middle 20%**	**Middle 40%**	**Middle 60%**
All Households	12.37	25.27	39.75	13.69	28.04	43.84
Rural Households	14.81	29.75	45.73	13.63	27.68	43.13
Urban Households	11.84	24.59	39.20	14.81	29.96	46.22
Malay Households	13.95	28.32	43.54	12.98	26.58	41.94
Chinese Households	12.89	26.15	41.25	14.64	29.82	45.97
Indian Households	11.82	23.29	36.68	15.87	32.26	50.40
Rural Households						
Malay	14.45	29.57	45.85	13.09	26.62	41.53
Chinese	15.29	30.95	47.01	14.33	29.00	45.32
Indian	15.21	31.06	48.85	16.54	33.08	52.73
Urban Households						
Malay	13.56	27.74	44.81	14.13	29.46	45.93
Chinese	12.46	25.50	40.35	14.99	29.74	46.63
Indian	9.95	20.31	32.05	17.12	33.21	51.79

Note:
Middle 20% = income share of decile 5 to decile 6 of the households; Middle 40% = income share of decile 4 to decile 7 of the households; Middle 60% = income share of decile 3 to decile 8 of the households.

However, Table 3.3.3 indicates that the income share of the middle 20%, middle 40% and middle 60% of the Malay and rural households fell between 1976/77 and 1988/89. The income share of the rural Chinese middle-income group also fell between the two periods, while the income share of the rural Indian middle-income group increased. These figures appear to be contrary to the results from the Wolfson polarisation index (W). While it did not indicate any increase in polarisation within the Malay (and rural) households, the income share of their middle-income group, i.e. another indicator for polarisation, indicated an increase in polarisation. On the other hand, while the Wolfson index (W) indicated an increase in polarisation within the rural Indian community, the income share of their middle-income group indicated this is not the case. The only consistent result is for the rural Chinese household, where both the Wolfson polarisation index (W) and the income share of their middle-income group showed an increase in polarisation within them. Thus, the findings on polarisation for the Malay and rural households, as well as for the Indian households were inconclusive. It seems that the Wolfson index of polarisation (W) missed one important aspect of intra-group changes amongst the Malays: that the top and the

bottom income group fared better than the 'middle' income group between 1976/77 and 1988/89.

3.4 Poverty

Earlier discussions on income inequality have shown that there was an improvement in the overall income inequality between 1976/77 and 1988/89. However, a decline in income inequality does not necessarily imply that there will be improvement in the standard of living of the poorest section of the households. Even when there has been a declined in income inequality, one cannot conclude with certainty that there is also a reduction in poverty, since it is possible to have an improvement in the overall income inequality with, at the same time, the poorest section of the households becoming poorer or at least to remaining the same. For instance, *ceteris paribus*, suppose there is a transfer of income between the rich sections of the population, such that the loser is richer than the gainer. In this case, income inequality may well be improving but the situation of the poorest section of the society remains unchanged. Therefore, the question on what happens to the poorest section of the household, i.e. the question of poverty, needs examination. Indeed, this question is particularly important in Malaysia because of the New Economic Policy, where one of the objectives is to reduce poverty.

Table 3.4.1 below shows the head-count ratio, i.e. the poverty incidence in Peninsular Malaysia reported in the government documents. It shows that poverty incidence was remarkably reduced from 49.3 percent in 1970 to 15.0 percent in 1990. Furthermore, the incidence of poverty amongst the rural and urban households also declined from 58.7 and 21.3 percent to 19.3 and 7.3 percent respectively. Poverty incidence amongst all ethnic groups also showed a substantial reduction. In particular, the incidence of poverty amongst the Bumiputera was reduced substantially from 65.0 percent in 1970 to 20.8 percent in 1990.

Table 3.4.1: Incidence of Poverty (%) in Peninsular Malaysia, 1970 and 1990.

	1970	1990
Peninsular Malaysia	49.3	15.0
Rural	58.7	19.3
Urban	21.3	7.3
Bumiputera	65.0	20.8
Chinese	26.0	5.7
Indians	39.0	8.0
Others	44.8	18.0

Source: Malaysia (1991).

However, it has been argued that the head-count ratio is not a satisfactory index to show the state of poverty in a population [see for example Fields (1994), Sen (1997b) and Zheng (1997)]. Basically, the head-count ratio is the proportion of total population whose income falls below the specified poverty line. While it does give some information on the state of poverty in the population, the shortcomings of the head-count ratio as a measure of poverty is that it fails to take into account the extent to which the income falls below the poverty line. Furthermore, it also fails to take into consideration the distribution of income of those who fall below the specified poverty line. In other words, the head-count ratio ignores the "depth" as well as the "distribution" of poverty (Sen 1997b, p.168). Therefore, if income is transferred from the poorest person to the least poor such that it enables the least poor to cross over the poverty line, this seems to reduce poverty in terms of the head-count ratio. However, while it reduces the head-count ratio of poverty, it also could be the case that the quality of life of the remaining poor has worsened. Thus, apart from the head-count ratio (H), which is normally reported in the government documents as well as in the previous studies, there is a need for a better measure of poverty. Here, apart from the head-count ratio (H), the indices employed in the study are the poverty-gap ratio (I), Sen index (S), Clark, Hemming and Chu index (P*), and Foster, Greer and Thorbecke index (FGT). These are among the better indices of poverty that have been proposed in the literature.

Table 3.4.2 below reports a set of poverty indices for 1976/77 and 1988/89, calculated from the MFLS data. All of them indicate that poverty declined over the period under study. The poverty incidence (H), i.e. the fraction of total household living below the poverty line declined significantly from 45 percent in 1976/77 to 22 percent in 1988/89. The results also show that not only did the proportion of the total household who lived in poverty decline, but that the depth of poverty also improved as reflected by the decline in the poverty gap ratio (I) from 0.48 in 1976/77 to 0.35 in 1988/89. Furthermore, the distribution of income among the poor also improved as reflected by the decline in poverty indices of S, P* as well as FGT (α=2). Poverty also declined across all ethnic groups as well as across location (see Table 3.4.3 and Table 3.4.4).

In fact, further examination of rural and urban poverty by ethnic groups also indicates a similar finding – poverty declined (see Table 3.4.5 and Table 3.4.6). In general, there is agreement among all the poverty indices that poverty declined between 1976/77 and 1988/89. This finding therefore not only confirmed, but also substantiated the government published figures that there was a substantial reduction in poverty. With all the poverty indices showing agreement, it can be stated with confidence that poverty really declined between the periods under study.

Since poverty indices are calculated for different population sub-groups – Malay, Chinese and Indian as well as rural and urban - it might be an interesting exercise to examine to what extent each population sub-group contributes to total poverty. Most poverty indices are not decomposable, in the sense that they do not necessarily establish sensible relationships between subgroup poverty and overall poverty with a view to determining how much each subgroup contributes to total poverty. The index proposed by Foster, Greer and Thorbecke (1984), however, addresses this problem. The FGT index allows poverty to be decomposed into its various components' contribution.

Table 3.4.2: MFLS Data: Poverty Indices, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77	1245	561	292	0.3210	0.4506	0.4792	0.2916	0.2417	0.3060	0.1415
1988/89	1507	337	556	0.2060	0.2236	0.3494	0.1084	0.0868	0.1016	0.0399

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 3.4.3: MFLS Data: Poverty Indices by Area, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Rural	722	403	284	0.3266	0.5582	0.4942	0.3685	0.3053	0.3746	0.1821
Urban	523	158	314	0.3011	0.3021	0.4411	0.1848	0.1516	0.2022	0.0853
Total	1245	561	292	0.3210	0.4506	0.4792	0.2916	0.2417	0.3060	0.1415
1988/89										
Rural	965	271	545	0.2161	0.2808	0.3625	0.1410	0.1129	0.1323	0.0534
Urban	542	66	602	0.1600	0.1218	0.2956	0.0508	0.0399	0.0450	0.0157
Total	1507	337	556	0.2060	0.2236	0.3494	0.1084	0.0868	0.1016	0.0399

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 3.4.4: MFLS Data: Poverty Indices by Ethnic Groups, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Malay	591	343	267	0.3393	0.5804	0.5232	0.3981	0.3347	0.4060	0.2046
Chinese	496	150	308	0.3194	0.3024	0.4504	0.1900	0.1563	0.2154	0.0904
Indian	147	61	394	0.1595	0.4150	0.2969	0.1737	0.1343	0.1463	0.0534
Total	1234	554	293	0.3207	0.4489	0.4786	0.2902	0.2405	0.3044	0.1407
1988/89										
Malay	911	271	554	0.2086	0.2975	0.3525	0.1456	0.1161	0.1348	0.0538
Chinese	399	44	592	0.1762	0.1103	0.3081	0.0488	0.0379	0.0438	0.0160
Indian	184	19	510	0.2334	0.1033	0.4031	0.0584	0.0468	0.0574	0.0232
Total	1494	334	556	0.2067	0.2236	0.3495	0.1085	0.0869	0.1017	0.0400

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 3.4.5: MFLS Data: Poverty Indices Amongst **Rural Households** by Ethnic Groups, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Rural Malay	435	284	257	0.3546	0.6529	0.5418	0.4605	0.3874	0.4623	0.2438
Rural Chinese	201	77	339	0.2468	0.3831	0.3961	0.2111	0.1707	0.2223	0.0882
Rural Indian	76	36	381	0.1782	0.4737	0.3211	0.2166	0.1656	0.1823	0.0710
TOTAL	712	397	284	0.3258	0.5576	0.4935	0.3677	0.3045	0.3732	0.1814
1988/89										
Rural Malay	688	227	542	0.2187	0.3299	0.3656	0.1671	0.1335	0.1558	0.0637
Rural Chinese	182	30	585	0.1867	0.1648	0.3156	0.0760	0.0578	0.0663	0.0251
Rural Indian	86	11	484	0.2441	0.1279	0.4339	0.0777	0.0623	0.0770	0.0319
TOTAL	956	268	545	0.2171	0.2803	0.3628	0.1410	0.1129	0.1323	0.0535

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 3.4.6: MFLS Data: Poverty Indices Amongst **Urban Households** by Ethnic Groups, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Urban Malay	156	59	318	0.2505	0.3782	0.4340	0.2204	0.1823	0.2259	0.0952
Urban Chinese	295	73	276	0.3919	0.2475	0.5077	0.1744	0.1464	0.2106	0.0919
Urban Indian	71	25	414	0.1286	0.3521	0.2621	0.1344	0.1004	0.1064	0.0345
TOTAL	522	157	314	0.3020	0.3008	0.4409	0.1841	0.1510	0.2017	0.0851
1988/89										
Urban Malay	223	44	611	0.1513	0.1973	0.2849	0.0802	0.0618	0.0676	0.0233
Urban Chinese	217	14	605	0.1465	0.0645	0.2920	0.0281	0.0211	0.0245	0.0083
Urban Indian	98	8	547	0.2115	0.0816	0.3607	0.0451	0.0331	0.0400	0.0155
TOTAL	538	66	602	0.1600	0.1227	0.2956	0.0512	0.0402	0.0454	0.0158

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 3.4.7 below reports the decomposition of poverty FGT (α=2) by area. It shows that it is the rural household poverty that contributed the most to total poverty. Indeed between 1976/77 and 1988/89, the contribution of rural household poverty to total poverty increased. Table 3.4.8 reports the decomposition of poverty FGT (α=2) by ethnic groups. It shows that the contribution of Malay household poverty to total poverty was similar to that of rural households. Further investigation shows that the contribution of poverty amongst the Malay to the total poverty was significantly large in both the rural and urban areas (Table 3.4.9 and Table 3.4.10). What these decomposition exercises show is that, while poverty amongst the Malay household has been substantially reduced, they still formed the largest group under poverty. This implies, while poverty amongst the Malay has significantly declined, the decline was much slower compared to that of the Chinese and the Indian.

3.5 Conclusion

This chapter examines the question of income inequality and poverty in Malaysia. While many authors have investigated this question, most however normally employed the income data set and the published figures from the government survey data. This study uses a different data set from the previous studies, which is the MFLS data set. The advantage of using a different data set is that it allows a comparison of results to be made with the findings from the previous studies.

Furthermore, the availability and accessibility of the MFLS data set also allow examination to be made on the question of polarisation, which a new aspect of investigation on income inequality. This question never seems never to have been addressed before in previous studies. Besides, in this study, a better index of poverty has been calculated than that normally calculated in the previous studies as well as government documents. Moreover, here the poverty index (FGT poverty index) has also been decomposed to its various component contributions, which also has never been done before. Thus, the information from a different data set could not only allow comparison to be made, but also to complement and substantiate the findings of the previous studies.

Table 3.4.7: MFLS Data: Decomposition of Poverty [FGT (α=2)] by Area, 1976/77 and 1988/89.

	n_j	m_j	μm_j	n_j/n	$FGT_j(\alpha=2)$	$[(n_j/n)*FGT_j(\alpha=2)]$	$[(n_j/n)*FGTj(\alpha=2)]/FGT(\alpha=2)$	% contribution to poverty
1976/77								
Rural	722	403	284	0.5799	0.1821	0.1056	0.7465	74.65
Urban	523	158	314	0.4201	0.0853	0.0359	0.2535	25.35
Total	1245	561	292	1.0000	0.1415	0.1415	1.0000	100.00
1988/89								
Rural	965	271	545	0.6403	0.0534	0.0342	0.8582	85.82
Urban	542	66	602	0.3597	0.0157	0.0057	0.1418	14.18
Total	1507	337	556	1.0000	0.0399	0.0399	1.0000	100.00

Table 3.4.8: MFLS Data: Decomposition of Poverty [FGT (α=2)] by Ethnic Groups, 1976/77 and 1988/89.

	n_j	m_j	μm_j	n_j/n	$FGT_j(\alpha=2)$	$[(n_j/n)*FGT_j(\alpha=2)]$	$[(n_j/n)*FGTj(\alpha=2)]/FGT(\alpha=2)$	% contribution to poverty
1976/77								
Malay	591	343	267	0.4789	0.2046	0.0980	0.6965	69.65
Chinese	496	150	308	0.4019	0.0904	0.0363	0.2583	25.83
Indian	147	61	394	0.1191	0.0534	0.0064	0.0452	4.52
Total	1234	554	293	1.0000	0.1407	0.1407	1.0000	100.00
1988/89								
Malay	911	271	554	0.6098	0.0538	0.0328	0.8218	82.18
Chinese	399	44	592	0.2671	0.0160	0.0043	0.1067	10.67
Indian	184	19	510	0.1232	0.0232	0.0029	0.0714	7.14
Total	1494	334	556	1.0000	0.0400	0.0400	1.0000	100.00

Table 3.4.9: MFLS Data: Decomposition of **Rural Household** Poverty [FGT (α=2)] by Ethnic Groups, 1976/77 and 1988/89.

	n_j	m_j	μm_j	n_j/n	$FGT_j(\alpha=2)$	$[(n_j/n)*FGT_j(\alpha=2)]$	$[(n_j/n)*FGTj(\alpha=2)]/FGT(\alpha=2)$	% contribution to poverty
1976/77								
Malay	435	284	257	0.6110	0.2438	0.1489	0.8210	82.10
Chinese	201	77	339	0.2823	0.0882	0.0249	0.1372	13.72
Indian	76	36	381	0.1067	0.0710	0.0076	0.0418	4.18
Total	712	397	284	1.0000	0.1814	0.1814	1.0000	100.00
1988/89								
Malay	688	227	542	0.7197	0.0637	0.0459	0.8571	85.71
Chinese	182	30	585	0.1904	0.0251	0.0048	0.0893	8.93
Indian	86	11	484	0.0900	0.0319	0.0029	0.0536	5.36
Total	956	268	545	1.0000	0.0535	0.0535	1.0000	100.00

Table 3.4.10: MFLS Data: Decomposition of **Urban Household** Poverty [FGT (α=2)] by Ethnic Groups, 1976/77 and 1988/89.

	n_j	m_j	μm_j	n_j/n	$FGT_j(\alpha=2)$	$[(n_j/n)*FGT_j(\alpha=2)]$	$[(n_j/n)*FGTj(\alpha=2)]/FGT(\alpha=2)$	% contribution to poverty
1976/77								
Malay	156	59	318	0.2989	0.0952	0.0285	0.3344	33.44
Chinese	295	73	276	0.5651	0.0919	0.0519	0.6104	61.04
Indian	71	25	414	0.1360	0.0345	0.0047	0.0552	5.52
Total	522	157	314	1.0000	0.0851	0.0851	1.0000	100.00
1988/89								
Malay	223	44	611	0.4145	0.0233	0.0097	0.6098	60.98
Chinese	217	14	605	0.4033	0.0083	0.0033	0.2115	21.15
Indian	98	8	547	0.1822	0.0155	0.0028	0.1787	17.87
Total	538	66	602	1.0000	0.0158	0.0158	1.0000	100.00

The study found that there is evidence that overall income inequality declined between the periods under study. In this regard, it appears that the results from the MFLS data analysis seems to be in agreement with the results reported in previous studies. However, while previous studies showed that rural income inequality declined quite significantly, the results from the MFLS data showed that there is lack of improvement in rural income inequality. The same could be said for income inequality amongst the Malay. Therefore, as far as income inequality amongst the rural and the Malay households are concerned, the results from the MFLS data analysis appeared to cast some doubt on the prevailing perception in the previous studies that income inequality amongst the rural and the Malay household was considerably reduced during the NEP period. It appears that analysis of a different income data set, i.e. the MFLS data, tells a different story on the rural and the Malay households income inequality.

The study also shows that, even though declining, one of the possible explanations for the persistence of the high level of income inequality in Malaysia is the growing importance of intra-groups inequality in explaining the total income inequality. The contributions of intra-ethnic as well as intra-area (urban and rural) inequalities to total inequality are significantly large. Indeed, the contribution of intra-group inequality to total inequality rose between 1976/77 and 1988/89. On the contrary, the importance of inter-groups inequality to explain the changes in total inequality declined. This finding seems to be in agreement with the findings of the previous studies such as Anand (1983), Ikemoto (1985) and Shireen (1998). Therefore, it could be argued that the decline in income inequality between 1976/77 and 1988/89 was mainly due to the reduction in inter-group inequalities, i.e. a decline in income inequality between the rural and urban households, as well as inequality between ethnic groups. However, since intra-group inequality remains high (i.e. inequality within the rural and urban households as well as within each ethnic group), the reduction in total income inequality was not as significant as it would have been if there was also a significant reduction in intra-group inequality. This explains the fact that even though total income inequality declined between 1976/77 and 1988/89, it nevertheless still remained quite high. This in turn also explains why there was almost no improvement in the position of Malaysia relative to other countries in terms of income inequality.

On the question of polarisation, there is no evidence that there is a "disappearing middle-class" within the total households in Malaysia between 1976/77 and 1988/89. Thus, the declining overall income inequality seems to be followed by the enlargement of the middle-income group. However, further examination showed that there was inconclusive evidence of polarisation for the rural and the Malay households, as well as for the rural Indian households. The only evidence of polarisation was found within the rural Chinese household. It seems therefore, while the rural Chinese experienced a declining income inequality between 1976/77 and 1988/89, nevertheless they became more polarised. With regards to poverty, this study confirms the results from previous studies as well as from poverty figures reported in the government documents that there was a substantial reduction in poverty. All the poverty indices employed in the study, which are better indices previously reported, showed that poverty has been reduced substantially. Thus, the results found in this study provide clear evidence and confirms that poverty has been reduced in Malaysia. It was also found that, while poverty amongst the Malay has been substantially reduced, nonetheless they still represent the major contributor to total poverty.

Chapter 4

Inequality Decomposition By Income Sources

4.1 Introduction

The purpose of this chapter is to examine the contribution of inequality in income sources to total inequality in Malaysia. Previous studies on income inequality in Malaysia, such as Anand (1983), Ikemoto (1985), and Shireen (1998) examined the personal income distribution in Malaysia, which included examination of the contribution of inequality within and between population sub-groups to the total inequality. Therefore, while these studies contributed to the understanding of income inequality in Malaysia, they did not however explain the whole story. The reason for this was that these studies treated income as if it was a single lump. In reality, however, income is usually derived from a range of sources such as income from labour, capital and transfers. The proportion of each source in total income is unlikely to be the same and also unlikely to be distributed evenly throughout the population. The questions then arise as to what extent the inequality of these sources contributes to total inequality and what impact they have on it. Thus, these questions merit investigation. Unfortunately, examination of this aspect of income inequality is still absent in Malaysia, which might be due to the unavailability and confidentiality of the relevant income data in Malaysia. Using the Malaysian Family Life Survey (MFLS) data, this study attempts to bridge the existing gap in the literature, and hopefully will improve and shed further light on the understanding of income inequality in Malaysia.

This chapter is organised as follows. Section 4.2 briefly describes the data and discusses the method of inequality decomposition. Section 4.3 examines the structure of household income. The results of the decomposition, i.e. the contribution of the various income components as well as their impact to total income inequality, is examined and discussed in Section 4.4, 4.5 and 4.6. Section 4.7 concludes the chapter.

4.2 Data and Method of Inequality Decomposition

This chapter employs household income data from the MFLS, which has already been described in Chapter 2. The MFLS gathered information generally on all income received by the household – cash and non-cash income, which included the value of self-activities such as domestic produces and services for own consumption. Income data was collected on agricultural production, ownership of animals, businesses owned, services performed, gifts from non-household members, inheritance or dowries received, income from insurance, pensions and retirement programs, and interest; income received from renting rooms, houses, or land; ownership of land; and possession of durable goods. The household income of the MFLS refered to total annual income received by each household. For the purpose of this chapter, household income is broadly grouped into the following sources: (i) paid employment – refers to income before tax received from work, which is mainly wages and salaries, including bonuses as well as payments in kind; (ii) self-employment – refers to gross income from self-employment which includes income from agriculture and business activities; (iii) rent (from property such as housing and land), interest and dividends; (iv) pensions and employment provident fund (EPF); (v) remittances; (vi) welfare payment and zakat[1]; (vii) inheritance, gifts and dowries; (viii) home produce and consumption, and (ix) others.

Two decomposable measures of inequality are calculated - the Shorrock's index and the Gini coefficient (Pyatt, Chen and Fei 1980; Shorrocks 1982; Adams 1994; Yao 1997). Reddy and Chakravarty (1998) for instance, have employed both these indices in their study on the role of income from forestry in income inequality and poverty in India. The decomposition of the Gini coefficient and Shorrock's inequality index is also explained in Chapter 2.

[1] According to the *Shariah* (Islamic Law), zakat is a compulsory payment that is due to the poor from the wealth of the well-to-do Muslims.

4.3 The Structure of Household Income

Table 4.3.1a and Table 4.3.1b present the structure of household income for 1976/77 and 1988/89 respectively. It is clear that paid employment constituted the major portion of total household income, followed by self-employment. About three fifths of total household income was derived from paid employment. Self-employment made up about one third to one fourth of the total household income. Therefore, taking both the paid income and self-employment together, labour income formed the main source of household income. The share of income from capital (rents, interests and dividends, pensions and EPF) and transfers (welfare payments, remittances, inheritance, dowries, and gifts) appeared to be relatively small compared to income from labour. These facts appeared to be entirely true for rural and urban households, as well as for each ethnic group. Thus, it is clear that across all households – either by area or by ethnic - paid employment formed the major source of household income, followed by self-employment.

Between 1976/77 and 1988/89, it was found that the share of self-employment in the total household income declined. The share of paid employment remained almost about the same. On the other hand, the share of income from capital and transfers - particularly rents, interests, dividends, pensions, EPF and remittances - increased. Nonetheless, it still remained relatively small. There also existed minor differences between ethnic groups. In 1976/77, it appeared that the share of paid employment in the Malay and Indian household income was relatively larger than that in the Chinese. On the other hand, the share of self-employment in the Chinese household income was relatively larger than that in the Malay and the Indian.

Table 4.3.1a: MFLS Data: The Structure of Household Income (%), 1976/77.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
All Households	58.71	35.69	1.25	0.13	0.01	0.87	0.15	2.83	0.35	100.00
Rural Households	58.46	34.68	0.89	0.13	0.01	0.92	0.27	4.32	0.33	100.00
Urban Households	58.87	36.32	1.48	0.13	0.02	0.85	0.08	1.89	0.36	100.00
Malay Households	66.01	29.85	0.60	0.13	0.01	0.71	0.28	2.41	0.01	100.00
Chinese Households	51.03	41.91	1.61	0.13	0.02	0.90	0.13	3.67	0.60	100.00
Indian Households	75.52	21.67	1.17	0.13	0.01	1.11	0.00	0.35	0.04	100.00
Rural Malay	54.70	40.15	0.93	0.21	0.01	0.78	0.40	2.82	0.00	100.00
Rural Chinese	52.88	36.84	1.08	0.00	0.00	1.23	0.23	6.99	0.75	100.00
Rural Indian	95.29	3.36	0.02	0.32	0.00	0.39	0.00	0.56	0.07	100.00
Urban Malay	82.31	15.01	0.11	0.00	0.00	0.62	0.12	1.82	0.01	100.00
Urban Chinese	50.26	43.99	1.83	0.19	0.03	0.77	0.08	2.31	0.54	100.00
Urban Indian	66.05	30.44	1.73	0.04	0.01	1.45	0.00	0.25	0.02	100.00

Table 4.3.1b: MFLS Data: The Structure of Household Income (%), 1988/89.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
All Households	59.84	24.40	3.23	3.33	0.02	5.02	0.66	2.42	1.08	100.00
Rural Households	57.21	27.86	2.97	1.65	0.04	4.86	0.86	3.51	1.04	100.00
Urban Households	62.80	20.50	3.53	5.23	0.00	5.20	0.42	1.20	1.12	100.00
Malay Households	60.74	24.29	2.75	2.02	0.04	4.27	0.72	3.10	2.06	100.00
Chinese Households	57.67	28.58	3.84	1.44	0.00	6.13	0.39	1.93	0.03	100.00
Indian Households	68.01	15.08	2.01	7.36	0.00	5.12	1.16	1.22	0.06	100.00
Rural Malay	57.37	27.52	2.82	1.49	0.06	4.37	0.84	3.98	1.55	100.00
Rural Chinese	54.29	31.60	3.70	0.81	0.00	6.01	0.79	2.79	0.00	100.00
Rural Indian	65.62	18.19	2.30	5.37	0.00	5.67	1.01	1.82	0.01	100.00
Urban Malay	68.12	17.21	2.60	3.20	0.01	4.07	0.45	1.17	3.18	100.00
Urban Chinese	59.69	26.77	3.92	1.82	0.00	6.19	0.14	1.41	0.04	100.00
Urban Indian	69.41	13.25	1.83	8.52	0.00	4.80	1.24	0.86	0.08	100.00

A simple correlation was performed between total household income and its various sources. The correlation coefficient for both 1976/77 and 1988/89 is shown in Table 4.3.2a and Table 4.3.2b respectively. There was a high correlation between total income and income from paid employment as well as self-employment for both 1976/77 and 1988/89. In 1976/77 the correlation coefficient between total income and self-employment appeared to be relatively higher than that between total income and paid employment. In 1988/89, however, the reverse was true. The correlation coefficient was relatively higher between total income and paid-employment than between total income and self-employment. The correlation coefficient between total income and income from capital (rent, interest, dividends, pensions and EPF) was higher in 1988/89 than in 1976/77. Thus, generally speaking, paid and self-employment were positively and relatively highly correlated with total income compared to the rest of income sources. Capital income (particularly rent, interest and dividends) was also found to be positively and quite highly correlated with total income in 1988/89.

4.4 The Contribution and Effect of Income Sources on Overall Inequality

Table 4.4.1a and Table 4.4.1b respectively present the decomposition of Shorrock's and the Gini inequality indices to their various income source components. The magnitude of contribution of income source to aggregate inequality from Shorrock's decomposition was not exactly similar to the Gini decomposition. However, both decomposition methods showed that a significantly large portion of total income inequality was contributed by labour income – paid and self-employment. This finding is quite similar to Fields (1979) in his study on urban income inequality in Colombia. The rest of the sources of income made only a relatively small contribution. However, there was a growing role of rent, interest and dividends as well as pensions and EPF as determinants of aggregate inequality. This could be seen from the increased contribution of these sources to aggregate inequality between 1976/77 and 1988/89.

