Chapter-IV

Investment Patterns in Sri Lanka, 1961-2000
4.1 Introduction

The importance of the investment in the process of economic development was identified as one of the major factors. It remains as one of the central concerns in the study of long run economic development. The studies on economic growth have not diminished the importance of investment for economic growth (Mankiw, Romer, & Weil, 1992). Further, the recent empirical studies (Ndikumana, 2000; Barro & Lee, 1994; Collier & Gunning, 1999; Barro, 1995) established beyond doubt the critical linkage between investment and rate of growth in developing countries.

Third world countries felt the shortage of capital especially after the Second World War, when many of them became independent and most of them embarked on programmes of economic development (Hewavitharane, 1975). The capital required for development could be raised by domestic accumulation or obtained from abroad. Many economists emphasize capital accumulation as the major factor governing the rate of development. Sir Arthur Lewis in emphasizing the need to accumulate capital from domestic sources, has stated that "the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 per cent of
its national income or less, converts itself into an economy where voluntary saving is running at about 12 or 15 per cent of national income or more"

Therefore, there is a need to study the factors, which determines investment in Sri Lanka during different phases of the economy. It is attempted in the following section.

4.2 Investment in Different Phases of the Economy

In Sri Lanka, the rates of investment changed differently during different phases of economy. Investment policy of Sri Lanka in the early years of independence centered only on developing peasant agriculture sector. During that time, the development and expansion of traditional agriculture received more attention from the government and, in particular, much of the investment came from public investment after 1956 (Abeyratne, 2000). The participation of the private sector in agriculture development was very minuscule because of the dominant role played by the government. Because of this, the share of private investment declined from the late 1950's until 1965. For instance, the gross capital formation which was at 16 % of the GDP in 1961 came down to 12.5 % of GDP in 1965. It is noticed that this was the ever-lowest contribution during the last four decades. But in the meantime, the share of government investment had increased from 35.8 % to 39.8 % of the gross capital formation during the same period. The other reason for the decrease in the private investment during that time was the result of nationalization programme, restrictions of imports and exchange controls carried out in Sri Lanka which in turn discouraged the private
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Investment to a large extent. Later, the government felt that the external payments could be minimized through the private sector participation in investment activities, and an import substitution drive was commenced during 1965-70. Following this, the government had started encouraging private foreign investment in 1966, for the first time in Sri Lanka. Further, large corporations were established mainly to undertake production of manufactured goods. As a result, the private sector activities in investment had increased to 14.5 % in 1970 from 7.5 % in 1965, which in turn resulted in increasing the gross capital formation to 18.9 % of GDP from 12.5 % during this period.

Table 4.1: Share of Investment in Government and Private Sectors, 1961 - 2000

<table>
<thead>
<tr>
<th>Period</th>
<th>Government Capital Formation % of GDP</th>
<th>Government Capital Formation % of GDCF</th>
<th>Private Capital Formation % of GDP</th>
<th>Private Capital Formation % of GDCF</th>
<th>Gross Capital Formation % of GDP</th>
<th>Savings Investment Gap % of GDP</th>
<th>GDP Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961 - 1965</td>
<td>35.3</td>
<td>5.2</td>
<td>64.7</td>
<td>9.6</td>
<td>14.8</td>
<td>2.0</td>
<td>3.6</td>
</tr>
<tr>
<td>1966 - 1970</td>
<td>27.8</td>
<td>4.6</td>
<td>72.2</td>
<td>12.1</td>
<td>16.7</td>
<td>4.6</td>
<td>5.2</td>
</tr>
<tr>
<td>1971 - 1977</td>
<td>34.2</td>
<td>5.4</td>
<td>65.8</td>
<td>10.3</td>
<td>15.7</td>
<td>3.3</td>
<td>2.9</td>
</tr>
<tr>
<td>1978 - 1982</td>
<td>23.6</td>
<td>6.3</td>
<td>76.4</td>
<td>21.3</td>
<td>27.6</td>
<td>12.5</td>
<td>6.2</td>
</tr>
<tr>
<td>1983 - 1989</td>
<td>21.9</td>
<td>5.3</td>
<td>78.1</td>
<td>19.0</td>
<td>24.3</td>
<td>8.4</td>
<td>3.7</td>
</tr>
<tr>
<td>1990 - 2000</td>
<td>14.0</td>
<td>3.5</td>
<td>86.0</td>
<td>21.7</td>
<td>25.2</td>
<td>5.4</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Source: Central Bank of Sri Lanka, Annual Report, 2002 & Author’s Calculation

During the closed economy regime (1971 – 77), the private sector participation was again disturbed by the threat of nationalization of private institutions and the land reforms act of 1972. Due to this, the share of private investment started declining continuously until the liberalized economic policies
were introduced in 1977. For instance, gross capital formation dropped from 18.9 % in 1970 to 14.4 % in 1977. There was a remarkable active participation from the government side during this period. The contribution from government to the gross capital formation reached the level of 40.2 % in 1976, which was the highest contribution during the last four decades (CBSL, 1978).

As noted in Chapter 1, the Sri Lankan economy has become far more outward-looking since the liberalization process began in 1977. The policy reform package introduced in 1977 included new incentives for foreign investors, significant exchange rate realignment, financial market reforms, removal of price controls and government monopolies in domestic trade (Central Bank of Sri Lanka, 1990). This economic policy created a conducive environment for new investment activities. Both the government and the private sector increased their share in investment during 1978-1982. It was observed that this is the period in which the rates of investment of government and private sectors reached the ever highest rates. For instance, private capital formation were 25.2 % and 25.8% in terms of GDP in 1980 and 1982 respectively while the government capital formation as a percentage of GDP were 7.1% and 8.6% in 1979 and 1980 respectively. Due to the increased participation of the both sectors, the gross capital formation also attained the ever-highest level of 33.8% of the GDP in 1980. It is learnt that the reason for this sharp increase in the government investment was the development programme carried out by the government, such as Mahaweli Development Programme and Housing & Urban Development
Programme. The other reason for the increase in the gross capital formation was the foreign sector participation in capital formation in the country.

As observed earlier, economic policy reform introduced in 1977 recognized the importance of international capital flows in promoting economic growth. The budget speeches and national plans as well as white papers issued from time to time indicated the positive attitude of the authorities towards foreign direct investment (Wijesinghe, 1989). Though the foreign investments were encouraged during last 1960s, it could not receive a positive response from foreign collaborators because of the restriction on ownership and management. The foreign investors were expected to have collaboration with the local enterprises and the general rule was that the local collaborator should hold the greater part of the shares and retain effective control over the firms, thereby protecting the interest of the local enterprises (Ministry of Planning, 1972).

Since then, Sri Lanka took measures to create suitable environment for foreign investment by adapting appropriate macroeconomic policies and offering a package of incentives, which led the government to liberalize the exchange control regulations substantially. For example, the first Export Promotion Zone (EPZ) at Katunayake, which is located near the Colombo International Air Port was EPZ established in 1978. As a result, the foreign investment in numbers of potential sectors rose significantly.
The whole scenario changed during 80’s because of the civil war raged against Tamil minority that started in 1983 and the JVP insurgency during 1987 - 89. The much-awaited role of the private sector as an engine of growth has not been materialized due to the unrest in the country. It is noticed that the private investment during the period 1984 – 89 had gone down significantly. For instance, the share of private investment to the total investment was 64.7 % in 