Table 4.3.2a: MFLS Data: Correlation Coefficient between Income Sources and Total Household Income, 1976/77.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
All Households	0.524**	0.798**	0.168**	0.028	-0.015	0.033	0.036	0.177**	0.078**	1.000
Rural Households	0.723**	0.542**	0.131**	-0.001	0.010	0.021	0.113**	0.396**	0.107**	1.000
Urban Households	0.445**	0.834**	0.161**	0.025	-0.026	0.017	0.005	0.120**	0.059	1.000
Malay Households	0.813**	0.413**	0.100**	0.019	0.015	0.084*	0.159**	0.231**	0.088*	1.000
Chinese Households	0.460**	0.800**	0.138**	0.021	-0.027	-0.003	-0.014	0.161**	0.061	1.000
Indian Households	0.502**	0.896**	0.292**	0.028	-0.027	0.013	0.000	0.037	-0.001	1.000
Rural Malay	0.711**	0.549**	0.182**	0.055	0.039	0.036	0.210**	0.288**	-0.009	1.000
Rural Chinese	0.615**	0.600**	0.117	0.000	-0.015	-0.059	0.040	0.439**	0.099	1.000
Rural Indian	0.992**	0.156	-0.079	-0.050	0.000	-0.041	0.000	-0.027	0.024	1.000
Urban Malay	0.855**	0.360**	-0.029	0.000	0.000	0.129	0.196*	0.171*	0.097	1.000
Urban Chinese	0.425**	0.817**	0.132*	0.011	-0.035	0.012	-0.027	0.122*	0.054	1.000
Urban Indian	0.398**	0.937**	0.283*	0.251*	-0.048	-0.006	0.000	0.069	-0.010	1.000

Note:
* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 4.3.2b: MFLS Data: Correlation Coefficient between Income Sources and Total Household Income, 1988/89.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
All Households	0.680**	0.553**	0.417**	0.297**	0.019	0.214**	0.040	0.157**	0.087**	1.000
Rural Households	0.677**	0.623**	0.486**	0.069*	0.038	0.174**	0.051	0.217**	0.070*	1.000
Urban Households	0.654**	0.475**	0.347**	0.418**	-0.062	0.238**	0.036	0.097*	0.097*	1.000
Malay Households	0.704**	0.604**	0.465**	0.098**	0.036	0.224**	0.054	0.152**	0.139**	1.000
Chinese Households	0.713**	0.534**	0.443**	0.041	-0.034	0.163**	0.021	0.255**	-0.030	1.000
Indian Households	0.729**	0.555**	0.218**	0.310**	0.000	0.045	0.089	0.093	0.044	1.000
Rural Malay	0.714**	0.595**	0.483**	0.063	0.048	0.221**	0.061	0.169**	0.087**	1.000
Rural Chinese	0.538**	0.711**	0.513**	0.008	-0.033	-0.041	0.027	0.492**	0.000	1.000
Rural Indian	0.515**	0.597**	0.395**	0.314**	0.000	0.036	0.007	0.371**	-0.014	1.000
Urban Malay	0.643**	0.663**	0.429**	0.137*	-0.090	0.244**	0.038	0.210**	0.230**	1.000
Urban Chinese	0.782**	0.415**	0.415**	0.035	-0.055	0.217**	0.084	0.096	-0.048	1.000
Urban Indian	0.763**	0.563**	0.139	0.285**	0.000	0.038	0.094	-0.053	0.030	1.000

Note:
* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 4.4.1a: MFLS Data: Shorrock's Decomposition of Inequality by Income Sources, 1976/77 and 1988/89.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
1976/77										
$(\mu_r/\mu)*100$	58.71	35.69	1.25	0.13	0.01	0.87	0.15	2.83	0.35	100.00
ρ_r	0.5242	0.7977	0.1680	0.0279	-0.0151	0.0331	0.0361	0.1773	0.0778	1.0000
C-Squared	2.5376	13.4197	81.2798	174.3125	686.2289	31.7857	231.6106	14.4663	79.7783	2.4852
C_r^A	0.8748	1.7091	0.0128	0.0003	0.0000	0.0024	0.0005	0.0116	0.0010	2.4852
C_r^B	0.6709	1.5790	0.0471	0.0012	-0.0002	0.0027	0.0021	0.0486	0.0067	2.4852
S_r	0.7729	1.6440	0.0299	0.0008	-0.0001	0.0026	0.0013	0.0301	0.0038	2.4852
$S_r/I*100$	31.10	66.15	1.20	0.03	0.00	0.10	0.05	1.21	0.15	100.00
α_r*100	35.20	68.77	0.51	0.01	0.00	0.10	0.02	0.47	0.04	100.00
β_r*100	73.00	36.47	98.11	99.95	100.01	99.89	99.92	98.05	99.73	0.00
1988/89										
$(\mu_r/\mu)*100$	59.84	24.40	3.23	3.33	0.02	5.02	0.66	2.42	1.08	100.00
ρ_r	0.6799	0.5534	0.4169	0.2969	0.0187	0.2145	0.0399	0.1568	0.0867	1.0000
C-Squared	1.8898	6.4090	36.3006	99.6411	393.4313	15.6358	36.3558	19.5291	111.2174	1.3271
C_r^A	0.6766	0.3816	0.0380	0.1107	0.0000	0.0394	0.0016	0.0115	0.0129	1.3271
C_r^B	0.6119	0.4061	0.1492	0.1169	0.0002	0.0587	0.0021	0.0272	0.0098	1.3271
S_r	0.6443	0.3938	0.0936	0.1138	0.0001	0.0490	0.0018	0.0193	0.0114	1.3271
$S_r/I*100$	48.55	29.67	7.05	8.58	0.01	3.69	0.14	1.46	0.86	100.00
α_r*100	50.98	28.75	2.86	8.34	0.00	2.97	0.12	0.86	0.98	100.00
β_r*100	53.89	69.40	88.76	91.19	99.99	95.58	99.84	97.95	99.26	0.00

Note:
$(\mu_r/\mu)*100$ = the share of income from source r in total household income; ρ_r = the correlation coefficient between income from source r and total household income; C-Squared = the squared coefficient of variation; C_r^A = inequality index if the only source of income differences arose from source r; C_r^B = the decline in inequality index when income from source r is equally distributed, while all other income source remain unaffected; S_r = the absolute contribution of source r to total inequality; $S_r/I*100$ =the percentage contribution of source r to total inequality; α_r*100 = the percentage of total inequality that would remain if the only source of income differences is from source r, while the income for the rest of the sources become equally distributed; β_r*100 = the percentage of total inequality that would remain if the income from source r were equally distributed while the distribution of the rest of the sources remains unchanged.

Table 4.4.1b: MFLS Data: Gini Decomposition of Inequality by Income Sources, 1976/77 and 1988/89.

	mf	wf	Gf	Cf	wfCf	gf=Cf/G	wfgf	% contribution
1976/77								
Paid Employment	3659	0.5871	0.6293	0.4821	0.2831	0.8898	0.5224	52.24
Self-Employment	2224	0.3569	0.8399	0.6422	0.2292	1.1853	0.4230	42.30
Rent, Interest & Dividends	78	0.0125	0.9745	0.7333	0.0092	1.3534	0.0170	1.70
Pensions & EPF	8	0.0013	0.9945	0.4032	0.0005	0.7442	0.0010	0.10
Welfare Payments & Zakat	1	0.0001	0.9983	-0.4011	-0.0001	-0.7403	-0.0001	-0.01
Remittances	54	0.0087	0.9263	0.2010	0.0018	0.3710	0.0032	0.32
Inheritance, Dowries & Gifts	10	0.0015	0.9947	0.5719	0.0009	1.0554	0.0016	0.16
Home Produce & Consumption	176	0.0283	0.9212	0.5423	0.0153	1.0009	0.0283	2.83
Others	22	0.0035	0.9804	0.5591	0.0020	1.0318	0.0036	0.36
TOTAL	6232	1.0000	0.5418	0.5418	0.5418	1.0000	1.0000	100.00
1988/89								
Paid Employment	7881	0.5984	0.5850	0.4620	0.2765	0.9902	0.5925	59.25
Self-Employment	3214	0.2440	0.7969	0.4660	0.1137	0.9987	0.2437	24.37
Rent, Interest & Dividends	426	0.0323	0.9589	0.7635	0.0247	1.6361	0.0529	5.29
Pensions & EPF	439	0.0333	0.9685	0.5888	0.0196	1.2618	0.0421	4.21
Welfare Payments & Zakat	3	0.0002	0.9965	0.0781	0.0000	0.1673	0.0000	0.00
Remittances	661	0.0502	0.8830	0.3327	0.0167	0.7131	0.0358	3.58
Inheritance, Dowries & Gifts	86	0.0066	0.9724	0.3678	0.0024	0.7881	0.0052	0.52
Home Produce & Consumption	319	0.0242	0.9015	0.3359	0.0081	0.7198	0.0174	1.74
Others	142	0.0108	0.9856	0.4512	0.0049	0.9669	0.0104	1.04
TOTAL	13172	1.0000	0.4666	0.4666	0.4666	1.0000	1.0000	100.00

Note:
mf = average income for source f; wf = income share of source f in total income; Gf = Gini coefficient for source f; Cf = factor concentration ratio; wfCf = factor component in G; gf = relative factor concentration ratio; wfgf = factor inequality weight.

The question that needed further investigation was why was it that labour income – paid and self-employment - contributed a large portion of the aggregate income inequality, while the rest of the sources were smaller? What was the explanation for this observation? One possible explanation was that if paid and self-employment accounted for a significantly large portion of aggregate income inequality, then it was likely that paid and self-employment were highly unequally distributed. By the same logic, if the rest of the sources accounted for only a relatively small portion of aggregate inequality, then it was likely that these sources were relatively equally distributed. However, this was not the case. Table 4.4.1a and Table 4.4.1b show that the inequality indices (both Shorrock's and Gini) for both paid employment and self-employment appeared to be relatively the most equally distributed sources of income compared to the rest of the sources. Income from capital (rents, interests, dividends, pensions and EPF) and transfers (welfare payments, remittances, inheritance, dowries and gifts) on the other hand, appeared to be relatively highly unequally distributed.

The contribution of income source to total inequality depends on the degree of inequality within each source and the importance of each source. The bulk of household income comes from paid and self-employment. Their weight ensures that they make a major contribution to total inequality, even though they are more evenly distributed than other sources of household income. By extension, although capital and transfer income are unequally distributed, their lack of weight ensures that their contribution to household income inequality is limited.

The above observation was still unsatisfactory. It only showed how much each source contributed to total income inequality. It did not tell the attribute of the sources, i.e. the likely impact of each source on inequality. One of the ways to examine this attribute was by comparing the percentage share of the income source to total household income with the percentage contribution of the source to aggregate inequality (Adger 1999). If the percentage share of the source in total household income was larger than its percentage contribution to aggregate inequality, then the source had an equalising (positive) effect on aggregate inequality. On the other hand, if the percentage share of the source in total household income was smaller than its percentage contribution to aggregate inequality, then the source had an unequalising

(negative) effect on aggregate inequality. Adger (1999) employed this method to identify the effect of income source on income inequality in his study of income inequality in Vietnam. However, Yao (1997, p. 28) pointed out that there was a more direct way of identifying which income source served to increase or decrease inequality. This attribute of income source could be identified by looking at the relative concentration coefficient (g_f) derived from the Gini inequality decomposition. According to Yao (1997, p. 28), a relative concentration coefficient (g_f) of more than the value of unity (one) implied that an income source had an unequalising (negative) effect on total inequality, while a value less than unity (one) implied that the income source had an equalising (positive) effect on inequality.[2]

From Table 4.4.1b it could be observed that in 1976/77 the percentage contribution of paid employment to aggregate inequality was smaller than its percentage share in total household income. Meanwhile, the percentage contribution of self-employment to aggregate inequality was higher than its percentage share in total household income. Furthermore, the relative concentration ratio (gf) for paid employment was less than one, while the relative concentration ratio (gf) for self-employment was more than one. Thus, it is clear that in 1976/77 paid employment had an equalising (positive) effect on aggregate inequality. On the other hand, self-employment had an unequalising (negative) effect on aggregate inequality.[3] In 1988/89 however, both sources had an equalising (positive) effect on aggregate inequality. Another observation that is worth mentioning here is that rent, interest and dividends consistently had an unequalising effect on aggregate inequality, both in 1976/77 and 1988/89. Besides, pensions and EPF had a positive impact on inequality in 1976/77. In 1988/89 however, they became unequalising sources.

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[2] If the relative concentration coefficient (g_f) of an income source has a value of more than one, it implies that, *ceteris paribus*, additional increments of that income source will lead to an increase in total income inequality. On the other hand, if the relative concentration coefficient (g_f) of an income source has a value of less than one, it implies that, *ceteris paribus*, additional increments of that income source will lead to a decrease in total income inequality.

[3] As being mentioned earlier, the contribution of each income source to aggregate inequality is not similar between the two methods of decomposition. Thus comparing the percentage share of income source in total income with the percentage contribution of income source in aggregate inequality derived from the two methods might produce inconsistent results. Here the effect of income source on inequality is identified by looking at the relative concentration ratio (gf) as well as comparing the percentage share of income source in total income with the percentage contribution of income source in aggregate inequality derived from the Gini decomposition only. The relative concentration ratio (gf) derived from Gini decomposition appears to give a consistent results.

Comparing the percentage share of income source in total income with the percentage contribution of that income source to aggregate inequality, or looking at the relative concentration ratio of that income source, revealed only the attribute of the income source. It did not give the real magnitude of the impact of the income source on aggregate inequality. The magnitude of the impact of each source of income on aggregate inequality can be gauged from the respective figures of α and β derived in Shorrock's decomposition (see Table 4.4.1a). The figures of α and β for paid employment and self-employment confirmed the importance of these sources in determining aggregate inequality. The α for paid employment indicated that if all other sources of income had been equalised except income from paid employment, total household income inequality would have remained at about 35.0 percent of its actual figure in 1976/77. Thus, if paid employment had been the only source of differences in income, total household income inequality would have been reduced by 65.0 percent. Looking at it differently, if income from paid employment had been equalised while the rest of the sources of income remained the same, the β for paid employment would have indicated that total household income inequality would be at 73.0 percent of its current level. In other words, if inequality in paid employment had been eliminated, the total household income inequality would have declined about 27.0 percent. On the other hand, if self-employment had been the only source of income differences (α), total household income inequality would have remained at about 69.0 percent of its current level. If the differences in paid employment had been eliminated and the rest of the sources remained unchanged (β), total household income inequality in 1976/77 would have been reduced to about 36.0 percent of its current level of inequality – a reduction of 64.0 percent of the aggregate income inequality. For sources other than paid and self-employment, it appeared that if inequality in these sources had been eliminated, there would have been no significant reduction in total income inequality. Thus, it appeared that the most effective way to reduce total income inequality in 1976/77 was by reducing inequality in self-employment, followed by reducing inequality in paid employment.

In 1988/89, the β for paid employment showed that if paid employment had been equalised while the rest of the sources remained the same, total income inequality

would have been at about 54.0 percent of its actual figure – a reduction of about 46.0 percent. On the other hand if inequality in self-employment had been eliminated, then total inequality would have been reduced by only about 29.0 percent. Therefore, while eliminating inequality in self-employment had been the best strategy to reduce total inequality in 1976/77, it appeared that this changed for 1988/89. In 1988/89, the most effective way to reduce total income inequality was by reducing inequality in paid employment. Furthermore, the β for rent, interest and dividends as well as for pensions and EPF showed that, if these sources had been equalised, aggregate inequality would have remained at 89.0 and 91.0 percent respectively. In other words, aggregate inequality would have been respectively reduced by 11.0 and 9.0 percents. While this was only a small reduction in aggregate inequality, nonetheless it was significant compared to the figures in 1976/77. For example, the β for rent, interest and dividends in 1976/77 showed that if inequality in this source had been eliminated, aggregate inequality in 1976/77 would only have been reduced by about 2.0 percent. This is relatively smaller than the 1988/89 figures where if inequality in rent, interest and dividends had been eliminated, aggregate inequality would have been reduced by about 11.0 percent. This result therefore confirms that there was a growing role of inequality of rent, interest and dividends (as well as pensions and EPF) as determinants of aggregate income inequality between 1976/77 and 1988/89.

4.5 The Contribution and Effect of Income Sources on Rural and Urban Inequality

The decomposition of Shorrock's and Gini inequality indices was also carried out for the rural and urban households. The results of Shorrock's decomposition for 1976/77 are shown in Table 4.5.1a, while those for 1988/89 are shown in Table 4.5.1b. The results for the Gini decomposition for 1976/77 and 1988/89 are shown in Table 4.5.2a and Table 4.5.2b respectively. With regards to rural household inequality, the decomposition analysis showed that in 1976/77 paid employment contributed more than 50.0 percent to rural household inequality. This was followed by self-employment which contributed about one third of the rural household inequality.

Table 4.5.1a: MFLS Data: Shorrock's Decomposition of Inequality by Income Sources by Area, 1976/77.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
Rural Household										
$(\mu_r/\mu)*100$	58.46	34.68	0.89	0.13	0.01	0.92	0.27	4.32	0.33	100.00
ρ_r	0.7226	0.5422	0.1306	-0.0009	0.0096	0.0213	0.1134	0.3958	0.1066	1.0000
C-Squared	2.5000	3.8112	107.0175	119.0331	324.9631	21.0901	247.1628	14.2885	143.9933	1.2578
C_r^A	0.8543	0.4584	0.0084	0.0002	0.0000	0.0018	0.0018	0.0266	0.0016	1.2578
C_r^B	0.6437	0.3651	0.0185	-0.0002	0.0000	0.0002	0.0091	0.1182	0.0079	1.2578
S_r	0.7490	0.4117	0.0134	0.0000	0.0000	0.0010	0.0055	0.0724	0.0047	1.2578
$S_r/I*100$	59.55	32.73	1.07	0.00	0.00	0.08	0.43	5.76	0.38	100.00
α_r*100	67.92	36.44	0.67	0.02	0.00	0.14	0.15	2.12	0.12	100.00
β_r*100	48.82	70.98	98.53	100.02	100.00	99.98	99.28	90.60	99.37	0.00
Urban Household										
$(\mu_r/\mu)*100$	58.87	36.32	1.48	0.13	0.02	0.85	0.08	1.89	0.36	100.00
ρ_r	0.4450	0.8337	0.1608	0.0252	-0.0264	0.0174	0.0051	0.1200	0.0595	1.0000
C-Squared	1.9311	13.2386	53.3880	160.2749	419.5960	30.5120	130.4371	14.7471	48.5633	2.2333
C_r^A	0.6693	1.7461	0.0117	0.0003	0.0000	0.0022	0.0001	0.0053	0.0006	2.2333
C_r^B	0.4187	1.5465	0.0403	0.0010	-0.0003	0.0002	0.0001	0.0208	0.0038	2.2333
S_r	0.5440	1.6463	0.0260	0.0006	-0.0001	0.0012	0.0001	0.0130	0.0022	2.2333
$S_r/I*100$	24.36	73.71	1.17	0.03	-0.01	0.05	0.00	0.58	0.10	100.00
α_r*100	29.97	78.18	0.53	0.01	0.00	0.10	0.00	0.24	0.03	100.00
β_r*100	81.25	30.76	98.20	99.96	100.01	99.99	100.00	99.07	99.83	0.00

Note:
$(\mu_r/\mu)*100$ = the share of income from source r in total household income; ρ_r = the correlation coefficient between income from source r and total household income; C-Squared = the squared coefficient of variation; C_r^A = inequality index if the only source of income differences arose from source r; C_r^B = the decline in inequality index when income from source r is equally distributed, while all other income source remain unaffected; S_r = the absolute contribution of source r to total inequality; $S_r/I*100$ =the percentage contribution of source r to total inequality; α_r*100 = the percentage of total inequality that would remain if the only source of income differences is from source r, while the income for the rest of the sources become equally distributed; β_r*100 = the percentage of total inequality that would remain if the income from source r were equally distributed while the distribution of the rest of the sources remains unchanged.

Table 4.5.1b: MFLS Data: Shorrock's Decomposition of Inequality by Income Sources by Area, 1988/89.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
Rural Household										
$(\mu_r/\mu)*100$	57.21	27.86	2.97	1.65	0.04	4.86	0.86	3.51	1.04	100.00
ρ_r	0.6766	0.6228	0.4861	0.0690	0.0380	0.1742	0.0509	0.2174	0.0703	1.0000
C-Squared	2.5288	6.9261	45.0633	41.1606	280.3902	14.7368	29.5287	18.9367	121.9356	1.5699
C_r^A	0.8276	0.5375	0.0399	0.0112	0.0000	0.0348	0.0022	0.0233	0.0132	1.5699
C_r^B	0.7149	0.6068	0.2034	0.0071	0.0006	0.0466	0.0038	0.0599	0.0070	1.5699
S_r	0.7713	0.5721	0.1216	0.0092	0.0003	0.0407	0.0030	0.0416	0.0101	1.5699
$S_r/I*100$	49.13	36.44	7.75	0.58	0.02	2.59	0.19	2.65	0.65	100.00
α_r*100	52.72	34.24	2.54	0.72	0.00	2.22	0.14	1.48	0.84	100.00
β_r*100	54.46	61.35	87.04	99.55	99.96	97.03	99.76	96.19	99.55	0.00
Urban Household										
$(\mu_r/\mu)*100$	62.80	20.50	3.53	5.23	0.00	5.20	0.42	1.20	1.12	100.00
ρ_r	0.6544	0.4751	0.3465	0.4185	-0.0624	0.2376	0.0362	0.0970	0.0968	1.0000
C-Squared	1.1820	5.6445	26.7097	62.6641	143.3041	14.4547	54.5752	13.5282	92.6263	0.9554
C_r^A	0.4662	0.2371	0.0332	0.1716	0.0000	0.0391	0.0010	0.0019	0.0116	0.9554
C_r^B	0.4072	0.2152	0.0903	0.1673	0.0000	0.0527	0.0012	0.0064	0.0088	0.9554
S_r	0.4367	0.2261	0.0618	0.1694	0.0000	0.0459	0.0011	0.0042	0.0102	0.9554
$S_r/I*100$	45.71	23.67	6.46	17.73	0.00	4.80	0.12	0.44	1.07	100.00
α_r*100	48.80	24.82	3.48	17.96	0.00	4.09	0.10	0.20	1.22	100.00
β_r*100	57.37	77.48	90.55	82.49	100.00	94.48	99.87	99.33	99.08	0.00

Note:
$(\mu_r/\mu)*100$ = the share of income from source r in total household income; ρ_r = the correlation coefficient between income from source r and total household income; C-Squared = the squared coefficient of variation; C_r^A = inequality index if the only source of income differences arose from source r; C_r^B = the decline in inequality index when income from source r is equally distributed, while all other income source remain unaffected; S_r = the absolute contribution of source r to total inequality; $S_r/I*100$ =the percentage contribution of source r to total inequality; α_r*100 = the percentage of total inequality that would remain if the only source of income differences is from source r, while the income for the rest of the sources become equally distributed; β_r*100 = the percentage of total inequality that would remain if the income from source r were equally distributed while the distribution of the rest of the sources remains unchanged.

Table 4.5.2a: MFLS Data: Gini Decomposition of Inequality by Income Sources and Area, 1976/77.

	mf	wf	Gf	Cf	wfCf	gf=Cf/G	wfgf	% contribution
Rural Household								
Paid Employment	2419	0.5846	0.6301	0.4611	0.2695	0.9558	0.5587	55.87
Self-Employment	1435	0.3468	0.7554	0.5022	0.1742	1.0409	0.3610	36.10
Rent, Interest & Dividends	37	0.0089	0.9808	0.6304	0.0056	1.3067	0.0116	1.16
Pensions & EPF	5	0.0013	0.9924	0.1604	0.0002	0.3325	0.0004	0.04
Welfare Payments & Zakat	0	0.0001	0.9972	0.4759	0.0000	0.9864	0.0001	0.01
Remittances	38	0.0092	0.9330	0.2195	0.0020	0.4550	0.0042	0.42
Inheritance, Dowries & Gifts	11	0.0027	0.9951	0.8201	0.0022	1.6998	0.0046	0.46
Home Produce & Consumption	179	0.0432	0.9180	0.6119	0.0264	1.2683	0.0547	5.47
Others	14	0.0033	0.9887	0.6777	0.0022	1.4048	0.0046	0.46
TOTAL	4139	1.0000	0.4824	0.4824	0.4824	1.0000	1.0000	100.00
Urban Household								
Paid Employment	5371	0.5887	0.5808	0.4230	0.2491	0.7918	0.4662	46.62
Self-Employment	3313	0.3632	0.8763	0.7222	0.2623	1.3519	0.4910	49.10
Rent, Interest & Dividends	135	0.0148	0.9623	0.7171	0.0106	1.3423	0.0199	1.99
Pensions & EPF	12	0.0013	0.9942	0.4920	0.0006	0.9209	0.0012	0.12
Welfare Payments & Zakat	2	0.0002	0.9977	-0.7564	-0.0001	-1.4157	-0.0003	-0.03
Remittances	77	0.0085	0.9140	0.1139	0.0010	0.2133	0.0018	0.18
Inheritance, Dowries & Gifts	7	0.0008	0.9930	0.1529	0.0001	0.2862	0.0002	0.02
Home Produce & Consumption	173	0.0189	0.9252	0.4894	0.0093	0.9160	0.0174	1.74
Others	33	0.0036	0.9688	0.3928	0.0014	0.7353	0.0027	0.27
TOTAL	9123	1.0000	0.5343	0.5343	0.5343	1.0000	1.0000	100.00

Note:
mf = average income for source f; wf = income share of source f in total income; Gf = Gini coefficient for source f; Cf = factor concentration ratio; wfCf = factor component in G; gf = relative factor concentration ratio; wfgf = factor inequality weight.

Table 4.5.2b: MFLS Data: Gini Decomposition of Inequality by Income Sources and Area, 1988/89.

	mf	wf	Gf	Cf	wfCf	gf=Cf/G	wfgf	% contribution
Rural Household								
Paid Employment	6241	0.5721	0.6232	0.4849	0.2774	1.0301	0.5893	58.93
Self-Employment	3039	0.2786	0.7712	0.4497	0.1253	0.9553	0.2661	26.61
Rent, Interest & Dividends	325	0.0297	0.9638	0.7853	0.0234	1.6682	0.0496	4.96
Pensions & EPF	180	0.0165	0.9767	0.4833	0.0080	1.0267	0.0170	1.70
Welfare Payments & Zakat	4	0.0004	0.9957	0.1801	0.0001	0.3826	0.0001	0.01
Remittances	530	0.0486	0.8816	0.2966	0.0144	0.6300	0.0306	3.06
Inheritance, Dowries & Gifts	94	0.0086	0.9686	0.4621	0.0040	0.9816	0.0084	0.84
Home Produce & Consumption	383	0.0351	0.8914	0.4063	0.0143	0.8632	0.0303	3.03
Others	114	0.0104	0.9781	0.3847	0.0040	0.8172	0.0085	0.85
TOTAL	10910	1.0000	0.4708	0.4708	0.4708	1.0000	1.0000	100.00
Urban Household								
Paid Employment	10801	0.6280	0.4970	0.3783	0.2376	0.8943	0.5616	56.16
Self-Employment	3525	0.2050	0.8251	0.5086	0.1042	1.2022	0.2464	24.64
Rent, Interest & Dividends	607	0.0353	0.9485	0.7188	0.0254	1.6993	0.0600	6.00
Pensions & EPF	900	0.0523	0.9495	0.5541	0.0290	1.3099	0.0685	6.85
Welfare Payments & Zakat	0	0.0000	0.9930	-0.7149	0.0000	-1.6901	0.0000	0.00
Remittances	894	0.0520	0.8774	0.3176	0.0165	0.7509	0.0390	3.90
Inheritance, Dowries & Gifts	73	0.0042	0.9789	0.3035	0.0013	0.7174	0.0030	0.30
Home Produce & Consumption	206	0.0120	0.9173	0.2899	0.0035	0.6854	0.0082	0.82
Others	193	0.0112	0.9895	0.4998	0.0056	1.1815	0.0132	1.32
TOTAL	17199	1.0000	0.4230	0.4230	0.4230	1.0000	1.0000	100.00

Note:
mf = average income for source f; wf = income share of source f in total income; Gf = Gini coefficient for source f; Cf = factor concentration ratio; wfCf = factor component in G; gf = relative factor concentration ratio; wfgf = factor inequality weight.

Besides, there was also a notable contribution of home produce and consumption (i.e. more than 5.0 percent) in rural household inequality. The rest of the sources made only a minor contribution. In 1988/89, paid employment continued to make the largest contribution to rural household inequality, followed by self-employment. There also had been a notable increase in the contribution of rent, interest and dividends of about 5.0 –8.0 percent to rural inequality.

Looking at the relative concentration ratio (gf) and also comparing the percentage share of income source in rural household income with the percentage contribution of the source in rural household inequality, in 1976/77 (see Table 4.5.2b), paid employment was an equalising source, while self-employment, rent, interest and dividends, as well as home produce and consumption were unequalising sources. In 1988/89 however, it was also found that paid employment became an unequalising income source. On the other hand, self-employment, home produce and consumption had become equalising income sources. Rent, interest and dividends continued to be an unequalising income sources.

The value of β in Table 4.5.1a reveals that in 1976/77 reducing inequality in paid employment would have been the best strategy to improve rural household inequality, followed by reducing inequality in self-employment and home produce and consumption. The β for paid employment for instance shows that if paid employment had been made equal, while the rest of the sources remain unaffected, rural household inequality would have been about 49.0 percent of it actual figure in 1976/77. This means if paid employment had been made equal, then there would have been a reduction about 51.0 percent from the current level of rural household inequality. In 1988/89 (see Table 4.5.1b), reducing inequality in paid employment continued to be the most effective way to improve rural inequality, followed by reducing inequality in self-employment. Besides, reducing inequality in the rent, interest and dividend would also have been one of the significant strategies to improve rural household inequality in 1988/89. The β for rent, interest and dividends shows that if rent, interest and dividends had been made equal, *ceteris paribus*, rural household inequality could have been reduced about 13.0 percent from its 1988/89 level.

Decomposition analysis of the urban household inequality for 1976/77 reveals that self-employment made the largest contribution to urban inequality, followed by paid employment. The rest of the sources made only a minor contribution. In terms of the attribute of the income source, paid employment was found to be an equalising income source, while self-employment as well as rent, interest and dividends were found to be unequalising income sources. In 1988/89, paid employment made the largest contribution to urban inequality, followed by self-employment. Besides, there was also quite a significant contribution of rent, interest and dividends (6.0 percent), and also pensions and EPF (7.0 – 17.0 percent) in urban inequality. Paid employment continued to be an equalising source in 1988/89 as in 1976/77. Self-employment, rent, interest and dividends, and also pensions and EPF were unequalising sources in 1988/89.

The β for paid and self-employment indicates that reducing inequality in both sources would have significantly improved urban household inequality in 1976/77. However, it appeared that reducing inequality in self-employment was effective than reducing inequality in paid employment. The β for self-employment indicates that if the rest of the sources had been left unaffected, while equalising self-employment, urban household inequality would have remained at 31.0 percent of the inequality level in 1976/77 – a reduction about 69.0 percent. In 1988/89, this no longer held. The β for self-employment shows that if self-employment had been made equal, *ceteris paribus*, urban household inequality would have remained at 77.0 percent of the inequality level in 1988/89. Thus, the expected reduction in the level of urban inequality was only about 23.0 percent. Reducing inequality in paid employment turned out to be the most effective way to improve urban inequality in 1988/89. The β for paid employment indicates that if inequality in paid employment had been eliminated and inequality in the rest of the sources remained unchanged, urban inequality would have been expected to decline to about 43.0 percent of the 1988/89 inequality level. In addition, reducing inequality in rent, interest and dividends as well as inequality in pensions and EPF would also have contributed to quite significant improvement in urban inequality in 1988/89.

4.6 The Contribution and Effect of Income Sources on Ethnic Groups Inequality

The decomposition of Shorrock's and Gini inequality indices was also carried out for the major ethnic group – Malay, Chinese and Indian. The results from Shorrock's decomposition analysis for 1976/77 and 1988/89 are respectively shown in Table 4.6.1a and Table 4.6.1b, while the results from Gini decomposition is shown in Table 4.6.2a and Table 4.6.2b. In general, the results of both Shorrock's and Gini decomposition analysis for the major ethnic group shows quite a similar pattern to that already found and described earlier. Therefore, the same remarks would apply. The results show that across all ethnic groups, in a significant portion of each ethnic group inequality was contributed to by paid and self-employment. The contribution of rent, interest, and dividends increased quite notably between 1976/77 and 1988/89 across all ethnic groups. The rest of the sources made only a small contribution to inequality of each ethnic group. For the Malay households, it was found that paid employment was an unequalising source, while self-employment was an equalising source, both in 1976/77 and 1988/89. Rent, interest and dividends were equalising sources in 1976/77, but became unequalising sources in 1988/89. For the Chinese and the Indian households, paid employment was an equalising source, while self-employment and also rent, interest and dividends were unequalising sources.

Looking at the β for the Malay households, it is found that in 1976/77, reducing inequality in paid employment would have significantly improved income inequality of the Malay household, followed by reducing inequality in self-employment. For the Chinese and the Indian however, it was the other way round. For these households, reducing self-employment would have been the best strategy to improve their income inequality in 1976/77, followed by reducing inequality in paid employment. In 1988/89 however, all three ethnic groups exhibited similar results. The β across all ethnic groups shows that the best strategy to reduce inequality would have been by reducing inequality in paid employment, followed by reducing inequality in self-employment. Besides, there was also further scope for improving inequality through reducing inequality in rent, interest and dividends. For the Indian household, it also appeared that reducing inequality in pensions and EPF was also one of the ways to improve their income inequality in 1988/89.

Table 4.6.1a: MFLS Data: Shorrock's Decomposition of Inequality by Income Sources by Ethnic Groups, 1976/77.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
Malay Household										
$(\mu_r/\mu)*100$	66.01	29.85	0.60	0.13	0.01	0.71	0.28	2.41	0.01	100.00
ρ_r	0.8131	0.4134	0.1003	0.0193	0.0153	0.0837	0.1594	0.2310	0.0876	1.0000
C-Squared	2.2159	3.8915	90.6744	124.4674	324.9662	31.1861	315.1327	12.0336	150.1979	1.1645
C_r^A	0.9656	0.3466	0.0032	0.0002	0.0000	0.0016	0.0025	0.0070	0.0000	1.1645
C_r^B	0.7589	0.1787	0.0091	0.0004	0.0000	0.0056	0.0148	0.0347	0.0002	1.1645
S_r	0.8622	0.2627	0.0061	0.0003	0.0000	0.0036	0.0086	0.0208	0.0001	1.1645
$S_r/I*100$	74.04	22.56	0.53	0.02	0.00	0.31	0.74	1.79	0.01	100.00
α_r*100	82.92	29.77	0.28	0.02	0.00	0.14	0.22	0.60	0.00	100.00
β_r*100	34.84	84.65	99.22	99.97	100.00	99.52	98.73	97.02	99.98	0.00
Chinese Household										
$(\mu_r/\mu)*100$	51.03	41.91	1.61	0.13	0.02	0.90	0.13	3.67	0.60	100.00
ρ_r	0.4596	0.8001	0.1382	0.0206	-0.0267	-0.0029	-0.0139	0.1611	0.0613	1.0000
C-Squared	2.6770	8.5034	52.9406	168.5662	470.7764	8.1968	77.7304	9.1466	32.6056	1.9534
C_r^A	0.6970	1.4935	0.0137	0.0003	0.0000	0.0007	0.0001	0.0123	0.0012	1.9534
C_r^B	0.3755	1.2396	0.0315	0.0007	-0.0003	-0.0009	-0.0006	0.0377	0.0047	1.9534
S_r	0.5362	1.3665	0.0226	0.0005	-0.0001	-0.0001	-0.0002	0.0250	0.0030	1.9534
$S_r/I*100$	27.45	69.96	1.16	0.03	-0.01	-0.01	-0.01	1.28	0.15	100.00
α_r*100	35.68	76.46	0.70	0.02	0.00	0.03	0.01	0.63	0.06	100.00
β_r*100	80.78	36.54	98.39	99.96	100.02	100.05	100.03	98.07	99.76	0.00
Indian Household										
$(\mu_r/\mu)*100$	75.52	21.67	1.17	0.13	0.01	1.11	0.00	0.35	0.04	100.00
ρ_r	0.5021	0.8957	0.2924	0.0279	-0.0265	0.0125	0.0000	0.0367	-0.0010	1.0000
C-Squared	1.1399	52.7228	47.6194	65.7912	147.0000	78.3364	0.0000	30.1223	58.8187	3.3855
C_r^A	0.6502	2.4754	0.0065	0.0001	0.0000	0.0096	0.0000	0.0004	0.0000	3.3855
C_r^B	0.8397	2.7105	0.0805	0.0010	-0.0001	-0.0051	0.0000	0.0022	0.0000	3.3855
S_r	0.7450	2.5929	0.0435	0.0006	-0.0001	0.0023	0.0000	0.0013	0.0000	3.3855
$S_r/I*100$	22.00	76.59	1.29	0.02	0.00	0.07	0.00	0.04	0.00	100.00
α_r*100	19.21	73.12	0.19	0.00	0.00	0.28	0.00	0.01	0.00	100.00
β_r*100	75.20	19.94	97.62	99.97	100.00	100.15	100.00	99.93	100.00	0.00

Note:
$(\mu_r/\mu)*100$ = the share of income from source r in total household income; ρ_r = the correlation coefficient between income from source r and total household income; C-Squared = the squared coefficient of variation; C_r^A = inequality index if the only source of income differences arose from source r; C_r^B = the decline in inequality index when income from source r is equally distributed, while all other income source remain unaffected; S_r = the absolute contribution of source r to total inequality; $S_r/I*100$ =the percentage contribution of source r to total inequality; α_r*100 = the percentage of total inequality that would remain if the only source of income differences is from source r, while the income for the rest of the sources become equally distributed; β_r*100 = the percentage of total inequality that would remain if the income from source r were equally distributed while the distribution of the rest of the sources remains unchanged.

Table 4.6.1b: MFLS Data: Shorrock's Decomposition of Inequality by Income Sources by Ethnic Groups, 1988/89.

	Paid Employment	Self-Employment	Rent, Interest & Dividends	Pensions & EPF	Welfare Payments & Zakat	Remittances	Inheritance, Dowries & Gifts	Home Produce & Consumption	Others	TOTAL
Malay Household										
$(\mu_r/\mu)*100$	60.74	24.29	2.75	2.02	0.04	4.27	0.72	3.10	2.06	100.00
ρ_r	0.7042	0.6037	0.4652	0.0978	0.0359	0.2235	0.0535	0.1516	0.1389	1.0000
C-Squared	2.2844	8.4139	45.3066	25.0301	255.0686	17.1555	32.5652	22.0094	69.6248	1.5772
C_r^A	0.8428	0.4965	0.0343	0.0103	0.0000	0.0313	0.0017	0.0211	0.0297	1.5772
C_r^B	0.7810	0.5720	0.1820	0.0146	0.0005	0.0680	0.0038	0.0342	0.0304	1.5772
S_r	0.8119	0.5343	0.1081	0.0124	0.0003	0.0497	0.0028	0.0277	0.0301	1.5772
$S_r/I*100$	51.48	33.87	6.86	0.79	0.02	3.15	0.17	1.75	1.91	100.00
α_r*100	53.44	31.48	2.17	0.65	0.00	1.99	0.11	1.34	1.88	100.00
β_r*100	50.48	63.73	88.46	99.07	99.97	95.69	99.76	97.83	98.07	0.00
Chinese Household										
$(\mu_r/\mu)*100$	57.67	28.58	3.84	1.44	0.00	6.13	0.39	1.93	0.03	100.00
ρ_r	0.7128	0.5343	0.4425	0.0409	-0.0345	0.1631	0.0214	0.2554	-0.0295	1.0000
C-Squared	1.6886	3.6998	19.2222	41.8608	246.4678	12.5273	45.2638	11.3689	355.5799	0.9189
C_r^A	0.5616	0.3022	0.0283	0.0087	0.0000	0.0470	0.0007	0.0042	0.0000	0.9189
C_r^B	0.4625	0.2609	0.1144	-0.0014	0.0000	0.0208	0.0004	0.0276	-0.0003	0.9189
S_r	0.5121	0.2816	0.0714	0.0037	0.0000	0.0339	0.0005	0.0159	-0.0001	0.9189
$S_r/I*100$	55.73	30.64	7.77	0.40	0.00	3.69	0.06	1.73	-0.02	100.00
α_r*100	61.12	32.89	3.08	0.95	0.00	5.12	0.07	0.46	0.00	100.00
β_r*100	49.66	71.60	87.55	100.15	100.00	97.74	99.96	97.00	100.04	0.00
Indian Household										
$(\mu_r/\mu)*100$	68.01	15.08	2.01	7.36	0.00	5.12	1.16	1.22	0.06	100.00
ρ_r	0.7294	0.5546	0.2176	0.3102	0.0000	0.0453	0.0895	0.0926	0.0440	1.0000
C-Squared	0.7035	7.6540	27.8634	11.6324	0.0000	10.3839	30.3291	19.4657	98.6667	0.5877
C_r^A	0.3254	0.1740	0.0112	0.0629	0.0000	0.0272	0.0041	0.0029	0.0000	0.5877
C_r^B	0.3125	0.1807	0.0241	0.0564	0.0000	-0.0158	0.0047	0.0047	0.0003	0.5877
S_r	0.3190	0.1773	0.0177	0.0597	0.0000	0.0057	0.0044	0.0038	0.0002	0.5877
$S_r/I*100$	54.27	30.18	3.01	10.15	0.00	0.98	0.74	0.65	0.03	100.00
α_r*100	55.37	29.61	1.91	10.71	0.00	4.63	0.69	0.49	0.01	100.00
β_r*100	46.82	69.25	95.90	90.41	100.00	102.68	99.20	99.19	99.94	0.00

Note:
$(\mu_r/\mu)*100$ = the share of income from source r in total household income; ρ_r = the correlation coefficient between income from source r and total household income; C-Squared = the squared coefficient of variation; C_r^A = inequality index if the only source of income differences arose from source r; C_r^B = the decline in inequality index when income from source r is equally distributed, while all other income source remain unaffected; S_r = the absolute contribution of source r to total inequality; $S_r/I*100$ =the percentage contribution of source r to total inequality; α_r*100 = the percentage of total inequality that would remain if the only source of income differences is from source r, while the income for the rest of the sources become equally distributed; β_r*100 = the percentage of total inequality that would remain if the income from source r were equally distributed while the distribution of the rest of the sources remains unchanged.

Table 4.6.2a: MFLS Data: Gini Decomposition of Inequality by Income Sources and Ethnic Groups, 1976/77.

	mf	wf	Gf	Cf	wfCf	gf=Cf/G	wfgf	% contribution
Malay								
Paid Employment	2505	0.6601	0.6418	0.5306	0.3503	1.0593	0.6993	69.93
Self-Employment	1133	0.2985	0.7550	0.4433	0.1323	0.8849	0.2641	26.41
Rent, Interest & Dividends	23	0.0060	0.9772	0.4384	0.0026	0.8752	0.0052	0.52
Pensions & EPF	5	0.0013	0.9925	0.3469	0.0004	0.6925	0.0009	0.09
Welfare Payments & Zakat	0	0.0001	0.9972	0.5589	0.0000	1.1158	0.0001	0.01
Remittances	27	0.0071	0.9534	0.2263	0.0016	0.4517	0.0032	0.32
Inheritance, Dowries & Gifts	11	0.0028	0.9965	0.8802	0.0025	1.7572	0.0050	0.50
Home Produce & Consumption	91	0.0241	0.9164	0.4610	0.0111	0.9204	0.0222	2.22
Others	0	0.0001	0.9940	0.5055	0.0000	1.0092	0.0001	0.01
TOTAL	3795	1.0000	0.5009	0.5009	0.5009	1.0000	1.0000	100.00
Chinese								
Paid Employment	4516	0.5103	0.6377	0.4192	0.2139	0.8173	0.4170	41.70
Self-Employment	3709	0.4191	0.8087	0.6403	0.2683	1.2483	0.5231	52.31
Rent, Interest & Dividends	143	0.0161	0.9609	0.6932	0.0112	1.3514	0.0218	2.18
Pensions & EPF	12	0.0013	0.9944	0.4619	0.0006	0.9005	0.0012	0.12
Welfare Payments & Zakat	2	0.0002	0.9979	-0.7626	-0.0001	-1.4866	-0.0003	-0.03
Remittances	80	0.0090	0.8556	-0.0637	-0.0006	-0.1243	-0.0011	-0.11
Inheritance, Dowries & Gifts	11	0.0013	0.9886	0.1197	0.0002	0.2334	0.0003	0.03
Home Produce & Consumption	325	0.0367	0.8914	0.4699	0.0172	0.9161	0.0336	3.36
Others	53	0.0060	0.9549	0.3714	0.0022	0.7239	0.0044	0.44
TOTAL	8850	1.0000	0.5130	0.5130	0.5130	1.0000	1.0000	100.00
Indian								
Paid Employment	5597	0.7552	0.4264	0.4019	0.3035	0.7810	0.5898	58.98
Self-Employment	1606	0.2167	0.9733	0.8972	0.1944	1.7435	0.3778	37.78
Rent, Interest & Dividends	87	0.0117	0.9787	0.8655	0.0101	1.6819	0.0197	1.97
Pensions & EPF	10	0.0013	0.9837	-0.2793	-0.0004	-0.5428	-0.0007	-0.07
Welfare Payments & Zakat	1	0.0001	0.9932	-0.4490	0.0000	-0.8725	-0.0001	-0.01
Remittances	82	0.0111	0.9830	0.5622	0.0062	1.0925	0.0121	1.21
Inheritance, Dowries & Gifts	0	0.0000	1.0000	1.0000	0.0000	1.9433	0.0000	0.00
Home Produce & Consumption	26	0.0035	0.9696	0.1617	0.0006	0.3143	0.0011	0.11
Others	3	0.0004	0.9837	0.3935	0.0001	0.7648	0.0003	0.03
TOTAL	7411	1.0000	0.5146	0.5146	0.5146	1.0000	1.0000	100.00

Note:
mf = average income for source f; wf = income share of source f in total income; Gf = Gini coefficient for source f; Cf = factor concentration ratio; wfCf = factor component in G; gf = relative factor concentration ratio; wfgf = factor inequality weight.

Table 4.6.2b: MFLS Data: Gini Decomposition of Inequality by Income Sources and Ethnic Groups, 1988/89.

	mf	wf	Gf	Cf	wfCf	gf=Cf/G	wfgf	% contribution
Malay								
Paid Employment	6775	0.6074	0.6219	0.5113	0.3105	1.0630	0.6457	64.57
Self-Employment	2709	0.2429	0.7815	0.4201	0.1021	0.8735	0.2122	21.22
Rent, Interest & Dividends	307	0.0275	0.9576	0.7697	0.0212	1.6003	0.0440	4.40
Pensions & EPF	226	0.0202	0.9610	0.3912	0.0079	0.8134	0.0165	1.65
Welfare Payments & Zakat	5	0.0004	0.9950	0.1400	0.0001	0.2911	0.0001	0.01
Remittances	476	0.0427	0.8845	0.3333	0.0142	0.6929	0.0296	2.96
Inheritance, Dowries & Gifts	80	0.0072	0.9725	0.4773	0.0034	0.9923	0.0071	0.71
Home Produce & Consumption	345	0.0310	0.8891	0.3442	0.0107	0.7156	0.0222	2.22
Others	230	0.0206	0.9782	0.5280	0.0109	1.0977	0.0227	2.27
TOTAL	11153	1.0000	0.4810	0.4810	0.4810	1.0000	1.0000	100.00
Chinese								
Paid Employment	9977	0.5767	0.5552	0.4029	0.2324	0.9484	0.5469	54.69
Self-Employment	4944	0.2858	0.7650	0.4860	0.1389	1.1439	0.3269	32.69
Rent, Interest & Dividends	664	0.0384	0.9433	0.6911	0.0265	1.6267	0.0624	6.24
Pensions & EPF	250	0.0144	0.9731	0.3451	0.0050	0.8122	0.0117	1.17
Welfare Payments & Zakat	0	0.0000	0.9958	-0.4510	0.0000	-1.0615	0.0000	0.00
Remittances	1060	0.0613	0.8616	0.2225	0.0136	0.5236	0.0321	3.21
Inheritance, Dowries & Gifts	67	0.0039	0.9762	0.2736	0.0011	0.6440	0.0025	0.25
Home Produce & Consumption	334	0.0193	0.9049	0.3916	0.0076	0.9218	0.0178	1.78
Others	5	0.0003	0.9972	-0.4763	-0.0001	-1.1211	-0.0003	-0.03
TOTAL	17300	1.0000	0.4249	0.4249	0.4249	1.0000	1.0000	100.00
Indian								
Paid Employment	9103	0.6801	0.4222	0.3095	0.2105	0.8550	0.5815	58.15
Self-Employment	2018	0.1508	0.8641	0.5275	0.0795	1.4571	0.2197	21.97
Rent, Interest & Dividends	269	0.0201	0.9638	0.7183	0.0144	1.9841	0.0398	3.98
Pensions & EPF	985	0.0736	0.9114	0.5437	0.0400	1.5017	0.1105	11.05
Welfare Payments & Zakat	0	0.0000	1.0000	1.0000	0.0000	2.7621	0.0000	0.00
Remittances	685	0.0512	0.8736	0.1857	0.0095	0.5129	0.0263	2.63
Inheritance, Dowries & Gifts	155	0.0116	0.9620	0.2602	0.0030	0.7186	0.0083	0.83
Home Produce & Consumption	163	0.0122	0.9508	0.3933	0.0048	1.0864	0.0132	1.32
Others	8	0.0006	0.9903	0.5017	0.0003	1.3856	0.0008	0.08
TOTAL	13385	1.0000	0.3620	0.3620	0.3620	1.0000	1.0000	100.00

Note:
mf = average income for source f; wf = income share of source f in total income; Gf = Gini coefficient for source f; Cf = factor concentration ratio; wfCf = factor component in G; gf = relative factor concentration ratio; wfgf = factor inequality weight.

4.7 Conclusion

Decomposition of income inequality by income source in Malaysia shows that a large portion of the total inequality was attributable to labour income, i.e. paid and self-employment. The large contribution of paid and self-employment to total inequality was not because these sources were the most unequally distributed sources, but rather due to their importance (large share) in total household income. The contribution of capital and transfer incomes (i.e. rent, interest and dividends as well as pensions and EPF) to total inequality appeared to be relatively small. Nonetheless, its contribution increased between the two periods under study. This finding are quite similar to those of Fields (1976).

With regard to effects of income source on income inequality, the results show differences from one group to another. However, income from rent, interest and dividends was found to have a consistently unequalising effect on all groups in 1988/89. This implies that, *ceteris paribus*, an enlarged share of rent, interest and dividends in total household income would be likely to worsen income inequality. Thus, in the context of an economic policy where attempts were made to enlarge the Malay share of capital ownership, such effort would be likely to result in greater inequality amongst the Malay in particular, and amongst Malaysian in general. Indeed, as indicated in the decomposition analysis, reducing inequality in rent, interest and dividends constituted one of the significant strategies to improve income inequality.

The decomposition analysis highlighted the importance of reducing inequality in paid employment, self-employment, as well as rent, interest and dividends. The importance of reducing inequality in paid employment for instance, can be comprehended from the fact that by eliminating inequality in paid employment in 1988/89, while leaving the distribution of the rest of the sources unchanged, the overall inequality was expected to decline roughly about 46.0 percent from its 1988/89 level. The figures for eliminating inequality in self-employment as well as in rent, interest and dividends (while leaving inequality of the rest of the sources unchanged) were 31.0 and 11.0 percent respectively. Thus, in terms of strategy to improve inequality, the decomposition analysis indicated that the best strategy to reduce income inequality is

by reducing inequality in paid employment, followed by reducing inequality in self-employment as well as inequality in rent, interest and dividends.

Chapter 5

Malay Nationalism, Income Inequality and the New Economic Policy

5.1 Introduction

Malaysia inherited a multiracial society when independence was achieved from the British in 1957. In the early years of independence, a marked income inequality existed between the Malay (Bumiputera) and the non-Malay (non-Bumiputera). The imbalance became untenable in the late 1960s, when racial riots occurred in May 1969. The riots proved to be damaging for nation-building. As a response, the government introduced the New Economic Policy in 1970, which accorded the Bumiputera preferential treatment to correct the perceived imbalances. Thus, the NEP was basically an affirmative action, pro-Bumiputera economic policy, and in fact it was also actually a realisation of the Malay nationalist economic aspirations. The New Development Policy (NDP) succeeded the NEP when it came to an end in 1990. While there were differences in priorities and strategies between the two, the NDP was still basically a pro-Bumiputera policy. During its implementation, Malaysia achieved tremendous economic growth and development, and brought the Malays into the mainstream economic activities.

This chapter argues that while the nationalist economic policy, i.e. the NEP, has been claimed as being behind Malaysia's notable economic success in the past, it might have also sewn the seed of Malaysia's current political crisis. The pro-Malay economic policy of distributing income appeared to be coherent and succeeded in the initial years since the poor were overwhelmingly from the Malay community. During its implementation from 1971 to 1990, the NEP successfully tackled the problem of poverty amongst the Malay, and also was successful in bringing out the Malay from the rural-agriculture sector into the urban-modern economic sector. On average, the

income of the Malays improved. However, the exclusive emphasis of the nationalist approach on rectifying the problem of inter-ethnic inequality tended to overlook the problem of intra-Malay inequality. Therefore, while the NEP might have reduced inter-ethnic inequality and poverty amongst the Malays, the problem of intra-Malay inequality remained. As a result, the Malays are no longer an economically homogeneous community. The NEP subsequently became an incoherent policy to develop the Malay community as it was in the past. The narrow ethnic focus of the NEP created cleavages within the Malay community as well as the emergence of cross-cutting cleavages in society, which made it difficult to address the new problem of income distribution (i.e. intra-Malay inequality) through the political rhetoric of ethnicity. Continuing the nationalist policy would apparently lead to internal contradictions and tension within the Malays. Furthermore, this internal contradictions lead to the reduction of appeal of ethnic politics, while multiethnic politics became more promising for the future. This is the paradox of the NEP.

This chapter is organised as follows. Section 5.2 discusses the idea of nationalism and how it affects economic policy. Section 5.3 discusses the historical background of Malaysian society. Section 5.4 examines the rise of Malay nationalism, while Section 5.5 examines the incorporation of the demands of the Malay nationalists into the Social Contract of 1957 and the Malay Special Privileges. Section 5.6 reviews the pattern and changes of income inequality between 1957 and 1970, and shows that the narrow view of the Malay nationalists on the distribution of income and wealth tends to overlook the problem of inequality within the Malays themselves. Section 5.7 examines the situation that led to the racial riots in 1969, which in turn led to the birth of the NEP. Here, the main features and programmes of the NEP are discussed as well. Section 5.8 briefly examines Malaysia's economic growth and development during the NEP (1971-1990) period as well as examining the distributional consequences of the NEP. Based on the figures on income distribution, Section 5.9 discusses why despite its achievements, the NEP appears to be paradoxical. The final section, which is Section 5.10, concludes the chapter.

5.2 Nationalism and Economic Policy

In order to understand how Malay nationalism has an impact on Malaysia's economic policy, it is worthwhile to start by examining briefly the idea of nationalism in general, as well as the general traits of nationalist policy. According to Gellner (1983, p.1), nationalism is "primarily a political principle, which holds that the political and national unit should be congruent", while nationalist sentiment "is the feeling of anger aroused by the violation of the principle, or the feeling of satisfaction aroused by its fulfilment". Nationalism is also a form of ideology and behaviour (Kellas 1991, p.3). The ideology of nationalism creates people's awareness of the nation, as well as to give them a set of attitudes and a programme of action – cultural, economic or political.

A nation on the other hand, is "an imagined political community" (Anderson, 1983, p.6). It is "imagined" because the members of a nation will never know most of the other members of their nationality. However, through this "imagination" they will know which individuals belong to their nationality and which do not. Thus, this "imagination" entails exclusion of people and defines the terms for inclusion. For this reason, what is needed for a nation to exist is that members must perceive that they belong to the same group. It does not really matter if what they perceived is really a truth or fiction. What is necessary is that members of the nation must be convinced or make themselves believe that, for example, they share a common history, culture or even ancestry. Therefore, in the process of creating a sense of belonging and differentiating with others, more often than not, the creation of myths is involved (see for example Hobsbawm, 1993).

One of the most common instruments to create a sense of belonging is ethnic identity. This is easy to understand since an ethnic group by definition is "a named human group claiming a homeland and sharing myths of common ancestry, historical memories and a distinct culture" (Smith, 1999, p.127). It is also for this reason that ethnic sentiment and appeal is usually manipulated by the nationalist as an instrument for integrating the nation, as well as differentiating it from other nations. If a nation is

"an imagined political community", therefore Gellner must be right to argue that a nation can be invented (see Smith 1998, p.28). This invention is carried out by nationalism, since the heart of nationalism is not just for the awakening of nations to self-consciousness, but to invent nations where they do not exist.

The main concern here, however, is not with the nation and nationalism per se, but rather with the significance of nationalism on economic policy. Therefore, there is a need to understand in what way does nationalism influence economic policy, and what impact a nationalist policy has on income distribution. Johnson (1968) examines the significance of nationalism on economic policy of newly formed states. He argues that, since nationalism appears to be the main motivation behind the formation of new states, it is natural to find that nationalism appears to be one of the factors that significantly shaped the philosophy of its economic policy, which in turn determines policy preferences in the development plan of the country. For instance, if the nation lacks productive facilities or certain types of industry that are seen to be important to the nation, economic policy will be focused on creating such facilities or establishing such industries.

However, the idea of nationalism goes beyond creating facilities or establishing industry. Since nationalism attaches value to having property owned or having economic functions performed by nationals, then facilities or industry must also be under the control of nationals. This appears to be one of the major characteristics of nationalist economic policy. Indeed, this is in agreement with the suggestion by Breton (1964, p.377) that nationalism could be viewed as a claim to national wealth. This explains why a nationalist economic policy is usually hostile to foreign investment, as well as why a nationalist economic policy usually prefers public ownership and public enterprises over private ownership and private enterprises. Indeed, where foreigners control the facilities or industry, a nationalist policy might prefer taking control of them through confiscation or nationalisation. In a situation where public ownership and public enterprises are impractical, a nationalist economic policy might prefer extensive regulation and control of private enterprises. What appears to be more important in a nationalist policy is nationality. The economy must

be under the control of the nationals. Nationalist economic policy is therefore not concerned with development per se, but rather with ownership and control. The question of nationality is considered more important than economic efficiency or the competence and ability of workers. As a result, the pursuance of a nationalist policy usually involves conflicting goals of encouraging rapid growth and development, and the efficiency of the path to achieve it.

The importance attached by nationalism on ownership and control by the nationals has a significant effect on the nationalist view of the question of equality. For the nationalist, as long as the economy is under the control of the nationals, then it does not really matter which individuals amongst the nationals really have the ownership or control of it. It is just the question of "us and them". With regards to income distribution, it follows that what really matters for the nationalist is equality between the nationals and the non-nationals. Equality from the nationalist point of view requires members of both groups (national and non-nationals) to be found all the way along the social scale. Thus, what matters is that both groups (national and non-nationals) must be equal in this sense. It does not really matter for the nationalist what the extent of inequality is within the nationals (groups). Here, the impact of a nationalist economic policy on equality of income is examined in the case of Malaysia.

5.3 Background of Malaysian Society

Malaysian society is a multiethnic society, with the Malays, Chinese and Indians forming the major ethnic groups. In 1996, the Bumiputera accounted for 61.0 percent of the population, the Chinese 30.0 percent, the Indians 8.0 percent, and other minority groups made up the remaining 1.0 percent (Gomez and Jomo, 1997, p.1). In general each of the ethnic groups is different in terms of their language, culture and religion. The Malay language is "Bahasa Melayu", the Chinese languages are Cantonese and Hokkien, and the Indian language is Tamil. The Malays are mostly

Muslim, while the Chinese and the Indian are mostly Buddhist and Hindu, respectively.

The multiethnic characteristic of Malaysian society was inherited from the British during their occupation of Malaya[1] from 1786 to 1957 (Snodgrass 1980, pp. 22-42; Anand 1983, pp.1-4; Faaland et.al. 1990, p.2-4). While there were already some Chinese and Indian in Malaya before the British occupation, it is during the British occupation that the mass migration of the Chinese and the Indians took place. Starting in the second half of the nineteenth century and up to the 1930s, the British had encouraged large scale Chinese and Indian immigration to Malaya, to supply their manpower need in the tin mining industries and rubber plantations which were mainly located in the west coast of Peninsular Malaysia. The Chinese were brought by the British to work in the tin mines, while the Indians to work in the rubber plantations. The Malays remained in the traditional subsistence agriculture and thus were left out of the modern sector of the economy.

As a result, in the early years of independence, each ethnic group was segregated in terms of geographical area. The majority of the Malays were found in the north and eastern states of Peninsular Malaysia such as Terengganu, Kelantan, Kedah and Perlis. These states were basically agricultural states and relatively underdeveloped. On the other hand, the Chinese and Indians were concentrated in the western states of Peninsular Malaysia such as Selangor, Negeri Sembilan, Perak and Pulau Pinang, which are relatively more developed and prosperous. Besides, the Malay were less urbanised compared to the Chinese and the Indians as indicated in Table 5.2.1 below. In 1957, almost 90 percent of the Malays lived in the rural area, compared to about 55 percent of the Chinese and 70 percent of the Indians. This situation remained throughout the 1960s.

[1]Before independent from the Colonial British in 1957, Peninsular Malaysia was known as Malaya.

Table 5.2.1: Population by Community Groups and Degree of Urbanisation at 1957 and 1970 Census (Peninsular Malaysia).

	1957		1970	
	Urban Area (%)	**Rural Area (%)**	**Urban Area (%)**	**Rural Area (%)**
Malays	11.2	88.8	14.9	85.1
Chinese	44.7	55.3	47.4	52.6
Indians	30.6	69.4	34.7	65.3
Others	49.3	50.7	40.8	59.2
Total	26.5	73.5	28.7	71.3

Source: Mehden (1975).

During the British rule, each ethnic group also generally experienced different education systems (Mahathir 1998, p.74-75; Shastri 1993, p.3). Most Malays were educated in the government school system located in the rural areas that used the Malay language as the medium of instruction. The Chinese on the other hand sent their children to the Chinese medium schools, which were established by Chinese voluntary associations. Nevertheless, the elite segment of each ethnic group generally sent their children to the English medium schools located in the urban areas, where the quality of education was far better than the rural Malay-medium school. Furthermore, most secondary and tertiary education was available in the urban areas with English as the medium of instruction. Those who were educated at the English-medium schools tended to gain positions in the civil service, commerce, business, and professions. Since most of the Malays were educated in the rural Malay medium schools, this indirectly limited their upward social mobility.

Besides, in the early years of independence, each ethnic group was also separated by their economic functions. The economic activities of the Malay were largely subsistence agriculture and fishing. The Chinese were involved in commerce and modern sectors of the economy, while the Indians were labourers in the rubber plantations.[2] Thus, not only did each ethnic group differ in terms of their language,

[2]In 1957, 73 percent of Malays were in agriculture, forestry and fishing, compared to only 40 percent of the Chinese and 56 percent of the Indians (Shastri 1993, p.3). Of the Malays, 37 percent of them were engaged in rice cultivation, and 25 percent in the rubber smallholdings. Of the Indians, 48 percent of them were labourers in the rubber plantations. In the modern economic sector, the Malays composed only 7 percent of the manufacturing sector management in 1970, compared to 68 percent of the Chinese, 4 percent Indian and 18 percent foreign (Mehden, 1975, p. 250).

culture and religion, they were also separated in terms of geographical location, education and economic functions. It is not surprising that there was very little integration and interaction between the ethnic groups. Another reason for the lack of integration and interaction was that many of the immigrant Chinese and Indians perceived Malaya only to be a transition land rather than their new homeland. Hence, no need was felt among the immigrant populations to integrate and interact with the Malays since they intended to return back to China or India after accumulating enough savings (Gomez and Jomo, 1997, p. 11). Communication between ethnic groups is carried out by their political leaders, generally the elite of each ethnic group. The political leaders therefore functioned as the spokespersons and brokers for their respective ethnic groups (Shastri, 1993, p.3).

Ethnicity therefore cut across almost all spheres of life. Indeed, it was the differences in their economic functions as well as their educational experience that probably reinforced their ethnic differences and influenced their perceptions of each other. Naturally the differences and lack of interaction between the ethnic groups led to the prejudices and the preoccupation with ethnic issues in almost all spheres of Malaysian life - social, cultural, economic and political. Thus while the issue faced by society might have involved many other dimensions, it was the ethnic dimension that really received most public and political attention. Ethnicity dominated all aspects of Malaysian life and as a result, ethnic cleavages were found at almost all levels and aspects of life, as explained by Mauzy (1997, p. 107):

> *"These groups were divided by coinciding cleavages of race, language, religion, customs, area of residence and to a large extent, by type of occupation. Predictably, they lined up on the same opposing sides on every politically relevant issue".*

As seen, despite the emergence of the multiracial society in Malaysia, there was very little integration and interaction among the ethnic communities in the early years of independence. Ethnicity cut across almost all spheres of life. Thus, the question of unity and nation-building was an important question in the newly independent Malaysia. However, nation-building was overwhelmed by the existence of economic imbalance between the ethnic groups, as will be seen later.

5.4 Malay Nationalism

The presence of European colonial power and the massive influx of the Chinese and Indian immigrant to Malaya in the mid-nineteenth century planted the seeds of anti-colonial and nationalistic sentiment among the indigenous Malays, and led to the rise of the Malay nationalist movement. Malay nationalism served as a rallying point of the Malays, who felt threatened by the increasing numbers of immigrants, the Chinese and Indians, to Malaya. It was also used to promote a sense of identity and homogeneity amongst the Malay, and thus exclude the participation of the immigrant communities (Siddique and Suryadinata 1981, p. 668).

The Japanese occupied Malaya from December 1941 to September 1945. After the Japanese were defeated in 1945, the British managed to re-establish their power in Malaya. However, the lack of resistance to the Japanese invasion from the British reinforced the anti-colonial and nationalistic sentiments amongst the Malay. The Japanese occupation of Malaya proved to the Malay that even the strong British colonialist could be defeated. Thus, for the Malay nationalist, their aim was clear and straightforward – the creation of a Malay nation. As nation involved "imagination" (Anderson 1983), it was not surprising to find that the heart of the Malay nationalist discourse was on the question of what signify "Malayness," and, subsequently on the vision and nature of the "Malay nation" (Shamsul 1997, p. 242).[3] It was this nationalist ideal of creating the "Malay nation" that motivated the Malay anti-colonial struggle (Shamsul 1997, p240). Eventually, this discourse shaped two central agenda of the Malay nationalist – the political agenda and the economic agenda.

[3] Therefore Malay nationalism is defined in ethnic terms. Thus, it excludes even those who are Malaysian citizens, but are not classified as Malay or *bumiputeras*.

The nationalist discourse focused on three important elements considered to signify "Malayness". These elements were language, religion and royalty. Within the Malay nationalist movement, there were generally three factions: the administrator-aristocrat or what Shamsul (1997, p.243) called "administocrat" faction, the Malay left faction and the Islamic faction. They differed on the importance of the elements that signified "Malay". The "administocrat" faction emphasized the symbolic importance of royalty as the custodian of Malay culture and religion. On the other hand, the Malay left faction recognised the importance of religion but not royalty, while the Islamic faction felt that the ultimate form of a Malay nation was an Islamic one. All of the three factions however, agreed that the Malay language should be the sole medium of official communication and education in their proposed "Malay nation". Thus, the three element of "Malayness", i.e. language (Malay), religion (Islam) and royalty (sultans), constituted the main foundation of the intended nation of the Malay nationalists. These three elements were vital as it shaped the character of the intended nation. Part of the Malay nationalist political agenda was realised and included in the Malayan Constitution after the ethnic bargain of 1957, where these three pillars of Malayness (language, religion and royalty) was guaranteed and protected.

Related to the political agenda of the Malay nationalists was their economic agenda. The Malay nationalist economic agenda arose from the dissatisfaction of the Malay nationalists with the economic condition of the Malay. The Malay nationalists argued that the Malay had been neglected and discriminated against by the British. Under the British colonial rule, the feeling of neglect and discrimination developed within the Malay. Faalant et.al. (1990, p. 7) for instance has concisely explained the discrimination as follows:

> *"Social and economic discrimination against the Malays by the commercial and industrial circles controlled by the non-Malays took many forms. In business, the British and Chinese banks refused to have anything to do with them, for they were regarded as having no suitable experience. In wholesale, retail, and export and import business, they were kept out by associations and guilds. Even if the Malays sought jobs in the private sector, they were kept out by clan, language and cultural preferences and barriers. The many Chinese and Indian shops refused to employ Malays. Until recently, Indian shops imported labour from India when they were short-handed. As for urban jobs outside the government, only the lowest types of manual labour*

were open to the Malays: such jobs as trishaw pedalers, drivers and watchmen."

Furthermore, the Malays were also denied the development of knowledge and skills. As mentioned above, most of the Malays sent their children to the rural Malay medium schools where the quality of education was far inferior to the urban English medium schools. Besides, since English education was considered necessary for government employment, and for further education, the majority of the Malays found that the opportunities for their children were limited. The Malay nationalists argued that it is the neglect and discrimination by the British had retarded their economic development. In other words, the presence of the British and immigrant population had limit their economic advancement and had also barred them from mainstream economic life.

It was also argued that years of discrimination had resulted in the loss of self-confidence and a deep feeling of inferiority amongst the Malay (Mahathir 1998, p. 77). The British occupation and the massive influx of Chinese and Indian immigrants to Malaya, was therefore viewed as the major cause of their economic backwardness. The Malay nationalists argued that before the presence of the colonial powers and the immigrant population, they were actively involved in business and trade. The Malays in the 15th century kingdom of Melaka, which was the leading port in the East and the centre of valuable spice trade, used to deal with foreigners from as far away as India, China, and the Middle-East (Mahathir 1998, p. 77). Historically, the Malay nationalists argued, the Malay excelled in commerce and trade. It was the presence of the British and the immigrants that curbed their opportunities and hence kept them out of the mainstream economy.

This has led the Malay to look at the colonialist and the immigrants as "dispossesors" (Shamsul 1997, p. 245). The Malays felt that the British and the immigrants had dispossessed them both politically and economically. Hence, it is not surprising to find that the Malay nationalists articulated their struggle for independence as the struggle to repossess the political and economic dominance from the British and the

immigrant population. The struggle of the Malays for independence can be seen as the attempt to put them in their rightful place in their own country. As such, the struggle of the Malay for independence entailed reclaiming their lost dignity and their identity as a people, and to once become the definitive people of their own country (Mahathir 1998, p.79). As can be seen, the "imagined" Malay community has been created, and hence they can be distinguished from the other communities. What seems to be interesting is the fact that this analysis of national identity was accepted under the Ethnic Bargain 1957 and embedded in the Constitution of Federation of Malaya in 1957, the newly created independent state. This will be discussed in the next section.

5.5 The Social Contract of 1957 and Malay Special Privileges

After the Japanese surrender in 1945, the British appeared to be ready for accommodation and the granting of Malaya's independence. As the first step, the British proposed the Malayan Union plan in 1946. Basically, under the Malayan Union proposal, all states, except Singapore, would be united into a single political entity under a centralised government. Special treatment of the Malays in matters regarding land ownership, education, government jobs and so on would be abolished and the sultans (Malay kings) reduced to mere symbols without power. More importantly, citizenship would be granted freely to the entire immigrant Chinese and Indians.

Since the non-Malay were then in the majority, the granting of citizenship to the non-Malay under the British proposed Malayan Union would certainly dilute the Malay political power. Thus, the majority of the Malays rejected the Malayan Union scheme. This possible loss of Malay supremacy united the Malays and led to the formation of United Malay National Organisation (UMNO) in May 1946. Consequently, there were strong pressures on the British to withdraw the Malayan Union proposal. Finally, the British had to abandon their Malayan Union proposal, but then the British opted for the "federation nation", which was favoured by the Malay administocrat faction of the Malay nationalist movement. In the meantime, the ethnic Indians also formed their

political party – the Malayan (later Malaysian) Indian Congress (MIC) in 1946 and the Chinese formed the Malayan (later Malaysian) Chinese Association (MCA) in 1949. However, their motives were largely undefined compared to the Malays.

In the early 1950s, as it became clear that the British wanted to grant Malaya's independence, the British instituted local and municipal elections in Malaya. However, the British had openly indicated that Malaya would only be granted independence if it was apparent that the various ethnic groups could live together peacefully (Mauzy 1997, p.108). Thus, in the Kuala Lumpur Municipal Election in 1952, UMNO and MCA formed a coalition, called the Alliance, as a gesture towards inter-ethnic co-operation. The coalition was successful as it won the Kuala Lumpur Municipal Election. Following their victory in Kuala Lumpur and in other local and municipal elections, the leadership of both parties decided to link the organisation nationally on a permanent basis. The MIC joined the Alliance in the following year.

In the 1955 Federal Legislative Council Elections, two years before independence, the Alliance won an overwhelming majority, i.e. 52 out of 53 seats contested. Among the first tasks of the Alliance was to negotiate the terms of independence from the British. This required the coalition partners to negotiate, i.e. compromise, on the conflicting claims of their ethnic constituencies and then present a united front to the British. The main issue in the negotiation was the issue surrounding their status and the character of the newly independent country. Since the Malays saw themselves as the indigenous people of the country, the Malays felt that they should have the definitive say in shaping the character of the country, and that their dominant position in the country must be safeguarded. Besides, the Malays also felt that they must be assisted to place them on an equal footing with the non-Malays, since they were lagging behind the non-Malays in modern education and economic spheres. In short, the Malays demanded special rights and their dominant position had to be safeguarded. Such safeguards were felt imperative, as the Malay political elite feared that the more advanced and aggressive non-Malays might overshadow them in their own country (Rajakrisnan 1993, p. 220).

Finally it was agreed that the non-Malays had to recognise the special rights of the Malays as the indigenous people of the country. The non-Malays also had to recognise Islam and the Malay language as the official religion and language of the country. In return for this privilege, the Malays offered concessions in terms of political power by granting citizenship to the non-Malays.[4] In addition, the non-Malays were also assured that they were free to pursue their socio-economic interests, i.e. to conduct their businesses unimpeded and also to retain and develop their own cultural and linguistic heritage and separateness. This ethnic negotiation was occasionally called the "ethnic bargain" or "social bargain" of 1957. With this "ethnic bargain", part of the Malay nationalists political agenda was achieved.

The substance of the ethnic bargain was embedded in the Constitution of Federation of Malaya in 1957 (See Appendix 1). Article 153 of the Constitution safeguarded the Malay special rights, which could not be amended without the consent of the Conference of Rulers (that is, the nine Malay kings). Article 153(1) of the constitution recognised the special position of the Malays, and Article 153(2) ensured that they received special reserved place in public service, education, and in the granting of licences for the operation of any trade or business. In addition, the reservation of certain land for exclusive use by Malays was also assured in Article 89. While the Constitution made special provisions for the Malays, the non-Malay citizens had their rights guaranteed and were safeguarded by Clause 8 of Article 153. The clause recognised the "legitimate interest of the other communities" and gave the assurance that the reservation of licences and permits for Malays could not be used to deprive "any person of any right, privilege, permit or licence accrued to or enjoyed or held by him" or to exclude anyone from a trade or business for which no licence was previously required". On the 31st August 1957, Malaya was granted independence from the British.

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[4] With the agreement, it was estimated that about an additional one million of non-Malays were eligible to apply for citizenship. As the population of Malaya at that time was roughly five million people, such an agreement to give the citizenship to a large number of non-Malays diluted the Malay political power considerably. Therefore the acceptance by the Malays of granting citizenship to the non-Malays was considered generous. The Malays were willing to make this major concession as they were determined to gain independence (Mahathir 1998, pp. 42-43).

5.6 Income Inequality and the Economic Position of the Malay 1957- 1970

As discussed above, part of the political agenda of the Malay nationalists was achieved in the "ethnic bargain" of 1957. However, their economic agenda of uplifting the economic situation of the Malay, so as to put the Malay at their proper place in their own country, was still unfulfilled. The priority put by the Malay nationalists on the control of the political arena before the economic arena to a certain extent delayed the Malay nationalist economic agenda (Shamsul 1997, p.234). Besides, it was only in the late 1960s and the 1970s that the nationalist forces within the ruling Malay party, UMNO, gained most of their influence and control (Torii, 1997).

After independence, while the Constitution did stress that the socio-economic development of the Malay was to be promoted, active government intervention in the economy to help the Malay was not implemented immediately. The Alliance government continued the laissez-faire economic policy of the colonial government.[5] One of the reasons for this was the fact that in the "ethnic bargain", the non-Malays had been promised non-interference in their pursuance of economic interests. Thus, the continuation of the laissez-faire approach was part of the bargain that assured the protection of the economic interests of the Chinese (non-Malays). Besides, for the Malay, the laissez-faire policy that among others favoured foreign investments seemed to be acceptable since a large foreign stake in the economy was likely to act as a counter balance to the Chinese economic power (Jesudason, 1997, p. 130). Furthermore, in 1955 the World Bank advocated limited government intervention in the economy and promotion of development led by the private sector for the post-colonial development of the Malayan economy. Implicitly, it was assumed that this approach was expected to generate high economic growth, where the benefits would then trickle down to the majority of the lower income group, i.e. the Malay. It appeared that the World Bank proposal coincided with the interest of the Alliance government and the British (Gomez and Jomo, 1997, p. 14). The laissez-faire

[5] Nonetheless, while there was no active government intervention in the economy after independence was achieved, there was increased government expenditure for agriculture and the rural areas aimed at the development of the Malays.

approach nevertheless resulted in rapid economic growth. Real GDP growth rate was 4.1% in 1956-1960 period, 5.0% in the 1961-1965 period and 5.4% in the 1966-70 (Bank Negara 1994, p.4). However, despite the rapid growth, the trickle down process did not appear to work as expected. Towards the end of 1960s, about half the population was living under poverty as indicated in the incidence of poverty (see Table 5.5.1).

Table 5.5.1: Incidence of Poverty in Peninsular Malaysia (%), 1957 and 1970.

	1957/58	1970
All Households	51.2	49.3
Rural households	59.6	58.7
Urban households	29.7	21.3
Malay		
All households	70.5	65.9
Rural households	74.9	70.3
Urban households	32.7	38.8
Chinese		
All households	27.4	27.5
Rural households	25.2	24.6
Urban households	29.4	30.5
Indian		
All households	35.7	40.2
Rural households	44.8	31.8
Urban households	31.5	44.9

Source: Ikemoto (1985).

The complexity of the poverty problem arose from the fact that there was an association between poverty incidences with a particular ethnic group. The bulk of the poor were notably high among the Malays compared to the non-Malays. While in the period of 1957 to 1970 there was a reduction in the incidence of poverty among the Malays, they remained the largest. In 1970, 65.9 percent of the Malays were poor, compared to only 27.5 and 40.2 percent respectively of the Chinese and Indians. Besides, poverty incidence was more serious in the rural than in the urban areas. Therefore, while there were Chinese and Indian poor, as well as urban poor, generally the problem of poverty was perceived to be the problem of the rural and the Malay households. As the majority of the rural households were Malay, the Malay then became synonymous with the poor, i.e. the poor were generally the Malays, and the Malays were generally poor.

In addition, there was also a significant imbalance in terms of wealth (equity) ownership between the Malays and the Chinese. As shown in Table 5.5.2, by 1970 the Malays owned only about 2.4 percent of the ownership of share capital, while the Chinese owned 27.2 percent. Furthermore, there also existed inter-ethnic inequality in terms of employment and occupation, which reflected the differences in skills, education and experiences of each ethnic group. By 1970, about two-third of those employed in the primary sector were Malays, while the non-Malays on the other hand, were largely employed in the secondary and tertiary sectors as shown in Table 5.5.3. Besides the difference in the pattern of employment, there were also significant differences in terms of occupation. The professional, technical, sales and managerial jobs were predominantly held by the Chinese, while about three-quarter of the Malays were agricultural workers mostly involved in small, subsistence farming and fishing activities (Klitgaard and Katz, 1983: p. 335). Thus, not only were the Malays found to be poor, but also they were primarily associated with agriculture, a low productivity sector. On the other hand, the non-Malays were associated with mining, manufacturing and construction, a high productivity sector.

Table 5.5.2: Ownership of Share Capital (at par value) of Limited Companies, 1970 (%).

Ownership Group	**1970**
Malay/Bumiputera	2.4
Malay/Bumiputera individuals & institutions	1.6
Trust agencies	0.8
Non-Malays/non-Bumiputera	28.3
Chinese	27.2
Indian	1.1
Others	-
Nominee companies	6.0
Foreigners	63.4

Source: Gomez and Jomo (1997).

Table 5.5.3: Sectoral Employment of Bumiputera and non-Bumiputera (%) in Peninsular Malaysia, 1970.

Sector	**Bumiputera**	**Non-Bumiputera**
Primary[1]	67.6	32.4
Secondary[2]	30.8	69.2
Tertiary[3]	37.9	62.1

Note:
[1]Agriculture
[2]Mining, manufacturing, construction, utilities and transport.
[3]Wholesale and retail trade, finance, government and other services.
Source: Malaysia (1991).

However, while it was true that the bulk of the poor were Malays, and there existed economic imbalances between the Malay and the Chinese, an ethnic perspective of the problem appeared to be a narrow and simplistic view of the complex problem of poverty and inequality. This point became more obvious when income inequality was examined. Table 5.5.4 shows the mean income and income distribution in Peninsular Malaysia from 1957/58 to 1970. It shows that while the mean monthly household income in real terms increased from RM 207 in 1957/58 to RM261 in 1970, income inequality however worsened, as indicated by the increase in Gini coefficient from 0.412 to 0.513. The rich appeared to benefit the most from the rapid economic growth at the expense of the poor (middle and lower-income groups). The share of the national income captured by the high-income group (top 20 %) rose from 48.6 to 55.9 during the above period. The share of the poorest 40 per cent of the population fell from 15.9 to 11.6 per cent, and this fall was especially sharp between 1967/68 and 1970.

Table 5.5.4: Distribution of Household Income in Peninsular Malaysia, 1957-1970.

	1957/58	**1967/68**	**1970**
Mean income (RM Per Month)*	207	226	261
Median income (RM Per Month)*	150	145	164
Mean to Median Income Ratio	1.38	1.56	1.59
Gini coefficient	0.412	0.444	0.513
Income Share of:			
Top 20%	48.6	51.3	55.9
Middle 40%	35.5	34.4	32.5
Bottom 40%	15.9	14.3	11.6

Note:
*1959 RM prices
Source: Perumal (1989).

Besides, it appeared that the rich were mostly urban and the bulk of the poor were mostly rural (see Table 5.5.5). The ratio of the mean income between the urban and rural households -- the urban-rural disparity ratio -- went up, and there was a sudden increase in the two years before 1970. Income inequality worsened, but more for the rural population. Not only did the rural population become poorer than their urban counterparts on average, but also there was another development in the countryside. The Gini coefficient went up dramatically. Income inequality among the rural,

predominantly Malay population, increased faster than inequality amongst the urban dwellers.

Table 5.5.5: Distribution of Household Income in Peninsular Malaysia by Area, 1957-1970.

	1957/58	1967/68	1970
Urban Households			
Mean Income (RM Per Month)*	307	340	424
Median Income (RM Per Month)*	207	232	262
Gini Coefficient	0.429	0.447	0.494
Income Share of:			
Top 20%	49.6	51.8	55.0
Middle 40%	33.2	34.0	32.8
Bottom 40%	17.2	14.2	12.2
Rural Households			
Mean Income (RM Per Month)*	166	175	198
Median Income (RM Per Month)*	126	126	138
Gini Coefficient	0.374	0.399	0.463
Income Share of:			
Top 20%	44.5	46.8	51.0
Middle 40%	37.3	36.7	35.9
Bottom 40%	18.2	16.7	13.1
Urban-Rural Disparity Ratio	1.84	1.95	2.14

Note:
*1959 RM prices
Source: Perumal (1989) and Snodgrass (1980).

Income distribution also worsened for each of the three ethnic groups (see Table 5.5.6). The Malays moved from the least unequal to the most unequal, measured in the Gini coefficient of income distribution, amongst the three ethnic groups. The poor amongst the Indian population fared the worst in the following sense. The median and the mean income were identical for this group in 1957/58, but the median income was considerably lower than the mean in 1970. The median income had, in fact, declined between these two periods uniquely for the Indians. Besides, the picture of intra-group distribution painted in Table 5.5.6 was reflected in both urban and rural areas. The intra-group inequality increased amongst both the rural and urban Malays more than it did for their Chinese counterparts.[6] It was particularly pronounced amongst Malay rural households.

[6] Ikemoto (1985) breaks down the rural and urban households into three ethnic groups, and calculates the relevant Gini coefficients. He then demonstrates that intra-group inequality worsened most for the bumiputeras, in both the rural and urban areas.

Table 5.5.6: Distribution of Household Income by Ethnic Groups in Peninsular Malaysia, 1957-1970.

	1957/58	1967/68	1970
Malay			
Mean Income (RM Per Month)*	134	154	170
Median Income (RM Per Month)*	108	113	119
Gini Coefficient	0.342	0.400	0.466
Income Share of:			
Top 20%	42.5	48.2	52.5
Middle 40%	38.0	34.8	34.8
Bottom 40%	19.5	17.0	12.7
Chinese			
Mean Income (RM Per Month)*	288	329	390
Median Income (RM Per Month)*	214	246	265
Gini Coefficient	0.374	0.391	0.455
Income Share of:			
Top 20%	45.8	46.7	52.6
Middle 40%	36.2	36.3	33.5
Bottom 40%	18.0	17.0	13.9
Indian			
Mean Income (RM Per Month)*	228	245	300
Median Income (RM Per Month)*	228	180	192
Gini Coefficient	0.347	0.403	0.463
Income Share of:			
Top 20%	43.7	48.1	54.2
Middle 40%	36.6	35.6	31.5
Bottom 40%	19.7	16.3	14.3

Note:
*1959 RM prices
Source: Perumal (1989) and Snodgrass (1980).

Unfortunately, the observation that there was a widening gap between the rich and the poor, even within groups, did not form the central focus of the Malay nationalists political debate. Instead, the problem of distribution was viewed from the narrow ethnic perspective. As a result, even though the gap between the rich and the poor widened even within groups, the perception of injustice was focused only on the distribution between ethnic groups. The problem of intra-group inequality, particularly intra-Malay inequality, was ignored in the nationalist political discourse. The heart of the nationalist political debate fell on inter-group inequality, especially between the Malay and Chinese populations, had increased (see Table 5.5.7).

Table 5.5.7: Disparity Ratio Between Ethnic Groups in Peninsular Malaysia, 1957-1970.

	1957/58	1967/68	1970
Chinese-Malay	2.16	2.14	2.25
Indian-Malay	1.71	1.60	1.75
Chinese-Indian	1.27	1.34	1.29

Source: Calculated from Table 3.7

This ethnic analysis of income distribution seemed to be supported and encouraged by foreign economic advisers. For instance, it was noted that Just Faalant from the Harvard Development Advisory Service encouraged the Malay nationalist politicians to analyse the plight of the Malay community in ethnic terms (Jomo, 1991, p. 471). As the distributional problem was looked at from ethnic dimension, the complexity of the problem of poverty and inequality was reduced to just a simple problem of inter-ethnic inequality, i.e. Malay-Chinese inequality. Naturally, ethnicity then became the cornerstone of the nationalist solution to the Malay economic problem, as will be discussed in the next section.

5.7 The New Economic Policy 1971-1990

The poor economic condition of the Malays as well as the notable economic imbalance between the Malays and the Chinese was unsatisfactory to the Malay nationalists. Since to a certain degree the Malay nationalists had achieved their political agenda, they now embarked on their economic agenda. The momentum peaked in the 1960s. The Malays organised the First Bumiputera Economic Congress in June 1965, where the economic problems of the Malay were discussed and the strategies and programs to enhance the Malay economic position were drawn up. In September 1968, the second Bumiputera Economic Congress was held. This time around, the Congress reassessed the progress and achievements since the first congress. Basically, the Congress came to the conclusion that after almost ten years of independence, the progress made to uplift the economic position of the Malays had not matched the expectations of the Malays. The government was perceived as having failed to restore their position as the indigenous people to its proper place, as inspired in their struggle of independence. Feelings of dissatisfaction and strong criticism of

the government laissez-faire approach emerged from the Malays. For the Malays, the continuation of the colonial laissez-faire economic policy by the Alliance government after independence in 1957 had only ensured the growth of the Chinese economic interest, but it had not done much to increase the plight of the Malays. To the Malay nationalists, the Alliance government was too friendly to Chinese interests. A more aggressive government intervention was called for to speed the upward mobility of the Malays in education, employment and the economy of the country to keep them abreast with the non-Malays.

What made the situation explosive was the fact that the frustration was almost equivalent amongst the Chinese ethnic group. Towards the end of 1960s, the feeling of being discriminated against by the "Malay special rights" swelled up amongst the Chinese, even though they had accepted the "ethnic bargain" in 1957. From their perspective, the government was biased towards the Malays, and they thus became more vocal in criticising the "Malay special rights". Lee Kuan Yew, the leader of People's Action Party (PAP) of Singapore called for a "Malaysian Malaysia" rather than a "Malay Malaysia" as has been agreed in the "ethnic bargain" of 1957. The challenge of the Chinese to the Malay political primacy ended up with the ejection of Singapore from the Federation of Malaysia in 1965. The ejection of Singapore, which was a predominantly Chinese populated island, somewhat weakened the Chinese opposition to the "Malay special rights". However, the feeling of bitterness among the Chinese still remained and affected their support of the Alliance government in the 1969 general election.

Thus, towards the end of 1960s, both Malays and the Non-Malays had come to question the "ethnic bargain" of 1957. The Malays felt that the government was not doing enough nor speedily enough to overcome their economic problems and to restore them to their proper position as the indigenous people. The Chinese on the other hand felt that the government was doing too much for the Malays and felt discriminated. The growing frustration amongst the Malays and the non-Malays resulted in both groups voting against the Alliance government in the 10 May 1969 general election. It has been estimated that about half the Malays and about two-thirds

of the non-Malays voted against the Alliance (Jomo 1991, p. 471). The Alliance lost a few states to the opposition but still controlled the federal government. From the Malay perspective, the results of the election showed that the granting of citizenship to the non-Malays increased their political power and majority of them voted for the opposition. Thus, there existed fears among the Malays, that the non-Malays could even eliminate their political dominance. This led the Malays to perceive that the bargain of 1957 was a mere sell-out out to the non-Malays. The announcement that MCA would withdraw from the Alliance reasserted the fears of the Malays that the Chinese were renouncing the bargain of 1957 (Snodgrass 1980, pp. 55-56). The rising tension came to a peak with racial riots on the May 13 1969. It appeared that the racial riots marked a major turning point in Malaysia's development policy as they paved the way for affirmative action policies in favour of the Malay to be implemented. With the racial riots of 1969, the inter-ethnic bargain of 1957 was in essence terminated (Mauzy 1997, p.111). A new policy, called the New Economic Policy (NEP), was announced in 1970. The NEP represented a "new social contract" between the various ethnic groups (Mauzy, 1997, p. 113) or a "restatement" of the 1957 social bargain (Milne, 1976, p.239).

There are at least two versions on the underlying reasons behind the racial riots. Some Chinese politicians concluded that the problem was due to insufficient private investment and low economic growth during the economic recession in 1967-68, which the government had done little to counter (Snodgrass 1980, p. viii). Top UMNO leaders however, had concluded that the riot was due to the dissatisfaction of the Malays over economic matters (Mauzy 1997, p. 111). From UMNO point of view, the riot was inevitable due to the inter-ethnic economic imbalances, not only in income but also in employment patterns and in the ownership and control of wealth. As the demands from the Malay nationalists to implement their economic agenda peaked towards the end of 1960s, the riots appeared to give them the necessary justification to pursue their economic agenda rigorously by asserting a pro-Malay economic policy. In other words, the racial riots served as a convenient excuse for the nationalist factions in UMNO, which was the dominant political party in the Alliance government, to accommodate a pro-Malay economic policy (Stafford, 1997: p. 560).

The riots therefore, became a "blessing in disguise" to the Malay nationalists (Shamsul 1997, p. 250). Finally, as already mentioned above, a new economic policy, which was called the New Economic Policy (NEP), was announced in 1970. The NEP was to be implemented in the span of twenty years (1971-1990). The approach of the NEP to overcome the perceived socio-economic imbalances in society was by giving preferential treatments to the Malays and other indigenous people.[7]

The ultimate aim of the NEP was to achieve national unity and to foster nation-building. The way to unite the multiethnic population visualised in the NEP was through active government intervention to reduce inter-ethnic inequality by employing preferential treatments in favour of the Malays. Implicitly, therefore, inter-ethnic equality was depicted as a prerequisite to social peace and stability, as well as prosperity. As such, the NEP implicitly regarded that unity was synonymous with the correction of ethnic economic imbalances (Mauzy 1997, p. 120), and considered it inevitable but necessary to solve the inter-ethnic economic imbalances that existed in the country (Jomo 1991, p.469). There were two specific objectives of the NEP. The first was to eradicate poverty by raising income levels and increasing employment opportunities for all Malaysians irrespective of race, while the second was to restructure the society so that the identification of ethnic groups with economic function was eliminated (Malaysia, 1991).

The strategy to reduce poverty consisted of three major components (Shireen, 1998). The first was to improve the quality of life of the poor by improving the provision of social services to them such as housing, health, education and public utilities. The second was to increase the income and productivity of the poor. This was to be done by expanding their productive capital and utilising the capital efficiently by adopting modern techniques and the provision of better facilities such as land, replanting and redevelopment of crops, irrigation, introduction of new crops, and improved marketing, credit, financial and technical assistance. Finally, to increase employment opportunities for inter-sectoral mobility out of low productivity areas and activities. In

[7] For a discussion on the "special rights" as a strategy for development in Malaysia, see Means (1972).

this regard, the necessary education, training, financial and technical skills would be provided to facilitate the movements into the modern sector of the economy. With regard to the second objective, it was to be achieved through the restructuring of the employment pattern, ownership of share capital in the corporate sector, and the creation of a Bumiputera Commercial and Industrial Community (BCIC). The creation of BCIC was regarded as important since this would ensure a meaningful participation of the Bumiputera in the modern sector of the economy. Thus, the NEP envisaged restructuring of society in three levels. First, to increase the share of Bumiputera employment in the modern industrial sectors. Second, to increase the Bumiputera share in corporate ownership, and third, to increase the number of Bumiputera entrepreneurs and Bumiputera managerial control. The targets of the NEP with regards to its objectives are shown in Table 5.6.1 below.

Table 5.6.1: Selected Socio-Economic Targets of the NEP.

	1970	**Target (1990)**
I. Incidence of Poverty[1]		
Overall	49.3	16.7
Rural	58.7	23.0
Urban	21.3	9.1
II. Corporate Equity Ownership		
Bumiputera	2.4	30.0
Other Malaysians	34.3	40.0
Foreigners	63.3	30.0
III. Bumiputera Employment by Sector (% of total employment)		
Primary	67.6	61.4
Secondary	30.8	51.9
Tertiary	37.9	48.4
IV. Bumiputera Employment by Category (% of total employment)		
Professional and Technical	47.2	50.0
Administrative and Managerial	22.4	49.3
Clerical	33.4	47.9
Sales	23.9	36.9
Agricultural	68.7	62.3
Production	31.3	52.0
Services	42.9	52.3

Note:
[1]Peninsular Malaysia only
Source: Malaysia (1991), Table 2-1, p. 34.

In order to achieve these targets, various economic and social institutions were developed to assist the Bumiputera (Kok Swee Kheng, 1994; Rajakrishnan, 1993; Stafford, 1997). Government agencies that already existed in the 1960s to assist the Bumiputera such as FELDA (Federal Land Development Authority), MARA (Peoples Trust Council), FAMA (Food and Marketing Authority) and MARDI (Malaysian Agricultural Research and Development Institute) were supported with huge funds to implement and accelerate rural development projects. Besides the existing government agencies, new agencies such as RISDA (Rubber Industry Smallholders Development Authority), MAJUIKAN (Fisheries Board) and MAJUTERNAK (Cattle Board) were established to increase income and productivity of the Bumiputera.

In addition, UDA (Urban Development Authority) and SEDCs (State Economic Development Corporations) were also set up to carry out commercial and industrial projects, which in turn would allow and encourage greater participation of the Bumiputera in these activities, and hence induce them to move from rural to urban areas. Credit facilities, advisory services and the physical infrastructure such as shops and houses were also provided through agencies such as MARA, MIDF (Malaysian Industrial Development Foundation), CGC (Credit Guarantee Corporation) and Bank Bumiputera. Of significance in increasing Bumiputera participation and ownership in the economy was the establishment of PERNAS (Perbadanan Nasional or National Corporation) in 1970. PERNAS was responsible for buying and developing companies and holding them in trust for the Bumiputera, and latter selling them on to private Bumiputera interests.

Table 5.6.2 shows the amount of funds allocated in various Malaysia Five-Year Plans to carry out the two objectives of the NEP - poverty eradication and restructuring the society. From the Second to the Fifth Malaysia Plans, total allocation for both objectives of the NEP averaged more than 30%. It appears that poverty eradication formed a large proportion of the allocation. Nevertheless, the share of the restructuring increased over time, particularly in the Fourth Malaysia Plan.

Table 5.6.2: Federal Allocation for the NEP, 1971-1990 (RM Million).

	Poverty Eradication	Restructuring Society	Overlapping	Total	Total Federal Government Allocation
2nd Malaysia Plan	2350.0	508.3	3.4	2861.7	8950
(1971-1975)	(26.3)	(5.6)	(0.0)	(31.9)	
3rd Malaysia Plan	6373.4	2376.0	149.0	8898.4	31147
(1976-1980)	(20.5)	(7.6)	(0.5)	(28.6)	
4th Malaysia Plan	9319.2	4397.6	300.5	14017.3	39330
(1981-1985)	(23.7)	(11.2)	(0.8)	(35.7)	
5th Malaysia Plan	15835.1	4201.6	0.0	20036.7	48860
(1986-1990)	(32.4)	(8.6)	(0.0)	(41.0)	
4th Malaysia Plan	10497.0	6576.8	464.5	17538.3	74000
(1981-1985) (Revised)	(14.2)	(8.9)	(0.6)	(23.7)	
5th Malaysia Plan	13661.4	2711.6	0.0	16373.0	57512
(1986-1990) (Revised)	(23.8)	(4.7)	(0.0)	(28.5)	

Note:
Figures in parentheses show percentage of total allocation.
Source: Kok Swee Kheng (1994).

As the demand from the Malay nationalists to implement their economic agenda peaked towards the end of 1960s, it was not surprising that the two stated objectives of the NEP were actually associated with the Malay nationalist economic agenda. Thus, the NEP could be viewed as a fulfilment of the Malay nationalist economic agenda, as suggested by Shamsul (1997, p. 251):

> *"If seen from the Malay nationalist perspective, the two central objectives of the NEP, to eradicate poverty and to restructure society, are essentially parts of the overall nationalist economic agenda."*

Therefore, it was not a coincidence to find that between the two stated objectives of the NEP, more emphasis was given on the restructuring objective (Toh Kin Woon 1989, p. 244; Jomo 1991, p. 479). It was also the most controversial, since the restructuring objective involved inter-ethnic redistribution measures. It raised concern among the non-Malays that the restructuring objective would deprive and limit their economic opportunities (Heng Pek Koon, 1997). As a consequence, implementation of the NEP had to be in the context of rapid economic growth, thus ensuring that no other sections of the community would be deprived as a result. Therefore, rapid economic growth was of paramount important to realise the NEP's objectives. Towards this end, the NEP projected an annual growth rate of GDP 8.0 percent (Malaysia, 1991).

The reason for the concern of the non-Malays with regard to the restructuring objective of the NEP was attributed to the fact that this second objective of the NEP constituted the claim of the Malay nationalists to the national wealth. In fact, it was for this reason that the restructuring objective received the greatest public attention and more controversy than the poverty eradication objective. For instance, to ensure the success of the restructuring objective, there was increased regulation of the economy. Most important among the many moves, was the Industrial Co-ordination Act (ICA). The ICA was instituted in 1975 and became an instrument by which the government pressurised foreign and domestic businesses to restructure their equity and employment in line with NEP guidelines. The ICA also required manufacturers to acquire licences to enable them to operate. A license would only be issued if the manufacturer complied with the NEP guidelines with regard to employment and equity. The ruling of the ICA was that Malaysian companies with fixed investments above RM2.5 million and 75 workers[8], had to set aside 30.0 percent of their equity for Malay ownership. Also, manufacturing companies had to ensure that the composition of their workforce reflected the composition of the population, i.e. about half of the workers were expected to be Malays. Moreover, companies had to ensure that at least 30 percent of turnover was from work undertaken by Malay distributors (Kok Swee Kheng, 1994, p. 91). As a result, the ICA became the centre of some of the NEP's greatest criticism (Stafford 1997, p. 562).

5.8 Economic Growth and Development During the NEP Period

During the NEP period, Malaysia experienced a remarkably high economic growth. In the 1970s, the economy was growing at an average annual growth rate of 8.3 percent (Table 5.7.1). The economy was in recession in the 1985-86 period, but started to recover in 1987. Since then, GDP growth rate has been sustained at roughly more than 8.0 percent annually. The rapid growth was accompanied by relatively low and stable

[8] It was changed to RM500000 and 25 workers in 1986. For discussion on the impact of ICA on the Malaysian economy, see Yasuda (1991).

prices (Table 5.7.2) as well as a low and declining unemployment rate (Table 5.7.3). The remarkable growth and development record of Malaysia during the past decades has been widely acknowledged. Indeed, Malaysia has been recognised as one of the "economic miracles" of East Asia (World Bank, 1993).

Table 5.7.1: Annual Growth Rates of Gross Domestic Product (%, at constant prices).

	Malaysia Five-Year Plans					
	1st	2nd	3rd	4th	5th	6th
	1966-1970	1971-1975	1976-80	1981-1985	1986-1990	1991-1995
Year	(1965=100)	(1970=100)	(1970=100)	(1978=100)	(1978=100)	(1978=100)
1	6.2	10.0	11.6	6.9	1.2	8.7
2	1.0	9.4	7.8	6.0	5.4	7.8
3	4.2	11.7	6.7	6.2	8.9	8.3
4	10.4	8.3	9.3	7.8	9.2	9.2
5	5.0	0.8	7.4	-1.1	9.7	9.5
Average	5.4	8.0	8.6	5.2	6.9	8.7

Source: Bank Negara Malaysia (1994, 1996).

Table 5.7.2: Annual Growth Rate of Consumer Prices (%).

	Malaysia Five-Year Plans					
	1st	2nd	3rd	4th	5th	6th
	1966-1970	1971-1975	1976-80	1981-1985	1986-1990	1991-1995
Year	(1967=100)	(1967=100)	(1967=100)	(1980=100)	(1980=100)	(1994=100)
1	1.0	1.6	2.6	9.7	0.7	4.4
2	5.8	3.2	4.8	5.8	0.3	4.7
3	-0.2	10.5	4.9	3.7	2.5	3.6
4	-0.4	17.4	3.6	3.9	2.8	3.7
5	1.9	4.5	6.7	0.3	3.1	3.4
Average	1.6	7.4	4.5	4.7	1.9	4.0

Note:
Up to 1980, data refers to Peninsular Malaysia only
Source: Bank Negara Malaysia (1994, 1996).

Table 5.7.3: Unemployment Rate (%), 1960 - 1995.

Year	No. Employed ('000)	Labour force ('000)	Unemployment rate (%)
1960	2310	n.a.	n.a.
1970	3396	3682	7.8
1980	4817	5122	5.7
1990	6621	7047	5.6
1995	7915	8140	2.8

Note:
n.a. = not available
Source: (i) Kok Swee Kheng (1994). (ii) Malaysia (1996).

There was also a rapid structural transformation of the economy. Between 1970 and 1995, the contribution of agriculture to GDP declined from 29.0 percent to 13.5 percent, while the contribution of the manufacturing sector increased from 13.9 percent to 33.1 percent (Table 5.7.4). The economic structural changes were also been reflected in the structure of employment. The share of agriculture in total employment fell from 50.5 percent in 1970 to 18.0 percent in 1995, while the share of manufacturing sector has increased from 11.4 percent in 1970 to 25.9 percent in 1995 (Table 5.7.5).

The rapid growth of the economy was also reflected in the increase in per capita income. It was merely RM721 in 1960 (Bank Negara Malaysia, 1994), but increased significantly to RM6099 in 1990 and further to RM9786 in 1995 (Malaysia, 1996, p. 36). Besides, there was tremendous improvement in the quality of life among the Malaysians, such as in health and education (see Table 5.7.6).

Table 5.7.4: Composition of Gross Domestic Products (% at constant prices).

	1970	**1975**	**1980**	**1985**	**1990**	**1995**
Agriculture, Forestry and Fishing	29.0	27.7	22.9	20.8	18.7	13.5
Construction	3.8	3.8	4.6	4.8	3.5	4.5
Manufacturing	13.9	16.4	19.6	19.7	27.0	33.1
Mining and Quarrying	13.7	4.6	10.1	10.5	9.7	7.5
Services	36.2	47.5	42.8	44.2	42.3	41.4

Source: (i) Bank Negara Malaysia (1994, p. 6); (ii) Malaysia (1991, p. 72); (iii) Ministry of Finance (1996, p. xiv – xv), Economic Report 1996/97.

Table 5.7.5: Employment by Sector (% of total employment).

	1970	**1980**	**1990**	**1995**
Agriculture, Forestry and Fishing	50.5	39.7	27.8	18.0
Construction	4.0	5.5	6.4	8.3
Manufacturing	11.4	15.6	19.5	25.9
Mining and Quarrying	2.6	1.7	0.6	0.5
Services	31.5	37.5	45.7	47.3

Source: (i) Kok Swee Kheng (1994); (ii) Malaysia (1996).

Table 5.7.6: Selected Quality of Life Indicators

	1970	1990[a]
Life expectancy (years)[b]		
Males	61.6	69.0
Females	65.6	73.5
Birth rate (per 1000 population)	32.4	27.1
Infant mortality rate (per 1000 live birth)	39.4	13.5
Death rate (per 1000 population)	6.7	4.7
Primary school enrolment ratio (%)	88.2	98.9
Teacher/Pupil ratio (primary and secondary)	28.9	20.9
Doctor/Population ratio	1:4302	1:2656
Television sets (per 1000 population)	22	100
Passenger cars (per 1000 population)	26	96
Telephones (per 1000 population)	1.0	9.7
Total roads (km)	21182	39113

Notes:
[a]Refers to 1989 figures
[b]Peninsular Malaysia only
Source: Malaysia (1991).

The NEP also appeared to have been successful in reducing poverty. Indeed, government official figures show that the NEP reduced poverty beyond its target (see Table 5.7.7). Furthermore, the identification of ethnic group with economic function was reduced during the NEP period. Table 5.7.8 below shows that the percentage of Bumiputera in professional and technical occupation increased from 46.7 percent in 1970 to 64.3 percent in 1995. Indeed, the percentage of Bumiputera in all other occupations, except for agricultural occupation, increased. There was also an increase in the number and percentage of registered professionals from the Malay (Bumiputera) ethnic group (see Table 5.7.9). In 1970, only 225 Bumiputera were registered as professionals, which is about 5.0 percent of the total registered. In 1995 however, the number increased significantly to 19344, which was about one third of the total registered. These were a reflection of the significant increase in Malay enrolment in higher learning institutions, as well as in various technical training institutes during the NEP period. The ownership of share capital by the Bumiputera increased from 2.4 percent in 1970 to 20.6 percent in 1995 (see Table 5.7.10). Thus, even though it still

fell short of the NEP target of 30.0 percent, the Bumiputera seemed to have made quite a significant progress in terms of ownership and control of capital.[9]

Table 5.7.7: Incidence of Poverty in Peninsular Malaysia: Targets and Achievements of NEP.

	1970	OPP1 Target 1990	Achieved 1990
Peninsular Malaysia	49.3	16.7	15.0
Rural	58.7	23.0	19.3
Urban	21.3	9.1	7.3
Bumiputera	65.0		20.8
Chinese	26.0		5.7
Indians	39.0		8.0
Others	44.8		18.0

Source: Malaysia (1991, 1996).

Table 5.7.8: Employment by Occupation and Ethnic Group.

	Bumiputera			Chinese			Indians		
	1970	1990	1995	1970	1990	1995	1970	1990	1995
Professional & Technical	46.9	60.5	64.3	39.5	29.1	26.2	10.8	7.7	7.3
Teachers and Nurses		68.5	72.3		24.6	20.5		6.4	6.6
Administrative & Managerial	24.1	28.7	36.1	62.9	62.2	54.7	7.8	4.0	5.1
Clerical & Related Workers	35.4	52.4	57.2	45.9	38.6	34.4	17.2	8.6	7.7
Sales & Related Workers	26.7	29.9	36.2	61.7	58.4	51.9	11.1	6.8	6.5
Service Workers	44.3	57.8	58.2	39.6	26.8	22.8	14.6	9.5	8.7
Agricultural Workers	72.0	69.1	63.1	17.3	13.8	12.9	9.7	7.3	7.5
Production Workers	34.2	43.6	44.8	55.9	39.6	35.0	9.6	10.8	10.3

Sources: (i) Rajakrisnan (1993), Table 4, p. 224. (ii) Malaysia (1996), Table3-3, pp. 82-83.

Table 5.7.9: Registered Professionals[a] by Ethnic Groups, 1970-995.

	1970[b]		1980		1990		1995	
	No.	%	No.	%	No.	%	No.	%
Bumiputera	225	4.9	2534	14.9	11753	29.0	19344	33.1
Chinese	2793	61.0	10812	63.5	22641	55.9	30636	52.4
Indian	1066	23.3	2963	17.4	5363	13.2	7542	12.9
Others	492	10.8	708	4.2	750	1.9	939	1.6
Total	4576	100.0	17017	100.0	40507	100.0	58461	100.0

Notes:
[a]architects, accountants, engineers, dentists, doctors, veterinary surgeons, surveyors, lawyers.
[b]excluding surveyors and lawyers
Source: (i) Jomo (1991), p.498, Table 6; (ii) Malaysia (1996), Table 3-4, p. 84.

[9] Some have argued that the actual size of Bumiputera share of corporate capital is considerably underestimated (see Gomez and Jomo 1997, p. 166).

Table 5.7.10: Ownership of Share Capital (at par value) of Limited Companies

Ownership Group	1970	1990	1995
Bumiputera	2.4	19.3	20.6
Bumiputera individuals & institutions	1.6	14.2	18.6
Trust agencies	0.8	5.1	2.0
Non-Bumiputera	28.3	46.8	43.4
Chinese	27.2	45.5	40.9
Indian	1.1	1.0	1.5
Others	-	0.3	1.0
Nominee companies	6.0	8.5	8.3
Foreigners	63.4	25.4	27.7

Source: Gomez and Jomo (1997), Table 6.3, p. 168.

Thus, during the NEP period, not only was there remarkable economic growth and development of the country, there was also improvement in the economic position of the Malays as well. Poverty eradication in particular was successful under the NEP. Furthermore, there was the emergence of the Malay middle-class, as well as a noticeable Malay business-class, never before imagined.

5.9 The Paradox of the New Economic Policy

The success of the NEP in bringing the Malay community into mainstream economic activities has been highlighted as a vindication of the NEP (OPP2 1991, p.97-98). The assertion that Malaysia's growth and development was due to the NEP, however, raises a problem. First, which elements of the NEP have really had an impact on growth? Was it the restructuring element or was it the poverty eradication element? While both elements were redistributive in nature, they were different. The restructuring element, aimed at correcting inter-ethnic economic imbalances implied inter-ethnic redistribution of income and wealth from the non-Bumiputera to the Bumiputera. This element was the nationalist claim to the national wealth. Meanwhile poverty reduction implied a general redistribution of income and wealth from the rich to the poor. As the majority of the Malays were poor and the non-Malays were generally better-off in the early period of the NEP, it appeared that a redistribution from the rich to the poor coincided with inter-ethnic redistribution. This implied that there was a possibility that it was not really the pro-Bumiputera policy that promoted economic growth, but rather the poverty eradication element. However, the pro-

Bumiputera policy appeared to be coherent in the early years of the NEP as majority of the Malay were poor. Thus the claim that the remarkable growth of the economy was due to the NEP needs scrutiny. The problems with this claim is that it might have increased expectation for continuation of the pro-Bumiputera policy, with the perception that it has worked well for the development of the country. However, this might not be the case. Secondly, there is a disturbing development concurrent with the success of the NEP. While the incidence of poverty was significantly reduced, income inequality began to increase after 1990. The inequality trend is shown in Table 5.8.1 and Table 5.8.2 below.

Table 5.8.1: Trends in Household Income Distribution in Peninsular Malaysia

	1970	**1990**	**1995**
OVERALL			
Mean Income (RM per month)	267	1167	2007
Median Income (RM per month)	167	n.a.	n.a.
Gini Coefficient	0.502	0.446	0.464
Share of Top 20%	56.1	50.3	n.a
Share of Middle 40%	32.7	35.2	n.a
Share of Bottom 20%	11.2	14.5	n.a

Source: (i) Snodgrass (1980); (ii) Malaysia (1990, 1996).

Table 5.8.2: Gini Coefficient by Ethnic Groups, 1957-1995.

	Overall	**Malay**	**Chinese**	**Indian**
1957/58	0.412	0.342	0.374	0.347
1967/68	0.444	0.400	0.391	0.403
1970	0.502	0.466	0.455	0.463
1976	0.529	0.494	0.505	0.458
1979	0.493	0.488	0.470	0.460
1984	0.480	0.469	0.452	0.417
1987	0.458	0.447	0.428	0.402
1990	0.446	0.428	0.423	0.394
1995	0.464	n.a.	n.a.	n.a.

Note:
n.a.=not available
Source: (i) Snodgrass (1980); (ii) Shari and Zin (1990); (iii) Malaysia (1990, 1996).

The government appears to have stopped publishing intra-ethnic distribution figures, which were readily available until 1990, and it is likely that intra-ethnic inequality has worsened for at least the Malay community. Indeed, the government acknowledged that intra-ethnic income inequality is still high, particularly among the Bumiputera. The concern for the high intra-Malay inequality could be drawn from the following excerpt (Malaysia 1991, p.100):

> *"Intra-ethnic income disparities are still sizeable, with inequality among the Bumiputera being higher relative to that of the non-Bumiputera. The Gini coefficient in 1990 for the Bumiputera was 0.428 while that for the Chinese was 0.423 and the Indians 0.394. As another comparison, whilst the mean income of the top 20 percent of the Chinese household was about 8.6 times the income of the bottom 20 percent, the disparity between the top and bottom income households for the Bumiputera was about 9.2 times."*

As mentioned earlier, the claim that the NEP was responsible for Malaysia's economic success might have raised expectation for the continuation of the pro-Bumiputera policy. The expectation of greater equality of income distribution, an expectation which was encouraged by the NEP, could be fulfilled at least in terms of inter-ethnic equality for a period. However, as the NEP was successful in reducing poverty amongst the Malay, the expectation can no longer be fulfilled through inter-ethnic equality. Income redistribution policy must address the question of intra-ethnic (intra-Malay) inequality, but the nationalist policy (as will be seen below) cannot respond effectively to this question. The nationalist policy in essence becomes incoherent.

For the nationalist policy to be coherent, there must be a coherence of interests among its members. This implies that the Malays must not be deeply divided – be it socially, economically or politically. Therefore, as poverty amongst the Malay has been successfully reduced under the nationalist policy (NEP), the fact that intra-Malay inequality remained high throughout the NEP period must be an inconvenient fact for the nationalists. In other words, the success of the NEP has resulted in the Malays become no longer economically homogeneous as before. There has now emerged for example, a Malay urban working class, a Malay middle (professional) class and also a Malay business (capitalist) class. Hence, deeper social and political cleavages have

evolved in the nationalist (Malay) community. The Malays therefore no longer share a common economic and political interest amongst them as before. Besides, there is another interesting development. Cross-cutting cleavages also began to emerge in the society (Rae and Taylor, 1970) where the interests of some quarters of the Malay are coinciding with some quarters of other ethnic groups such as the Chinese and the Indians. These developments have brought about significant changes to the political landscape of the country.

As cleavages began to appear within the nationalist (Malay) community, the instruments of NEP were unable to respond to this new challenge. The political rhetoric of Malay nationalism is too impoverished to articulate a coherent response to the new reality that the Malays are no longer an economically homogeneous community. Thus, a nationalist political party (UMNO) that has gain political support previously through the rhetoric of ethnic nationalism (by creating the expectations of greater equality in the distribution of income between ethnic groups), finds it now difficult to address this new problem of intra-ethnic (intra-Malay) inequality. As the Malays are now economically and socially divided, UMNO is unable to articulate the interests of all the factions that existed within the Malays. The failure to address this intra-Malay distribution issue, in turn, has brought about major political crises facing UMNO today. In the 1999 general election, it has been estimated that about 70 percent of the Malays voted against UMNO (see Kamaruddin Jaafar, 2000, p. 27). The political rhetoric of ethnicity has become less appealing to the society and hence ethnicity is no longer the main criterion that divides the society.

There is also another significant development. The emergence of cross-cutting cleavages in the society has not only made the political rhetoric of ethnicity less appealing, but it also has encouraged the development of multiethnic political parties, which did not have much appeal to society before. What this development implies is that the emergence of cross-cutting cleavages has brought about a paradigm shift among the electorate on how politics will be shaped in future. While it was almost necessary for a particular ethnic group to have its own representative to articulate its interests previously, this is no longer true. Therefore the political interest of a

particular ethnic group is now no longer a monopoly of the political party of that particular ethnic group. In other words, it is no longer necessary to have a Malay politician expressing the political interests of the Malays, a Chinese politician expressing the political interests of the Chinese, or an Indian politician expressing the political interests of the Indians. The success of ethnic nationalism has paradoxically made ethnic politics less appealing, and multiethnic politics become promising in the future. Thus, while the success of the NEP might have raised expectation for the continuation of the pro-Bumiputera policy, the policy is now not only incoherent for development of the Malays (Bumiputera), it also can no longer draw considerable support from them as before.

5.10 Conclusion

A desire to develop a country where inequality between ethnic groups is significant raises the question of the way to achieve it. The nationalist ideology appears to provide a solution. For the nationalist ideals to be fulfilled, it must invent nation. Nation is "an imagined political community", where the members perceive themselves to belong to the same group. It entails exclusion of people and defines the terms for inclusion. Therefore, economic development to the nationalist is not only a question of opening up economic opportunities and creating wealth, but more importantly, it is also the question of who owns and controls the economy. The nationalist ideal could be viewed as the claim to national wealth, i.e. the stock of wealth in a geographical area that belongs to the nationals of that geographic entity. It follows that what matters for the nationalist with regards to equality is the equality between groups rather than between individuals. In this chapter, the nationalist economic policy that aimed at improving the economic position of the Malay ethnic group in Malaysia is examined to explore the nationalist claim.

It has been shown that since the 1970s, Malaysia has achieved a remarkable growth and development. The economic structure of the country has also been transformed from dependence on agriculture to a more broadly based economy. An exceptional

success has been made in poverty eradication. These successes have been made against the background of nationalist rhetoric informing economic policy. A closer examination of the record suggests the problems that the nationalist analysis claims to solve, cannot be solved. The policy of distributing income on an ethnic basis succeeded in the initial years because the poor were overwhelmingly from the Malay community. However, this rhetoric has made it difficult for the government to respond to cross-cutting cleavages which arose when the poor were no longer entirely from the Malay ethnic group. Consequently, internal contradictions of the nationalist policy become more and more apparent as the government pressed on with continuing the nationalist policy to develop the Malay ethnic group. But continuing the nationalist policy is no longer effective when the Malay is no longer economically homogeneous. The nationalist policy cannot respond effectively to the new problem of high intra-Malay inequality, which in effect results from the nationalist policy itself. Indeed, this internal contradiction might explain the current political turmoil in Malaysia. It is shown here that the nationalist solution, while it has been successful in past, has also sewn the seeds of Malaysia's current problems. In other words, a policy that is sustained through the rhetoric of ethnic nationalism has become obsolete due to the policy's own successes. The nationalist analysis therefore cannot solve the problem it claims it is capable of solving. As examined here, this idea of ethnic nationalism does not sit well with the search for evidence in the discipline of economics.

Chapter 6

Income Distribution and the Changing Tolerance Towards Inequality

6.1 Introduction

This chapter is inspired by a puzzling observation with regard to the New Economic Policy (NEP) in Malaysia. Why is it that despite the success of the NEP in improving the economic position of the Malay community, the support of the Malay to UMNO (the Malay nationalist political party that inspired the NEP) has started to fall apart? The argument advanced in this chapter is that this could be explained by Hirschman's (1973) "tunnel effect" proposition. Hirschman's tunnel effect describes the underlying reason for the changing tolerance of a society towards inequality in the course of economic development. Hirschman (1973) argues that at an earlier stage of development, society seems to accept and tolerate the existence of high level of income inequality. The reason for this is that, societal tolerance towards inequality is great at the initial stage of development due to the expectation that in due course everybody will gain from development programs undertaken by the government. However, if high inequality persists, societal tolerance to inequality will be eroded. As the beneficiary of the development programs is identified as a small section of the society, then a perception of injustices will emerge in the rest of society. The existence of high inequality in the society would no longer be tolerated.

This chapter is organised as follows. Section 6.2 describes the framework of analysis of this chapter and explains the tunnel effect proposed by Hirschman (1973). Section 6.3 describes the puzzling observation on the success of the NEP. Section 6.4 examines income inequality and poverty during the pre-NEP period and shows how, even though there exists a high intra-Malay inequality, the existence of glaring Malay-Chinese inequality has be used by the Malay nationalists to garner the support from the Malay community. Section 6.5 reports analysis on income inequality and

poverty during the NEP period as well as discussion on the underlying reason for the erosion of the tunnel effect among the Malays. Section 6.6 presents the conclusion of the chapter.

6.2 Rational Choice and Hirschman's Tunnel Effect

To understand the paradox of the NEP, it requires an understanding of the reason why a nationalist political party that initially received a solid support from the nationalist community later found that support falling away. This in turn, requires an understanding of how a nationalist individual would behave in a situation where nationalism is used as a strategy to secure political support. One way to understand this question is to examine the behaviour of an individual from the rational choice framework. According to this approach, an individual is nothing more than a set of preferences (or tastes), which is summarised in the individual utility function. The individual is assumed to be only interested in furthering his or her own interest. Given the constraint, the individual is assumed to maximise his utility. Thus, individuals are viewed as "living, choosing, economising persons" (Buchanan 1978, p.5); or the individuals as a "resourceful, evaluative, maximising man" (Brunner 1987, p.371). Society is therefore viewed as a collection of individuals engaged in furthering self-interest. In pursuing his or her own self-interest, an individual might also pursue the collective or social interest. However, it is not the intention of the individual to further the collective or common interest. That is just coincidental or unintentional. The objective of the individual is just to further only his or her own self-interest.

This rational choice framework appears useful in analysing the behaviour of the individual in making choices with regards to politics, in particular where nationalism exists. Here the model of economic nationalism proposed by Johnson (1965) is followed.[1] Following Johnson (1965), nationalism could be viewed as a form of discrimination, where discrimination against one group of people by another, based

[1] Johnson (1965) in turn, derives the model from Becker (1957), Downs (1957) and Breton (1964).

solely on the criterion of group identity, arises from a "taste for discrimination". The taste for discrimination ensures that there exists enjoyment, value or utility from avoiding contact with the group discriminated against. Therefore an individual with a taste for discrimination will derive utility from having certain jobs held or certain property owned by, or for having the rights on certain kind of jobs to, members of his national or ethnic group rather than by the non-members. The utility could be in the form of psychological satisfaction or material gains. Thus, a person with a taste for discrimination is willing to pay higher prices or accept lower prices in their economic transactions in order to enjoy the satisfaction from discrimination.

This analysis of discrimination is extended to the analysis of nationalism. This is simply done by substituting the taste for discrimination with a "taste for nationalism". Therefore in this context, an individual could be imagined to have a taste for nationalism. An individual with such a taste could be regarded as having certain preferences, demands or claims on some other national or ethnic group, and this individual derives enjoyment or utility from them. As with an individual with a taste for discrimination, an individual with a taste for nationalism will also derive utility for having certain jobs held or certain property owned by, or for having the rights on certain kind of jobs to, members of his national or ethnic group rather than by the non-members. Besides, as an individual with a taste for nationalism is assumed to be a rational individual, this individual will attempt to maximise his utility, including the enjoyment from that taste for nationalism.

Now, in the context of a democratic setting, where individuals (or electorates) are assumed to have a taste for nationalism, how then can a political party win or sustain power? In other words, given that the electorate has a taste for nationalism, what is the likely behaviour of a political party in a democratic setting? In this regard, Downs (1957) has extended the rational choice framework to analyse the process of selecting a government in a democratic setting. His central argument is that, political parties formulate or promote a certain policy with a motive to gain votes, and hence power. Political parties do not seek to gain power in order to carry out certain predetermined policies or to serve any particular interest groups. It is the other way round. Political parties are assumed to offer certain policies and serve interest groups in order to gain

power. Thus, a political party that seeks to gain or sustain power, i.e. to gain votes or become elected, must supply the policies demanded by the voters. In this sense, a political party could be viewed as a firm that sell policies for votes, instead of product for money. Voters give up votes for policies, instead of giving up money for products. Political parties therefore are assumed to maximise the number of votes they receive just as a firm in the market that maximises profits. Therefore, in a situation where the majority of the electorate are assumed to have a taste for nationalism, and hence have a strong demand for nationalistic policies, political parties are expected to pursue nationalistic policies in order to maximise votes and win power.

Now, suppose that a nationalist political party has won the vote and has the power to implement its nationalistic policy. It is interesting then to know who within that national or ethnic group will actually get the benefits from such a policy. This would be an interesting investigation since it is not uncommon for a nationalist political party to claim that their nationalist policy is good for all individuals of the national or ethnic group that their party represents. Is this really the case? In other words, are the benefits from a nationalist policy equally divided amongst the national or ethnic group, or the gains are accrued only to some within that national or ethnic group? In short, it is interesting to predict how income and wealth is distributed among the national or ethnic group under a nationalist policy. For this purpose, the idea of nationalism develop by Breton (1964) is useful. He identified nationality (or ethnicity) with ownership of wealth. According to Breton (1964, p.377):

> *"...nationality or ethnicity to an individual or to a group is the fraction of the total stock of wealth, in a given territory, owned by persons of the same ethnic or national origin as the person or groups under consideration.... [It] is a form of capital which can be augmented through investment or reduced through depreciation and consumption. Nationalism is both the disposition that leads an individual to favour and to justify investment in nationality and the encouragement which he gives to the investment of present scarce resources for the alteration of the interethnic or inter national distribution of ownership."*

Looking from Breton's perspective, nationalism therefore is about investment in nationality or ethnicity. A political party that pursues nationalistic policies could be

viewed as seeking to extend the property or wealth owned by the national or ethnic group through investment. What seems to be interesting is that this investment brings utility to a nationalist (i.e. an individual with a taste for nationalism) even though he or she might not have ownership of it because what matters for an individual with a taste for nationalism is the ownership of that investment. As long as the ownership belongs to his ethnic or national group, regardless of who they are, this individual will derives utility from the investment. The reward from investment in nationality comes in two forms – tangible (monetary) and intangible (non-monetary) rewards. Of course the tangible rewards such as income as well as the prestige from the investment accrue to the individual (of the national or ethnic group) who holds the assets or offices allocated to the national or ethnic groups. For the rest of the group, i.e. those having the taste for nationalism, the rewards or satisfaction derived from investment in nationality is only "of a psychic order and is usually referred to as pride, sense of identity, and the like" (Breton 1964, p. 379). Therefore, while the intangible rewards are generally dispersed to the whole national or ethnic group (as long as they have a taste for nationalism), the tangible rewards accrue only to some within the national or ethnic group, most likely the educated, entrepreneurially qualified, wealthy and the elite of the group. Breton (1964, p. 380) argues that, even though nationalist policies might redistribute income from one national (or ethnic) group to another, the policies will only succeed in redistributing it from one social group to another within their own national (or ethnic) group. Since not everybody within that national or ethnic group will receive the tangible rewards (i.e. income or wealth), then examination on income and wealth distribution within that national group is important.

The above discussion only predicts the distributional consequences of a nationalistic policy. It does not however tell us how the support from the nationalist community changes in line with income distribution changes over time. Therefore, the above framework needs to be extended to incorporate the changes in the voter attitude (or perception) towards the nationalist policy. In this regards, Hirschman's (1973) explanation on changing societal tolerance towards inequality is helpful. Hirschman explains the changes in societal tolerance towards inequality using the following analogy, or what he called the tunnel effect (1973, p.545):

"Suppose that I drive through a two-lane tunnel, both lanes going in the same direction, and run into a serious traffic jam. No car moves in either lane as far as I can see (which is not very far). I am in the left lane and feel dejected. After a while the cars in the right lane begin to move. Naturally, my spirits lift considerably, for I know that the jam has been broken and that my lane's turn to move will surely come any moment now. Even though I still sit still, I feel much better off than before because of the expectation that I shall soon be on the move. But suppose that the expectation is disappointed and only the right lane keeps moving: in that case I, along with my left lane cosufferers, shall suspect foul play, and many of us will at some point become quite furious and ready to correct manifest injustice by taking direct action (such as illegally crossing the double line separating the two lanes)."

According to Hirschman (1973), it is this tunnel effect that responsible for generating and sustaining the tolerance of the society to a high or increasing income inequality at an earlier period of economic development. However, if inequality does not improve over a certain period of time, then the societal tolerance towards inequality will run out. Once again, in Hirshman (1973, p. 545) own words:

"In the early stages of rapid economic development, when inequalities in the distribution of income among different classes, sectors, and regions are apt to increase sharply, it can happen that society's tolerance for such disparities will be substantial. To the extent that such tolerance comes into being, it accommodates, as it were, the increasing inequalities in an almost providential fashion. But this tolerance is like a credit that falls due at certain date. It is extended in the expectation that eventually the disparities will narrow again. If this does not occur, there is bound to be trouble and, perhaps, disaster."

The tunnel effect operates because the advances of others provide information to an individual about a better or promising future. This information in turn produces satisfaction to the individual and it in turn "overcomes, or at least suspends, envy " (Hirschman 1973, p.546). Thus, the expectation of the individual that he or she will eventually improve as did the others, brings about satisfaction that allows the individual to have tolerance about the advances of the others. It is this expectation that eventually he or she will gain that forms the basis for the acceptance or tolerance of inequality.[2]

[2] Societal tolerance towards inequality is also affected by the context in which inequality exists. For instance, the tolerance towards inequality (as well as economic hardship) might increase in time of economic growth and prosperity, but will decline in time of economic crisis. Nevertheless, if the economic crisis is due to uncontrollable factors (e.g. natural disaster or foreign sabotages), the existing inequality or hardship might be justifiable or tolerated. Societal tolerance towards inequality might also decline in a situation where there is an excessive display of wealth on the part of the few rich. Thus in a society where the rich are more easily visible, societal tolerance towards inequality might be lower than in a society where the rich are unnoticeable. See Adelman and Robinson (1989, pp. 950-952).

Following Hirschman's tunnel effect proposition, it could be predicted that voters' support for the nationalist economic policy will change over time. Initially, voters that have the taste for nationalism will vote for a nationalist economic policy (or nationalist political party). The reason is that a person with a taste for nationalism would be happier if income redistributed occurs from other ethnic groups to his or her ethnic group. However, the main reason for him or her to support the nationalist policy is that he or she expects to secure the tangible benefits from investment in nationality, such as in terms of jobs or property allocated to the ethnic group.

However, as mentioned earlier, the distribution of the tangible rewards from investment in nationality is unlikely to be evenly distributed amongst the national or ethnic group. Only some might succeed in securing the tangible rewards, while others might not. Now, as the beneficiaries of the nationalist policy become obvious, the individual who is not successful in securing the tangible rewards will start to question his rationale for supporting the nationalist policy. As those who got the tangible rewards from the investment in nationality become apparent, nationality is likely to mean different things to those who got the tangible rewards and those who did not. For those who did not, they are likely to cease supporting the nationalist economic policy. In other words, if an individual with a taste for nationalism did not realise any economic improvement (relative to others in his group) from the nationalist economic policy over a certain period of time, there is no reason to expect that the individual to continue to support the nationalist policy. This is a sensible thing to do given that the individual is rationale and interested only in pursuing his or her interest, rather than the interest of his or her national or ethnic group. In this situation, the tunnel effect or the psychic satisfaction begins to diminish. Therefore, as the beneficiaries of the nationalist policy become apparent (or the distributional impact of nationalist policy becomes noticeable), it is expected that support for the nationalist political party would start to fall apart.

6.3 The Puzzle of the New Economic Policy

Racial riots occurred in Malaysia in 1969. From the Malay nationalist perspective, the riots were a predictable consequence of inter-ethnic (Malay-Chinese) economic imbalances that existed in the society. Therefore, from a Malay nationalist point of view, continuing the liberal economic policy that had been pursued since independence in 1957 would only ensure the widening of the inter-ethnic economic imbalance. The Malay nationalists called for more aggressive government intervention to speed the upward mobility of the Malays in education, employment and the economy of the country, and hence to keep them abreast with the non-Malays. The government announced the New Economic Policy (NEP) in 1970 with achieving national unity as the ultimate aim. The NEP's main objectives were: (i) to eradicate poverty irrespective of race; and (ii) to restructure society so that the identification of ethnic groups with specific economic function would be eliminated. With regards to the second objective, the NEP gave preferential treatment to the Malays and other bumiputeras to overcome the perceived socio-economic imbalances in the society. In essence, what really mattered for the NEP was to make ethnic groups more equal, regardless of inequality within each group. Thus, intra-ethnic inequalities seemed to be acceptable under the NEP (see Mahathir 1998, pp. 33-34). Three measures were visualised in the NEP to ensure the restructuring objective was met. First, to increase the share of bumiputera employment in the modern industrial sectors. Second, to increase the bumiputera share in corporate ownership, and third, to increase the number of bumiputera entrepreneurs and bumiputera with managerial responsibilities. When the NEP came ended in 1990, the National Development Policy (NDP) replaced it. While there were changes in strategy and priorities, the main spirit of the NEP, i.e. to preferentially uplift the economic and social status of the Malay was maintained in the NDP.

During the NEP period, Malaysia experienced a remarkably high economic growth. This remarkable growth record of Malaysia during the past decades was widely acknowledged. The World Bank (1993) recognised Malaysia as one of the "economic miracles" of East Asia. The rapid growth was accompanied by relatively low and stable prices as well as a low and declining unemployment rate. There was also a

rapid structural transformation of the economy from an economy based on agriculture to an economy based on industry. The NEP appears not only to have brought about rapid growth and structural change to the economy, but also to have been successful in improving the economic position of the Malay ethnic group. Poverty incidence among the Malays (bumiputera) was significantly reduced from 65.0 percent in 1970 to 20.8 percent in 1990. Furthermore, the identification of ethnic group with economic function was also reduced during the NEP period. In terms of ownership and control of capital, the Malay (bumiputera) seem to have made quite significant progress, even though it still fell short of the NEP target of 30.0 percent. The ownership of share capital by the bumiputera increased from 2.4 percent in 1970 to 20.6 percent in 1995. To the government, the success of the NEP in bringing the Malay community into mainstream economic activities was highlighted as a vindication of the NEP (OPP2 1991, p.97-98).

As mentioned above, the NEP was successful not only in achieving rapid growth and development of the country, but also in uplifting the economic position of the Malay. However, towards the end of the NEP period, despite this success, the support of the Malay community towards UMNO began to fall apart. This was evidenced in the general elections in the 1990s. In the 1990 general election, the number of UMNO seats fell from 83 in 1986 to 71 (Table 6.3.1).

Table 6.3.1: Number of Seats won by UMNO in the Parliamentary General Elections.

	1986	**1990**	**1995**	**1999**
Total Parliamentary Seats	177	180	192	193
No. of Seats won by the National Front	148	127	162	148
No. of Seats won by UMNO	83	71	88	72
Percentage of UMNO Seats to Total Seats	*46.89*	*39.44*	*45.83*	*37.31*
Percentage of UMNO Seats to the no. of Seats won by the National Front	*56.08*	*55.91*	*54.32*	*48.65*

Source: (i) Kok Swee Kheng (1994); (ii) Azman Anuar (1998); (iii) Nurbaiduri Ramli (2000).

Besides, UMNO lost control of Kelantan, a state heavily populated by the Malays, to PAS (and Semangat 46). In the 1995 general election however, UMNO managed to regain and increase their parliamentary seats to 88. The clearest evidence of the declining support of the Malay to UMNO however, was revealed in the most recent (1999) general election when the number of UMNO seats fell from 88 in 1995 to 72. It was for the first time that UMNO won less than half of the total seats won by the National Front. Four federal ministers and one State Chief Minister from UMNO lost their seats. In fact, in almost the entire seats won by UMNO, their majority was reduced significantly (see Table 6.3.2). Furthermore, besides Kelantan, which has been controlled by PAS since the 1990 general election, PAS won another state, Terengganu, from UMNO. PAS and other parties in the Alternative Front[3] also made significant advances in other states such as Kedah, Perlis, Perak, Pahang, Selangor, Negeri Sembilan and Melaka (see Table 6.3.3). The results of the 1999 general election showed that UMNO significantly lost its traditional support from the Malays. It was a known fact that UMNO only won its seats mainly with the support of the non-Malay voters. In a constituency where 90-100 percent of the voters were Malays, UMNO (National Front) only managed to win four out of 25 seats (Table 6.3.4). Furthermore, in all by-elections after the 1999 general election saw that the majority gain by UMNO/National Front declined further. There is a puzzling observation here. The Malay nationalist approach to the Malay economic problem (i.e. the NEP) appeared to have been successful in uplifting the Malay economic position. However, despite this success, the support of the Malay community for UMNO, which inspired the NEP, started to erode. UMNO appeared to have lost their traditional support from the Malay, particularly in the 1999 general election.

[3] Alternative Front consists of four main opposition parties: PAS (Malaysian Islamic Party), PRM (Malaysian Peoples Party), KeADILan (National Justice Party) and DAP (Democratic Action Party).

Table 6.3.2: Peninsular Malaysia: Majority of UMNO Parliamentary Seats in the 1995 and 1999 General Election.

	Parliament Constituency	UMNO's Majority in 1995	UMNO's Majority in 1999	Changes Between 1995-1999
1	**P1 Padang Besar**	10070	4519	-5551
2	**P2 Kangar**	11000	4049	-6951
3	**P3 Arau**	6929	1586	-5343
4	**P4 Langkawi**	8425	6547	-1878
5	**P6 Kubang Pasu**	17226	10138	-7088
6	**P14 Merbok**	22201	15376	-6825
7	**P15 Sungai Petani**	26221	12133	-14088
8	**P18 Kulim Bandar Baharu**	14302	8067	-6235
9	**P32 Gua Musang**	8980	2925	-6055
10	**P41 Kepala Batas**	17834	11175	-6659
11	**P42 Tasek Gelugor**	12651	4236	-8415
12	**P51 Balik Pulau**	30046	9434	-20612
13	**P53 Larut**	Won Without Contest	4009	-
14	**P55 Bagan Serai**	6250	1584	-4666
15	**P56 Bukit Gantang**	15154	5101	-10053
16	**P58 Cenderoh**	11793	3990	-7803
17	**P60 Tambun**	26639	7084	-19555
18	**P64 Kuala Kangsar**	10649	2774	-7875
19	**P70 Pasir Salak**	17115	5045	-12070
20	**P72 Bagan Datoh**	14830	4617	-10213
21	**P75 Lipis**	10113	6356	-3757
22	**P77 Jerantut**	7194	1463	-5731
23	**P78 Kuantan**	23096	7361	-15735
24	**P79 Paya Besar**	16759	3563	-13196
25	**P80 Pekan**	10793	241	-10552
26	**P81 Maran**	14046	3748	-10298
27	**P84 Temerloh**	7852	213	-7639
28	**P85 Rompin**	12825	6028	-6797
29	**P86 Sabak Bernam**	14452	901	-13551
30	**P87 Tanjung Karang**	15818	2075	-13743
31	**P89 Kuala Selangor**	18342	9920	-8422
32	**P91 Gombak**	30878	803	-30075
33	**P93 Hulu Langat**	30812	3866	-26946
34	**P98 Shah Alam**	40715	1440	-39275
35	**P101 Kuala Langat**	9211	8020	-1191
36	**P102 Sepang**	15669	7162	-8507
37	**P105 Wangsa Maju**	27890	5618	-22272
38	**P107 Titiwangsa**	18966	1513	-17453
39	**P109 Lembah Pantai**	13389	1454	-11935
40	**P145 Labuan**	5147	6515	1368
41	**P113 Jelebu**	2940	7119	4179
42	**P114 Jempol**	15704	11919	-3785
43	**P115 Tampin**	23452	9979	-13473
44	**P116 Kuala Pilah**	20600	2818	-17782
45	**P120 Alor Gajah**	25096	12332	-12764
46	**P122 Batu Berendam**	22325	7288	-15037
47	**P124 Jasin**	22128	10691	-11437
48	**P126 Ledang**	23361	13507	-9854
49	**P127 Pagoh**	17599	12857	-4742
50	**P129 Mersing**	13525	10861	-2664
51	**P131 Parit Sulong**	25354	17657	-7697
52	**P133 Muar**	9483	7182	-2301
53	**P134 Sri Gading**	26350	17558	-8792
54	**P135 Batu Pahat**	24993	17448	-7545
55	**P136 Tenggara**	24518	20817	-3701
56	**P137 Sungai Benut**	21142	20692	-450
57	**P139 Kota Tinggi**	33760	32161	-1599
58	**P140 Tebrau**	39140	35485	-3655
59	**P141 Johor Baru**	34118	24558	-9560
60	**P142 Pulai**	29403	24568	-4835
Average		**18428**	**8669**	**-9452**

Source: Kamaruddin Jaafar (2000), Table 1, pp. 24-25.

Table 6.3.3: Percentage of Votes received by the **National Front** in the General Election by States (1986, 1990, 1995 and 1999).

	Percentage Votes Received by the National Front				**Changes in the Percentage Votes Received**		
States	**1986**	**1990**	**1995**	**1999**	**1986-90**	**1990-95**	**1995-99**
Perlis	66.5	65.5	67.0	56.2	-1.00	1.50	-10.80
Kedah	60.2	62.3	61.8	55.7	2.10	-0.50	-6.10
Kelantan	54.1	32.7	42.1	38.9	-21.40	9.40	-3.20
Terengganu	60.2	54.1	52.8	41.2	-6.10	-1.30	-11.60
P.Pinang	49.4	51.0	59.1	51.4	1.60	8.10	-7.70
Perak	55.4	56.2	62.4	55.5	0.80	6.20	-6.90
Pahang	64.3	63.0	66.6	57.4	-1.30	3.60	-9.20
Kuala Lumpur	40.7	43.1	57.0	50.2	2.40	13.90	-6.80
Selangor	63.2	58.2	71.6	54.7	-5.00	13.40	-16.90
N.Sembilan	64.4	60.2	66.5	59.2	-4.20	6.30	-7.30
Melaka	58.4	60.6	64.8	56.6	2.20	4.20	-8.20
Johor	65.7	61.5	75.6	72.9	-4.20	14.10	-2.70
Labuan	28.0	59.7	64.8	71.3	31.70	5.10	6.50
Sabah	47.4	16.7	50.4	59.4	-30.70	33.70	9.00
Sarawak	55.1	57.1	61.5	65.9	2.00	4.40	4.40
Malaysia	**57.6**	**53.4**	**65.1**	**56.5**	**-4.20**	**11.70**	**-8.60**

Source: Strategic Info Research Development (2000), p. 60.

Table 6.3.4: Number of Seats won by the **National Front** and **Alternative Front** in the Malay Majority Constituents (Peninsular Malaysia) in the 1999 General Election.

Percentage of Malay Voters	Total Seats	No. of Seats Won by the **National Front**	No. of Seats Won by the **Alternative Front**	Percentage Votes Received by the **National Front**	Percentage Votes Received by the **Alternative Front**
90 – 100	25	4	21	42.4	57.6
80 – 90	15	8	7	54.5	45.5
70 – 80	12	10	2	53.3	46.7
60 – 70	19	17	2	60.8	39.2
50 – 60	27	27	0	61.7	38.3
Total	98	66	32	55.2	44.8

Source: Strategic Info Research Development (2000), p. 20.

The reasons underlying the decline in Malay support for UMNO in the 1999 general elections are complex. There was internal dissension within UMNO, culminating in a public dispute between the Prime Minister, Mahathir Mohammed, and his erstwhile deputy, Anwar Ibrahim. The latter was removed not only from his government post as Deputy Prime Minister but his party post as Deputy President of UMNO as well. He was committed to trial in a criminal court. The elections were also conducted in the shadow of the Asian financial crisis, in which the Malaysian economy suffered much

in 1997-1998. It is the argument of this chapter that the failure of UMNO to rally supporters sufficiently to offset the above background effects – nearly 70 percent of the Malay voters are estimated to have voted against the government (Kamaruddin Jaafar, 2000, p. 27) – may have to do with the Hirschman's tunnel effect. The plausibility of this line of reasoning is strengthened by the fact that the economy had began to recover at the time of the elections in 1999, having emerged from the trough reached at the nadir of the Asian crisis in 1998. The Prime Minister's defensive statements about the irrelevance of intra-group inequality amongst the Malays (Mahathir 1998) is an indication that the government had perceived a concern amongst the Malay community about the failure of the NEP to address the problem of intra-group inequality.

6.4 Income Inequality and Poverty 1957- 1970

Let us start examining how the nationalist economic policy initially became appealing to the Malay ethnic group in Malaysia. As will be seen shortly, at the onset of the NEP, besides the existence of glaring inter-ethnic (Malay-Chinese) inequality, there was also a significant problem of intra-ethnic (intra-Malay) inequality. Indeed, intra-group inequality was worst among the Malays. Given this fact, why did the NEP disregard the question of intra-Malay inequality and yet still manage to retain considerable support from the Malay community? In other words, why could the Malay community be tolerant towards intra-Malay inequality, but intolerant towards Malay-Chinese inequality? This section attempts to shed some light on this question.

Table 6.4.1 presents income distribution during the pre-NEP period. It is clear that between 1957 and 1970, income inequality worsened as shown by the increase in Gini coefficient from 0.412 in 1957 to 0.513 in 1970. The income share of the high-income group (top 20%) rose from 48.6 to 55.9 percent. The share of the poorest 40 per cent of the population fell from 15.9 to 11.6 per cent. Thus, it appeared that during the pre-NEP period, the rich did better.

Table 6.4.1: Household Income Distribution in Peninsular Malaysia, 1957-1970.

	1957/58	1970	% Δ
Mean income, RM Per Month in 1959 Prices	207	261	26.1
Median income, RM Per Month in 1959 Prices	150	164	9.3
Gini Coefficient	0.412	0.513	
Percentage Share of Top 20%	48.6	55.9	
Percentage Share of Middle 40%	35.5	32.5	
Percentage Share of Bottom 40%	15.9	11.6	

Source: Perumal (1989) and Snodgrass (1980).

The rich were mostly urban and the poor were mostly rural. It happened that the rural population was predominantly Malay. While both urban and rural households experienced an increase in mean and median income, the percentage increase for the urban households was significantly larger than that for the rural households (see Table 6.4.2). Thus, there was quite a clear demarcation in terms of percentage change in income between the rural and urban household. As a result, the urban-rural disparity ratio, which is the ratio of the mean income between the urban and rural households, went up from 1.8 in 1957/58 to 2.1 in 1970 (see Table 6.4.3). It appeared that not only were the rural population becoming poorer than their urban counterparts on average, but that there was also a dramatic increase in their Gini coefficient. As can be seen, income inequality worsened, but more so for the rural population.

Table 6.4.2: Rural-Urban Income Distribution in Peninsular Malaysia, 1957-1970

	1957/58	1970	% Δ
Urban Households			
Mean income, RM Per Month in 1959 Prices	307	424	38.1
Median income, RM Per Month in 1959 Prices	207	262	26.5
Gini Coefficient	0.429	0.494	
Percentage Share of Top 20%	49.6	55.0	
Percentage Share of Middle 40%	33.2	32.8	
Percentage Share of Bottom 40%	17.2	12.2	
Rural Households			
Mean income, RM Per Month in 1959 Prices	166	198	19.3
Median income, RM Per Month in 1959 Prices	126	138	9.5
Gini Coefficient	0.374	0.463	
Percentage Share of Top 20%	44.5	51.0	
Percentage Share of Middle 40%	37.3	35.9	
Percentage Share of Bottom 40%	18.2	13.1	

Source: Perumal (1989) and Snodgrass (1980)

Table 6.4.3: Urban-Rural Disparity Ratio in Peninsular Malaysia, 1957-1970.

	Disparity Ratio
1957/58	1.8
1970	2.1

Source: Calculated from Table 6.4.2

Table 6.4.4 shows income distribution by ethnic groups. The Gini index shows that inequality among the Malays worsened. Indeed, between 1957 and 1970, income inequality worsened more among the Malays than among the Chinese. The Malays were less unequal compared to the Chinese in 1957/58, but become more unequal than the Chinese in 1970. This picture of intra-group distribution shown in Table 6.4.4 was also reflected in both urban and rural areas. The intra-group inequality increased among both the rural and urban Malays more than it did for their Chinese counterparts. It was particularly pronounced among rural households.[4] Furthermore, the Chinese-Malay disparity ratio went up from 2.16 in 1957/58 to 2.25 in 1970 (Table 6.4.5). One thing that is clear from Table 6.4.4 is the fact that there was a clear economic division between the Malay and the Chinese as shown by the percentage change of their mean and median incomes during the 1957-1970 period. The improvement in the Chinese household income was greater than that of the Malays.

Table 6.4.4: Income Distribution by Ethnic Groups in Peninsular Malaysia, 1957-1970

	1957/58	**1970**	**% Δ**
Malay			
Mean income, RM Per Month in 1959 Prices	134	170	26.9
Median income, RM Per Month in 1959 Prices	108	119	10.2
Gini Coefficient	0.342	0.466	
Percentage Share of Top 20%	42.5	52.5	
Percentage Share of Middle 40%	38.0	34.8	
Percentage Share of Bottom 40%	19.5	12.7	
Chinese			
Mean income, RM Per Month in 1959 Prices	288	390	35.4
Median income, RM Per Month in 1959 Prices	214	265	23.8
Gini Coefficient	0.374	0.455	
Percentage Share of Top 20%	45.8	52.6	
Percentage Share of Middle 40%	36.2	33.5	
Percentage Share of Bottom 40%	18.0	13.9	

Source: Perumal (1989) and Snodgrass (1980).

[4] Ikemoto (1985) demonstrates that intra-group inequality worsened most for the Bumiputeras, in both the rural and urban areas.

Table 6.4.5: Chinese-Malay Disparity Ratio in Peninsular Malaysia, 1957-1970.

	Disparity Ratio
1957/58	2.16
1970	2.25

Source: Calculated from Table 6.4.4

Besides the clear economic division between the Malays and the Chinese, the bulk of the Malays were poor (Table 6.4.6). The Malays in fact were synonymous with the poor: the poor were mostly the Malays, and most Malays were the poor. These factors well suited the nationalist argument for inter-ethnic redistribution. Thus, despite the above observations that show the gap between the rich and the poor widened, which was more apparent within the Malay ethnic group, the nationalist political debate, interestingly enough, focused on the Chinese-Malay inequality. What seems to be interesting is that the Malay nationalists were not only successful in capitalising on the existence of Malay-Chinese income inequality, but simultaneously also successful in suppressing the problem of intra-Malay inequality, which worsened more than that of the Chinese.

As there is a clear economic division between the Malay and the Chinese, and the majority of the Malays are poor, it seemed sensible for the Malay to support the nationalist argument for inter-ethnic redistribution programs. From the Malay perspective, their identity and economic interest reinforced each other, and hence there was quite a coherence of economic interest of the Malays as a group. On the other hand, the economic differences between the Malays and the Chinese reinforced their differences in other aspects such as language, culture and religion. Thus, the differences between the Malay and the Chinese became more and more visible. In this kind of situation, it was relatively easy for the nationalists to suppress the question of intra-Malay inequality and to focus on the question of Malay-Chinese inequality. In fact, this became easier since the Malay viewed the Chinese immigrants (as well as the colonial British) as "dispossessors" (Shamsul 1997, p. 245). The uneasiness of the Malay therefore was easily focused on the economic advances of the Chinese.

Table 6.4.6: Incidence of Poverty 1957 and 1970 in Peninsular Malaysia (%).

	1957/58	1970
All Households	51.2	49.3
Rural	59.6	58.7
Urban	29.7	21.3
Malay Households	70.5	65.9
Rural	74.9	70.3
Urban	32.7	38.8
Chinese Households	27.4	27.5
Rural	29.4	30.5
Urban	25.2	24.6
Indian Households	35.7	40.2
Rural	31.5	44.9
Urban	44.8	31.8

Source: Ikemoto (1985).

A nationalist solution to the Malay economic problem therefore, was possible and easily appealed to the Malays. From the Malay perspective, the nationalist policy (NEP) of inter-ethnic redistribution would open up opportunities for them to improve their standard of living. Thus, the NEP created an expectation of improvement among the Malays, which in effect drove the Malays to accept and support the nationalist economic solution. Besides, as the majority of the Malays were poor and also economically weaker than the Chinese, supporting the NEP coincided with their common interest, i.e. to increase their pride as a group versus the Chinese immigrants. Since most of the Malays were poor, any Malay that could achieve economic success through the NEP not only signified the success of the individual, but also symbolised the success of the Malay as a group. Furthermore, as the liberal economic policy in the 1957-1970 period had worked against the Malay interest, i.e. widening the Chinese-Malay income gap, the choice to the Malay appeared to be clear and straightforward.

6.5 Income Inequality and Poverty in the NEP Period

As examined in section 6.4 above, despite the fact that there was a high intra-Malay inequality, the Malays supported the NEP. By supporting the NEP, the Malay in essence actually accepted and tolerated intra-Malay inequality. As will be seen, as intra-Malay inequality remained persistently high during the NEP, the tolerance

towards it began to erode. The erosion began when the beneficiaries of the NEP became obvious, and those who were unable to secure the benefits from the NEP began to question the injustices of the NEP, a policy that they had initially supported. Consequently, the support for the nationalists began to fall apart. This point is illustrated here using the results from the Malaysian Family Life Survey (MFLS) data analysis.[5]

As mentioned in Section 6.3, the period following the introduction of the NEP (1971-1990) witnessed Malaysia experiencing an exceptionally rapid economic growth and development. With regard to the Malays, their economic situation was improved. They were represented in most sectors in the economy, including the industrial sector. The NEP brought about the migration of the Malays from the rural to the urban areas, which led to the emergence of the urban Malay middle-class. In particular, poverty incidence amongst the Malay was significantly reduced. However, the only poverty index reported is the head-count ratio (i.e. the poverty incidence). The head-count ratio, while useful, is an unsatisfactory poverty index [see for example Fields (1994), Sen (1997b) and Zheng (1997)]. Here, besides the head-count ratio measure of poverty usually reported by the government, a range of better poverty indices is calculated.

Table 6.5.1 below reports the set of poverty indices, which is calculated from the MFLS data. It is clear that, between the early and towards the end of the NEP period, all the poverty indices – from the simple head-count ratio to the more complex and better indices - indicate that poverty actually declined. Poverty also declined across all ethnic groups as well as across location (see Table 6.5.2 and Table 6.5.3). In fact, further examination on rural and urban poverty by ethnic groups also indicates a similar finding – poverty declined (see Table 6.5.4 and Table 6.5.5). Thus, there is no doubt at all that poverty was successfully reduced during the NEP period. This finding therefore confirms and substantiates the government published figures.

[5] The data as well as the measures of inequality and poverty employed in this chapter are explained in chapter 2.

Table 6.5.1: MFLS Data: Poverty Indices, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77	1245	561	292	0.3210	0.4506	0.4792	0.2916	0.2417	0.3060	0.1415
1988/89	1507	337	556	0.2060	0.2236	0.3494	0.1084	0.0868	0.1016	0.0399

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 6.5.2: MFLS Data: Poverty Indices by Area, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Rural	722	403	284	0.3266	0.5582	0.4942	0.3685	0.3053	0.3746	0.1821
Urban	523	158	314	0.3011	0.3021	0.4411	0.1848	0.1516	0.2022	0.0853
Total	1245	561	292	0.3210	0.4506	0.4792	0.2916	0.2417	0.3060	0.1415
1988/89										
Rural	965	271	545	0.2161	0.2808	0.3625	0.1410	0.1129	0.1323	0.0534
Urban	542	66	602	0.1600	0.1218	0.2956	0.0508	0.0399	0.0450	0.0157
Total	1507	337	556	0.2060	0.2236	0.3494	0.1084	0.0868	0.1016	0.0399

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 6.5.3: MFLS Data: Poverty Indices by Ethnic Groups, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Malay	591	343	267	0.3393	0.5804	0.5232	0.3981	0.3347	0.4060	0.2046
Chinese	496	150	308	0.3194	0.3024	0.4504	0.1900	0.1563	0.2154	0.0904
Indian	147	61	394	0.1595	0.4150	0.2969	0.1737	0.1343	0.1463	0.0534
Total	1234	554	293	0.3207	0.4489	0.4786	0.2902	0.2405	0.3044	0.1407
1988/89										
Malay	911	271	554	0.2086	0.2975	0.3525	0.1456	0.1161	0.1348	0.0538
Chinese	399	44	592	0.1762	0.1103	0.3081	0.0488	0.0379	0.0438	0.0160
Indian	184	19	510	0.2334	0.1033	0.4031	0.0584	0.0468	0.0574	0.0232
Total	1494	334	556	0.2067	0.2236	0.3495	0.1085	0.0869	0.1017	0.0400

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 6.5.4: MFLS Data: Poverty Indices Amongst **Rural Households** by Ethnic Groups, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Rural Malay	435	284	257	0.3546	0.6529	0.5418	0.4605	0.3874	0.4623	0.2438
Rural Chinese	201	77	339	0.2468	0.3831	0.3961	0.2111	0.1707	0.2223	0.0882
Rural Indian	76	36	381	0.1782	0.4737	0.3211	0.2166	0.1656	0.1823	0.0710
TOTAL	712	397	284	0.3258	0.5576	0.4935	0.3677	0.3045	0.3732	0.1814
1988/89										
Rural Malay	688	227	542	0.2187	0.3299	0.3656	0.1671	0.1335	0.1558	0.0637
Rural Chinese	182	30	585	0.1867	0.1648	0.3156	0.0760	0.0578	0.0663	0.0251
Rural Indian	86	11	484	0.2441	0.1279	0.4339	0.0777	0.0623	0.0770	0.0319
TOTAL	956	268	545	0.2171	0.2803	0.3628	0.1410	0.1129	0.1323	0.0535

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

Table 6.5.5: MFLS Data: Poverty Indices Amongst **Urban Households** by Ethnic Groups, 1976/77 and 1988/89.

	n	m	μ_p	G_p	H	I	S	P* (ε=0.25)[a]	P* (ε=0.75)[a]	FGT (α=2)
1976/77										
Urban Malay	156	59	318	0.2505	0.3782	0.4340	0.2204	0.1823	0.2259	0.0952
Urban Chinese	295	73	276	0.3919	0.2475	0.5077	0.1744	0.1464	0.2106	0.0919
Urban Indian	71	25	414	0.1286	0.3521	0.2621	0.1344	0.1004	0.1064	0.0345
TOTAL	522	157	314	0.3020	0.3008	0.4409	0.1841	0.1510	0.2017	0.0851
1988/89										
Urban Malay	223	44	611	0.1513	0.1973	0.2849	0.0802	0.0618	0.0676	0.0233
Urban Chinese	217	14	605	0.1465	0.0645	0.2920	0.0281	0.0211	0.0245	0.0083
Urban Indian	98	8	547	0.2115	0.0816	0.3607	0.0451	0.0331	0.0400	0.0155
TOTAL	538	66	602	0.1600	0.1227	0.2956	0.0512	0.0402	0.0454	0.0158

Note:

n=number of households; m=number of poor households; μ_p=mean income of poor households; G_p=Gini coefficient of poor households; H = head-count ratio; I = poverty income-gap ratio; S = Sen index; P* = Clark, Hemming and Chu ratio; FGT = Foster, Greer and Thorbecke index.

[a]The symbol ε stands for a poverty aversion parameter.

However, there was a disturbing development on the other side of these achievements. There was the emergence and growing recognition of cross-cutting cleavages (Rae and Taylor, 1970) due to the intra-group effects of distributional policy (NEP). Table 6.5.6 below reports the distribution of household income, which was analysed from the MFLS data. The results suggest that between the earlier and towards the end of the NEP period, income inequality seems to have improved. The Gini index of inequality fell from 0.5418 in 1976/77 to 0.4666 in 1988/89. The middle and lower income groups were gaining their income share, while the upper income group was losing out.

Income inequality among the urban households improved quite dramatically (see Table 6.5.7). The Gini index for the urban household decreased from 0.5362 in 1976/77 to 0.4252 in 1988/89. However, there was no significant improvement in the distribution of rural household income. The Gini index for rural households only fell marginally from 0.4807 in 1976/77 to 0.4781 in 1988/89. What seems to be interesting is that the percentage change in the mean income of the rural households was greater than their urban counterpart, while the percentage change in the median income of the rural households was less than the urban households. Thus in terms of percentage change in income, the economic division between urban and rural household became blurred during the NEP period.

Table 6.5.6: MFLS Data: Distribution of Household Income, 1976/77 and 1988/89.

	1976/77	**1988/89**	**% Δ**
Mean (RM)	6232	13172	111.36
Median (RM)	3840	9000	134.38
Gini Index (G)	0.5418	0.4666	
Income share of:			
Top 10%	41.76	35.65	
Top 20%	57.88	51.77	
Middle 40%	32.21	34.90	
Bottom 40%	9.91	13.34	

Table 6.5.7: MFLS Data: Distribution of Rural and Urban Household Income, 1976/77 and 1988/89.

	1976/77	1988/89	% Δ
Urban Households			
Mean	9123	17199	88.52
Median	5425	12738	134.80
Gini Index (G)	0.5343	0.4230	
Income share of:			
Top 10%	41.37	32.66	
Top 20%	57.79	48.41	
Middle 40%	31.68	36.29	
Bottom 40%	10.53	15.30	
Rural Households			
Mean	4139	10910	163.59
Median	3106	7310	135.35
Gini Index (G)	0.4824	0.4708	
Income share of:			
Top 10%	34.81	36.86	
Top 20%	51.65	52.47	
Middle 40%	37.20	34.06	
Bottom 40%	11.15	13.47	

This is obviously in contrast with the pre-NEP period, where the percentage change in rural household income significantly lagged behind that of the urban household (see Table 6.4.2). As can be seen in Table 6.5.8, this was reflected in the decline of the income disparity ratio between the urban and rural households. Thus, while the urban-rural income disparity ratio declined, income inequality within the rural households did not experience significant change. Indeed, inequality within the rural households was greater than the urban households.

Table 6.5.8: MFLS Data: Urban-Rural Disparity Ratio in Peninsular Malaysia, 1976/77 and 1988/89.

Year	Urban-Rural Disparity Ratio
1976/77	2.204
1988/89	1.576

Source: Calculated from Table 6.5.7.

Table 6.5.9 below reports the distribution of household income of the Malays and the Chinese. The Gini index shows that there was only a marginal improvement in income inequality among the Malay households. In contrast to the Malays, there was quite a substantial improvement in income inequality among the Chinese. What is more interesting is that their percentage change in mean income significantly lagging

behind the Malays. Thus during the NEP period, the Malays experienced a larger increase in income compared to the Chinese. This was in contrast to the period before the NEP (see Table 6.4.4). As a result, the income disparity ratio between the Chinese and the Malays fell (see Table 6.5.10). Thus, while the Malays experienced a significant growth in their income during the NEP period (1971-1990), it was less equally distributed compared to the Chinese. In fact, while the Malay household income was more evenly distributed than the Chinese in 1976/77, it became the most unevenly distributed in 1988/89.

Table 6.5.9: MFLS Data: Distribution of Household Income by Ethnic Group in Peninsular Malaysia, 1976/77 and 1988/89.

	1976/77	1988/89	% Δ
Malay			
Mean	3795	11153	193.89
Median	2647	7200	172.01
Gini Index (G)	0.5009	0.4810	
Income share			
Top 10%	36.43	37.54	
Top 20%	53.91	53.72	
Middle 40%	35.66	33.24	
Bottom 40%	10.42	13.04	
Chinese			
Mean	8850	17300	95.48
Median	5747	12140	111.24
Gini Index (G)	0.5130	0.4249	
Income share			
Top 10%	39.77	32.68	
Top 20%	55.70	48.65	
Middle 40%	32.78	35.71	
Bottom 40%	11.52	15.64	

Table 6.5.10: MFLS Data: Chinese-Malay Income Disparity Ratio, 1976/77 and 1988/89.

Year	Disparity Ratio
1976/77	2.332
1988/89	1.551

Source: Calculated from Table 6.5.9.

The analysis is taken further to examine income distribution among the Malay and the Chinese households by their location, i.e. rural and urban. The results are presented in Table 6.5.11. It shows that both the Malay and Chinese rural households experienced a worsening income distribution. Income inequality among the urban Malay and Chinese households improved. It also appears that the Malays, both in the rural and urban areas, were the more unequal compared to the Chinese. However, the

percentage change in income of both the rural and urban Malays was larger compared to their Chinese counterparts. Furthermore, while income distribution among the rural Malay household was the worst compared to the others (urban Malay, urban Chinese and rural Chinese), they were the ones to experience the largest percentage change in income during the NEP period. Thus, a fall in the Chinese-Malay income disparity ratio was observed for both in the rural and urban areas (Table 6.5.12), but income inequality among the Malays both in the rural and urban areas were higher than their Chinese counterparts in 1988/89.

Table 6.5.11: MFLS Data: Distribution of Household Income by Ethnic Group and Area in Peninsular Malaysia, 1976/77 and 1988/89.

	Malay			Chinese		
	1976/77	**1988/89**	**% Δ**	**1976/77**	**1988/89**	**% Δ**
Rural Households						
Mean	3044	10142	233.2	6351	14184	123.3
Median	2202	6531	196.6	4944	10200	106.3
Gini Index (G)	0.4880	0.4878		0.4254	0.4328	
Income share						
Top 10%	34.83	38.93		33.26	34.63	
Top 20%	51.51	54.18		48.54	49.71	
Middle 40%	38.02	32.68		36.50	35.51	
Bottom 40%	10.47	13.13		14.96	14.79	
Urban Households						
Mean	5890	14272	142.3	10553	19913	88.7
Median	4007	10102	152.1	6545	14820	126.4
Gini Index (G)	0.4589	0.4324		0.5339	0.4042	
Income share						
Top 10%	33.98	31.20		41.05	32.31	
Top 20%	51.03	48.89		57.16	47.35	
Middle 40%	35.53	36.93		32.63	35.79	
Bottom 40%	13.44	14.18		10.22	16.85	

Table 6.5.12: MFLS Data: Chinese-Malay Income Disparity Ratio by Location, 1976/77 and 1988/89.

	1976/77	**1988/89**
Rural	2.086	1.399
Urban	1.792	1.395

Source: Calculated from Table 6.14

The above results show that during the NEP period there was not much improvement in income inequality among the rural as well as the Malay households. Indeed, income inequality worsened among the rural Malay households, despite their significant improvement in income. Nonetheless, during the NEP period, it appeared that the urban-rural and the Chinese-Malay income inequality declined. This was also

observed from the Theil decomposition analysis, shown in Table 6.5.11 and 6.5.12. Both tables show that the contribution of inequality between ethnic groups, as well as urban-rural inequality to total inequality fell. Thus, a large portion of the total inequality was contributed by intra-group inequality. Furthermore, this contribution increased during the NEP period. This result is not surprising since the intention of the NEP was to reduce inter-group inequality, rather than within-group inequality as being mentioned earlier.

Table 6.5.13: MFLS Data: Theil Index and the Contribution of Inter- and Intra-Area (Rural-Urban) Inequality to Total Inequality, 1976/77 and 1988/89.

	1976/77		1988/89	
	Theil index	**% Contribution**	**Theil index**	**% Contribution**
Inter-Area	0.0766	13.02	0.0254	6.25
Intra-Area	0.5121	86.98	0.3802	93.75
Total	0.5887	100.00	0.4055	100.00

Table 6.5.14: MFLS Data: Theil Index and the Contribution of Inter- and Intra-Ethnic Inequality to Total Inequality, 1976/77 and 1988/89.

	1976/77		1988/89	
	Theil index	**% Contribution**	**Theil index**	**% Contribution**
Inter-Ethnic	0.0756	12.85	0.0196	4.99
Intra-Ethnic	0.5130	87.15	0.3734	95.01
Total	0.5887	100.00	0.3931	100.00

6.6 The Erosion of Hirschman's Tunnel Effect

The above findings show that before the NEP, i.e. between 1957 and 1970, the income of the Chinese improved more than that of the Malays. Besides, the bulk of the poor households are Malays. Thus, there existed quite a clear division in the economic achievement between the Malay and the Chinese. While there also existed a high level of intra-Malay inequality, this was ignored and tolerated by the Malays as the Malay nationalists successfully capitalised on the differences between the economic positions between the Malays and the Chinese. Furthermore, as the majority of the Malay were poor, it seemed sensible for them to support the nationalist argument for inter-ethnic redistribution.

During the NEP period, the income of the Malays increased more significantly than that of the Chinese. Despite the significant growth in their income, intra-Malay inequality remained high. This means that during the NEP period, as the income of the Malays improved significantly, the improvement was not even. It was particularly apparent in the rural area. Furthermore, the difference in income improvement between the Chinese and the Malays became less obvious. Indeed, it was better for the Malays, particularly the rural Malay households. As a result, the income gap between the Chinese and the Malay as well as between the urban and rural household fell during the NEP period.

As its power base was mainly among the rural Malays, this finding did not well suit UMNO. As there was a persistence of high intra-Malay inequality, the NEP began to be perceived as benefiting just a selected few Malay, both in the rural and urban areas. Even though the NEP was articulated in the political rhetoric of Malay-Chinese inequality, and raised the expectation of inter-ethnic redistribution, it has an unintended effect. It also raised the expectation for inequality within the Malay community. While it was true that the NEP improved the standard of living of most Malays, the pace of improvement was not the same. There was a perception that only a small segment of the Malay community did actually receive the benefits of the NEP. The above findings are also observed by Milne (1976, p. 259):

> *"...although it [the NEP] was intended to bring benefits particulary to the Malays, these have been restricted to a small "special class", "coterie" or "elite".*

Bowie (1988) also appears to agree with Milne's observation. He observes that not only the NEP benefited a small segment of the Malay community, it also accentuated division within them. Bowie (1988, p. 58) mentions that:

> *"The NEP also accentuated class division within the Malay community. Poor Malay took offense at members of the new Malay capitalist class flaunting their wealth. Moreover, many small Malay-owned firms found themselves crowded out by public enterprises and by a few large Malay companies that came to be the primary beneficiaries of Bumiputera privileges."*

Jomo (1989, p. 47) documents yet another similar observation. He observes that:

> *"...the question of ownership, whether share capital or other wealth, only involves the interest of a small elite. For instance, it has been shown that although 45 percent of adult Bumiputeras own national unit trust (ASN) shares, only 1.3 percent own 75 per cent of the total ASN shares."*

Consequently, as the beneficiaries of the NEP became apparent, i.e. a small group of the Malays, the perception of intra-Malay economic injustices from the NEP began to emerge. This was initially ignored due to the expectation that the NEP would provide opportunities for all of the Malay to benefits. The perception that the success of the selected few Malay was due to their political connection, i.e. the existence of crony capitalism, only made the matter worse (Gomez and Jomo, 1997; Jomo 1989, p.43). Thus, while the findings did show that Malay-Chinese inequality still existed, the spotlight of the political debate began to shift from the Malay-Chinese inequality to intra-Malay inequality. Dissatisfaction of the Malay who did not really benefit much from the NEP began to emerge. Accordingly, the support for the nationalists (UMNO) began to fall apart.

It is interesting to note that, while intra-Malay inequality increasingly became a problem, and hence the erosion of the tunnel effect, this problem was once again ignored. As argued in Chapter 5, it was difficult for the nationalists who argued in the political rhetoric of ethnicity to address the new problem of intra-Malay inequality. Thus, rather than finding policy alternatives, UMNO continued to press on with the nationalist approach as the one that would develop the Malays (see Mahathir Mohamed 1998, pp. 33-34). Probably the perception of the Malay nationalists (UMNO) was that the tunnel effect was still intact among the Malays. This, however, was an illusion on their part. The continuing neglect of intra-Malay inequality only assured a continuing erosion of the tunnel effect among the Malays. The result of the 1999 general election, already mentioned above, expressed clearly the fact that the Malays are abandoning UMNO. This shows the tunnel effect has been eroded among the Malays.

6.7 Conclusion

The argument advanced in this chapter is that the NEP was sustained by Hirschman's tunnel effect. In the early period of the NEP, the Malay nationalists received considerable support from the Malay community and the support appeared to stem from the ability and success of UMNO in capitalising on the glaring economic gap between the Malay and the Chinese. The support of the Malay to the Malay nationalist economic policy arose from the expectation of securing benefits from Malay identity. Intra-Malay inequality, while it existed, was tolerated. However, as the benefits of the NEP became obvious to only a small segment of the Malays, the support to the Malay nationalists began to fall apart.

It appeared that UMNO was under the illusion that the Malays would continue to support its argument, given that it had been widely accepted that during the NEP period, Malaysia had achieved remarkable economic growth and improvement in the economic position of the Malays. Here, it has been shown that as intra-Malay inequality remained high, the tolerance of the Malays seemed to be running out. While intra-Malay inequality appeared to have been ignored by the Malays at the earlier period of the NEP, the persistence of high intra-Malay inequality throughout the NEP period could no longer be concealed from the Malay community. However, the political rhetoric of ethnicity of the Malay nationalists (UMNO) was unable to respond to the emerging problem of intra-Malay inequality. Reiteration of the nationalist argument for inter-ethnic redistribution, while perhaps still having some merit, no longer appealed to the Malays. It is evidenced here that the initial approval or "psychic" satisfaction of the Malays with the advances of a few Malay turned (without being noticed by the nationalists) to disappointment with and resentment at the prevailing social injustices. Hirschman (1973, p.552) has already warned that this might happen:

> *"Providential and tremendously helpful as the tunnel effect is in one respect (because it accommodates the inequalities almost inevitably arising in the course of development), it is also treacherous: the rulers are not necessarily given any advance notice about its decay and exhaustion, that is, about the time at which they ought to be on the lookout for a drastically different climate of public and popular opinion; on the contrary, they are lulled into complacency by the easy early stage*

when everybody seems to be enjoying the very process that will later be vehemently denounced and damned as one consisting essentially in the "rich becoming richer".

Chapter 7

Summary and Conclusion

7.1 The Argument of the Study

In response to the racial riots in 1969, the government formulated the New Economic Policy (NEP). The underlying objective was to attain national unity and foster nation-building. These objectives were to be achieved through a two-pronged strategy: eradicating poverty irrespective of race, and restructuring society so as to correct the economic imbalances that existed between ethnic groups. This imbalance was perceived as the main reason for the racial riots. The NEP represented a complete change in government approaches to economic development, from a *laissez-faire* approach to active government intervention in the economy. Under the NEP, the government played an active role in raising the Malay income through poverty reduction measures in the rural areas, expansion of employment opportunities in the urban areas, and an increase in the share of corporate wealth of the Malay ethnic group. The National Development Policy (NDP) replaced the NEP when it ended in 1990. The main spirit of the NEP, to preferentially uplift the economic and social status of the Malay, continued to be the focus of NDP. It has been argued that these policies originated from Malay economic nationalism. During the implementation of the NEP and the NDP, Malaysia achieved a remarkable rate of economic growth. Economic well-being of the Malay in particular generally improved. This created an expectation that the policy would be continued.

The fundamental question asked in this study is this: was the NEP, a policy based on ethnicity, sustainable? The argument advanced in this study is that it was unlikely due to the following two reasons. First, the NEP was concerned with equality between the Malay and the non-Malay rather than with equality within the Malay themselves. Thus, the NEP did not really address the question of income and wealth distribution within the Malays. Therefore, while the NEP might have achieved its objective of

reducing inter-ethnic inequality, the question of intra-Malay inequality was not addressed. Thus cross-cutting cleavages emerged. The formation of cross-cutting cleavages deepened socio-political divisions and conflicts in the society, not only between the Malays and the non-Malays, but within the Malays themselves. The Malays no longer had a coherent economic interest. As a consequence, the Malay nationalist solution to the Malay economic problem, which is an ethnicity-oriented policy (NEP), no longer appeared coherent. Secondly, since the NEP exclusively focused on inter-ethnic rather than intra-ethnic inequality, a high degree of tolerance towards intra-ethnic inequality was needed for the ethnicity-oriented policy to be sustained and supported. If, throughout the NEP period, there was high intra-Malay inequality due to the exclusive focus on inter-ethnic inequality, then it was most likely that the tolerance of the Malay towards inequality, or what Hirschman (1973) called the tunnel effect, would run out. The reason for the erosion of the tunnel effect was obvious. The Malay eventually realised that the NEP, while being articulated as the saviour of the Malay in general, disproportionately benefited only a few among them. This awareness led to the weakening of support for the ethnicity-oriented policy as well as for the Malay nationalists. Both the emergence of cross-cutting cleavages as well as the erosion of the tunnel effect was likely to result in difficulties for the continuation of the NEP, and hence it would become unsustainable.

7.2 The Methodology of the Study

The exploration of the issues raised above entailed an examination of income distribution in Malaysia, particularly inter and intra-ethnic income inequality. The central aim of the study, therefore, was to investigate the trends and changes in income inequality and the related issues such as polarisation and poverty in Malaysia during the implementation of the pro-Malay economic policy (NEP). Based on the trends and changes in income inequality, the political implications of income distribution were drawn. This was not new. Many authors have investigated the question of income distribution and the politics of the NEP in Malaysia before. However, the previous studies seemed detached from each other. On the one hand there were studies (mostly by economists) that examined income distribution before

and after the implementation of the NEP but without examining the political implication of the results. There were other studies (mostly by political scientists) that examined the politics of the NEP without placing income distribution at the center of the argument. The novelty of the present study, therefore, lies in its attempt to marry the two approaches. This study examines the distributional impact of the nationalist economic policy, i.e. the NEP. It also examines how the distribution of income might explain Malaysia's current economic and political problems.

Another aspect that distinguishes this study from previous studies is the data. Except Anand (1983), most previous studies on income distribution in Malaysia used government survey data that was published in aggregate form. While aggregate data did contribute to understanding changes in income distribution in Malaysia, the factors that contributed to inequality and poverty were difficult to examine from that aggregate data. In this study, besides the income data available so far, additional data from the Malaysian Family Life Survey (MFLS) were employed. It was possible to disaggregate the MFLS income data not only by location (rural-urban) and ethnic groups (Malay, Chinese and Indian), but by the sources of income as well. Thus, the MFLS data permitted analysis to be carried out to identify the factors that contributed to inequality and poverty. Therefore, the broader and deeper analysis on the different income data set (MFLS) undertaken by this study could be used to compare findings from previously studies that used the government survey data, and also used to substantiate and verify the previous findings. What is interesting is that it was found that the aggregate data of the MFLS was more or less similar to the government survey data. Indeed, it also produced quite similar results.

Here, some of the most commonly used measures of inequality were employed. These were the Theil, Gini and Shorrock's indices of inequality. The Theil index of inequality was decomposed to examine the contribution of within and between population subgroups' inequality to total inequality. Gini and Shorrock's indices of inequality are also decomposed, but to examine the contribution as well as the effect of different sources of income to total inequality. The study also examined the question of polarisation, i.e. the disappearing middle-class, a topic not investigated in previous studies. Examination of polarisation was important since the conventional

measures of inequality such as the Gini index was not able to capture the distributional changes with regards to changes in the share of income held by the middle-income group. Here, the Wolfson index of polarisation (W) was used to examine the question of polarisation. This study also assessed the extent of poverty. Besides the usual simple head-count ratio (H) and poverty-income gap ratio (I) that were reported in the previous studies as well as in the government documents, other poverty measures employed in this study included Sen (S), Clark, Hemming and Ulph Index (P*), and Foster, Greer and Thorbecke (FGT) indices of poverty. They provided a richer picture of the nature of poverty. The FGT index of poverty was decomposed to examine the contribution of different groups to total poverty.

7.3 Main Findings of the Study

In general, the result from the MFLS data analysis confirmed the findings of the previous studies. It showed that the overall income inequality fell during the NEP period. Income inequality among the urban households and also among the Chinese and Indian households also experienced an improvement. Furthermore, inter-ethnic income inequality – fell between ethnic groups – has also fallen between the two periods under study (i.e. 1976/77 and 1988/89). What seems to be interesting from the result of the MFLS data analysis is that there was only marginal improvement in income inequality among the rural and Malay households. This finding was contrary to the claims made in government documents. Thus, the results from the MFLS data analysis suggested caution in accepting the claim that the NEP had been successful in reducing income inequality among the rural as well as among the Malay households.

The results from the Theil decomposition analysis showed that there was a large and increasing contribution of intra-group (intra-ethnic and intra-area) inequality to total inequality during the NEP period. The contribution of inter-group (inter-ethnic and inter-area) inequality to total inequality appeared to be small. Indeed, it was declining. The results appeared to be similar to the findings of Anand (1983), Ikemoto (1985) and Shireen (1998). What these results implied was that the best and most effective strategy to reduce the overall inequality in Malaysia was by reducing intra-group

(intra-ethnic and intra-area) inequality. Since the focus of the NEP was exclusively on reducing inter-groups inequality rather than reducing intra-groups inequality, the high level of income inequality in Malaysia (though declining) throughout the NEP period could be well understood.

Decomposition of income inequality by income source in Malaysia showed that a large portion of the total inequality was attributable to labour income, i.e. paid and self-employment. The contribution of capital and transfer incomes appeared to be relatively small. Nonetheless, its contribution (i.e. rent, interest and dividends as well as pensions and EPF) increased between the two periods under study. The contribution of paid and self-employment was large not because these sources were the most unequally distributed sources of income, but rather due to their importance (large share) in total household income. This finding seemed quite similar to the findings of Fields (1976). With regards to effects of income source on income inequality, the results showed that income from rent, interest and dividends had a consistently unequalising effect on all groups in 1988/89. Thus, in the context of an economic policy where attempts were made to enlarge the Malay share of capital ownership, such efforts would likely result in greater inequality amongst the Malay in particular, and amongst Malaysians in general. In terms of a strategy to improve inequality, the decomposition analysis by income sources indicated that the best strategy was to inequality in paid employment, followed by reducing inequality in self-employment and also in rent, interest and dividends.

The analysis on polarisation indicated that there was no evidence of a "disappearing middle-class" within the total households in Malaysia between 1976/77 and 1988/89. The declining overall income inequality seemed to be followed by the enlargement of the middle-income group. Further examination showed that there was inconclusive evidence of polarisation for the rural and the Malay households, as well as for the rural Indian households. The only evidence of polarisation was found within the rural Chinese household. It seems, therefore, while the rural Chinese experienced a declining income inequality between 1976/77 and 1988/89, nevertheless they became more polarised. With regard to poverty eradication, there was a clear indication that the achievement of the NEP was exceptional. All the indices of poverty employed in

this study, which provided a richer picture than the indices reported in previous studies, confirmed that poverty was reduced substantially, particularly among the Malay households. However, it was also found that, while poverty among the Malay household substantially declined, the Malay poor still formed the largest group living under poverty. Decomposition exercises showed that the contribution of poverty among the Malays to the total poverty was significantly large in both the rural and urban areas. Indeed, the contribution of Malay poverty to total poverty was not only significantly large, but it also increased between the two periods under investigation.

These findings above appeared to lend support to the arguments advanced in this study: that the desire to develop the Malay ethnic group through a nationalist solution (NEP) would result in a new problem – caused by the negligence of the intra-Malay inequality problem. There is no doubt that the NEP significantly improved the economic position of the Malay. As the results of this study indicated, the income of the Malays increased significantly, poverty among the Malays was reduced substantially, and there might also have been a growing Malay middle-class. However, intra-Malay inequality remained persistently high throughout the NEP period. As a result, while the policy had been successful in improving the economic position of the Malay in the past, the policy had no coherent prescriptions to address the current problems. It was unsustainable.

It was found that the nationalist policy of distributing income on an ethnic basis succeeded in the initial years because the poor were overwhelmingly from the Malay ethnic group. The NEP successfully improved the economic position of the Malay, albeit disproportionately, and significantly eradicated poverty among them so that the poor are no longer disproportionately from the Malay ethnic group. As there was a persistently high intra-Malay inequality, this implied the Malays were no longer economically homogeneous. Consequently, cross-cutting cleavages emerged in society. In this situation, it was difficult for a government that relied on the political rhetoric of ethnicity to respond effectively to challenges of intra-Malay inequality. As the government continued to articulate its political rhetoric of ethnicity to solve the Malay economic problem, internal contradictions of the redistribution policy became

more apparent. This internal contradiction could explain the current political turmoil in Malaysia.

The high level of intra-Malay inequality found in the MFLS data analysis (as well as in the previous studies) also supported another related argument advanced this study. It was argued that public support for the nationalist policy (NEP) was initially sustained by Hirschman's tunnel effect. The NEP initially received considerable support from the Malay community. The support appeared to stem from the ability and success of UMNO, the political party that had been in power since the inception of the policy, to capitalise on the glaring economic gap between the Malay and the Chinese. The findings of the study showed that at the initial period of the NEP, a high level of intra-Malay inequality already existed. However, it was argued here that at the early stage of the implementation of the nationalist policy (NEP), this high intra-Malay inequality was tolerated by the Malays. The notable income gap between the Malay and the Chinese at the early period of the NEP overwhelmed the problem of intra-Malay inequality. The nationalists received support at the polls by paying the ethnic card. As intra-Malay inequality continued to remain high during the NEP period, as the findings of the study showed, the focus shifted to the persistence of intra-Malay inequality. This shift in focus followed from the fact that the economic demarcation between the Malay and the Chinese became blurred as a result of the success of the NEP itself. This shift in focus changed the attitude of the Malay towards intra-Malay inequality. As it was now clearer to the Malay group that the benefits of the nationalist policy (NEP) accrued disproportionately to a small segment of the Malay, the tolerance of the Malay towards intra-Malay inequality declined. Malay support for the Malay nationalist party began to fall apart.

Besides, another factor that might also have contributed to the alienation of the Malays from the NEP was the perception that the policy was not effective enough to reduce poverty among the Malays. While it was true that poverty declined substantially among the Malay households, they still remained the largest group under poverty and the decline was much slower compared to that of the Chinese and the Indians. Since the NEP was articulated in terms of the rhetoric of ethnicity, this fact was not acceptable to the Malays. The political rhetoric of ethnicity might have created a

suspicion among the Malays that the success of the NEP in reducing Malay poverty was even a failure since they, the Malays, were still the largest group under poverty.

7.4 Conclusion of the Study

Nationalism more often than not involves the creation and cultivation of myths. Hence, the nationalist arguments might not have had a sound economic basis behind them. Ironically, nationalism has become an effective vehicle to draw popular political support. Nationalist ideology might be irrational, but it serves as an effective vehicle for political purposes. In this regard, Malaysia's experience of nationalism as a strategy to develop the economically backward Malay ethnic group seems interesting. The Malaysian experience showed that not only were the nationalists successful in gaining political support, but their nationalistic economic policy (the NEP) also brought about remarkable economic growth and development to the country. Malaysia made great progress in eradicating poverty, sustaining high economic growth, and transforming her economic structure from dependence on agriculture to a more broadly based economy. Furthermore, the economic position of the Malay ethnic group, which was once overwhelmingly poor, significantly improved. To the nationalists, their approach to economic development was vindicated.

However, a closer examination of the record suggested that the policy of distributing income on an ethnic basis succeeded in the initial years mainly because the poor were overwhelmingly from the Malay community. When the poor were no longer entirely from the Malay ethnic group and cross-cutting cleavages began to emerge in the society, the rhetoric of ethnic nationalism made it difficult for the government to respond to the new problem of reduced tolerance of intra-Malay inequality. The nationalist policy appeared impotent to respond to the changes that took place within the Malay community. While the success of the NEP has been highlighted as vindication of the nationalist approach to economic development, continuation of the nationalist policy did not achieve what it had achieved in the past. It failed to correct the inequality within the Malay community and hence held back their development,

and failed to gain the support from the Malay community. Therefore, while Malaysia has been praised for its economic success, the ethnicity-oriented policy that brought about her success was now incoherent, and hence no longer sustainable. In this regard, the success of the NEP was paradoxical. The policy was initially successful, but its own success also sowed the seeds of future problems for itself.

The results of this study could also be extended to examine the effects of economic globalisation. Rodrik (1997a, 1997b) argues that a country can only secure the benefits from integrating with the global market if globalisation is compatible with domestic, social and political stability. Globalisation produces social conflicts, as some people will gain and others will massively lose out as a result of it. Therefore, if the distributive conflict entailed in the globalisation process is not to disrupt the economy from securing the benefits of globalisation, Rodrik (1997a, 1997b) argues that coherent redistribution policies are essential to intervene in the economy to mitigate income inequality. Thus, the most serious challenge for a country is to formulate a redistribution policy to mitigate income inequalities arises from globalisation. As a small and open economy, Malaysia is exposed to the forces of globalisation. Rodrik's argument is relevant here in that, while the ethnicity-oriented policy is an attempt to mitigate income inequality, could it be effective in reducing the tensions arising from globalisation of the Malaysian economy? In other words, is the redistribution policy that is based on ethnicity compatible with globalisation in Rodrik's sense? The results of this study showed that the continuation of an ethnicity-oriented policy would be unlikely to reduce the tensions arising from globalisation, and may in fact deepen them.

This study therefore asks that some common sense should return in future, as the political rhetoric of ethnic nationalism cannot respond to the new aspect of distributional problems, more so now with regard to tensions arising from globalisation of the Malaysian economy. The political rhetoric of ethnic nationalism has probably gone too far in Malaysia. As the Malay community has changed, ethnic politics are no longer suitable for developing the Malays. It is important therefore to bring up and highlight the internal contradictions that are inherent in the NEP as a solution to the Malay economic problem in particular and to Malaysian economic

development in general, so that a better policy can be designed. Thus, for economic policy to be brought back on the right track, it is important to expose the paradox of NEP. Nonetheless, given the current political realities, some Malays, who have been so long accustomed to, and who have benefited from, the NEP framework, might find it difficult if not impossible to accept the main arguments of this study. Even so, the study believes that such changes in policy, sooner or later, are unavoidable and that indications of this exist. What is more important is to keep the discussions open, until favourable circumstances arise to make the change. Thus, the inherent contradictions of the NEP should be highlighted and debated, even though any changes to it might not be politically acceptable at present. The contribution of this study therefore, to quote Milton Friedman (1982, p. ix), is "to keep them alive and available until the politically impossible become politically inevitable".

Appendix 1

Extract from the Federal Constitution (as of 25 January 1989).
(Source: Faaland et.al., 1990, pp.18-19).

3. Religion of the Federation

(1) Islam is the religion of the Federation, but other religions may be practised in peace and harmony in any part of the Federation.

.....

32. Supreme Head of the Federation, and his Consort

(1) There shall be a Supreme Head of the Federation, to be called the Yang di-Pertuan Agong, who shall take precedence over all persons in the Federation and shall not be liable to any proceedings whatsoever in any court.

.....

89. Malay reservations

(1) Any land in a State which immediately before Merdeka Day was a Malay reservation in accordance with the existing law may continue as a Malay reservation in accordance with that law until otherwise provided by an Enactment of the Legislature of that State.

(2) Any land in a State which is not for the time being a Malay resevation in accordance with the existing law and has not been developed or cultivated may be declared as a Malay reservation in accordance with that law. ...

(3) Subject to Clause (4), the Government of any State may, in accordance with the existing law, declare as a Malay reservation --

(a) any land acquired by that Government by agreement for that purpose;
(b) on the application of the proprietor, and with the consent of every person having a right or interest therein, any other land;

and shall, in accordance with the existing law, immediately declare as a Malay reservation, in a case where any land ceases to be a Malay reservation, any other land of a similar character and of an area not exceeding the area of that land.

(4) Nothing in this Article shall authorise the declaration as a Malay reservation of any land which at the time of the declaration is owned or occupied by a person who is not a Malay or in or over which such a person has then any right or interest.

(5) Without prejudice to Clause (3), the Government of any State may, in accordance with the law, acquire land for the settlement of Malays or other communities, and establish trusts for that purpose.

(6) In this Article "Malay reservation" means land reserved in alienation to Malays or to natives of the State in which it lies; and "Malay" includes any person who, under the law of the State in which he is resident, is treated as a Malay for the purposes of the reservation of land.

90. Special provisions relating to customary land in Negri Sembilan and Malacca, and Malay holdings in Trengganu

(1) Nothing in this Constitution shall affect the validity of any restrictions imposed by law on the transfers or lease of customary land in the State of Negri Sembilan or the State of Malacca, or of any interest in such land.

.....

152. National language

(1) The national language shall be the Malay language and shall be in such script as Parliament may by law provide:
Provided that:
(a) no person shall be prohibited or prevented from using (otherwise than for official purposes) or from teaching or learning, any other language; and
(b) nothing in this Clause shall prejudice the right of the Federal Government or of any State Government to preserve and sustain the use and study of the language of any other community in the Federation.

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153. Reservation of quotas in respect of services, permits, etc., for Malays and natives of any of the States of Sabah and Sarawak

(1) It shall be the responsibility of the Yang di-Pertuan Agong to safeguard the special position of the Malays and natives of any of the States of Sabah and Sarawak and the legitimate interests of other communities in accordance with the provisions of this Article.

(2) Notwithstanding anything in this Constitution, but subject to the provisions of Article 40 and of this Article, the Yang di-Pertuan Agong shall exercise his functions under the Constitution and federal law in such manner as may be necessary to safeguard the special position of the Malays and natives of any of the States of Sabah and Sarawak and to ensure the reservation for the Malays and natives of any of the States of Sabah and Sarawak of such proportion as he may deem reasonable of positions in the public service (other than the public service of the State) and of scholarships, exhibitions and other similar educational or training privileges or special

facilities given or accorded by the Federal Government and, when any permit or license for the operation of any trade or business is required by federal law, then, subject to the provision of that law and this Article, of such permits and licenses.

(3) The Yang di-Pertuan Agong may, in order to ensure in accordance with Clause (2) the reservation to Malays and natives of any of the States of Sabah and Sarawak of positions in the public service and of scholarships, exhibitions and other educational or training privileges or special facilities give such general directions as may be required for that purpose to any Commission to which Part X applies or to any authority charged with responsibility for the grant of such scholarships, exhibitions or other educational or training privileges or special facilities; and the Commission or authority shall duly comply with the directions.

(4) In exercising his functions under this Constitution and federal law in accordance with Clauses (1) to (3) the Yang di-Pertuan Agong shall not deprive any person of any public office held by him or of the continuance of any scholarship, exhibitions or other educational or training privileges or special facilities enjoyed by him.

(5) This Article does not derogate from the provisions of Article 136.

(6) Where by existing federal law a permit or licence is required for the operation of any trade or business the Yang di-Pertuan Agong may exercise his functions under the law in such manner, or give such general directions to any authority charged under that law with the grant of such permits or licences, as may be required to ensure the reservation of such proportion of such permits or licences for Malays and natives of any of the States of Sabah and Sarawak as the Yang di-Pertuan Agong may deem reasonable; and the authority shall duly comply with the directions.

(7) Nothing in this Article shall operate to deprive or authorise the deprivation of any person of any right, privilege, permit or licence accrued to or enjoyed or held by him or to authorise a refusal to renew to any person any such permit or licence or a refusal to grant to the heirs, successors or assigns of a person any permit or licence when the renewal or grant might reasonably be expected in the ordinary course of events.

(8) Notwithstanding anything in this Constitution, whereby any federal law and permit or licence is required for the operation of any trade or business, that law may provide for the reservation of a proportion of such permits or licences for Malays and natives of any of the States of Sabah and Sarawak; but no such law shall for the purpose of ensuring such a reservation --

(a) deprive or authorise the deprivation of any person of any right, privilege, permit or licence accrued to or enjoyed or held by him; or
(b) authorise a refusal to renew to any person any such permit or licence or a refusal to grant to the heirs, successors or assigns of any person any permit or licence when the renewal or grant might in accordance with the other provisions of the law reasonably be expected in the ordinary course of events,

or prevent any person transferring together with his business any transferable licence to operate that business; or

(c) where no permit or licence was previously required for the operation of the trade or business, authorise a refusal to grant a permit or licence to any person for the operation of any trade or business which immediately before the coming into force of the law he had been *bone fide* carrying on, or authorise a refusal subsequently to renew to any such person any permit or licence, or refusal to grant to the heirs, successors or assigns of any person any permit or licence when the renewal or grant might in accordance with the other provisions of the law reasonably be expected in the ordinary course of events.

(8A) Notwithstanding anything in the Constitution, where in any University, College and other educational institution providing education after Malaysian Certificate of Education or its equivalent, the number of places offered by the authority responsible for the management of the University, College or such educational institution to candidates for any course of study is less than the number of candidates qualified for such places, it shall be lawful for the Yang di-Pertuan Agong by virtue of this Article to give such directions to the authority as may be required to ensure the reservation of such proportion of such places for Malays and natives of any of the States of Sabah and Sarawak as the Yang di-Pertuan Agong may deem reasonable; and the authority shall duly comply with the directions.

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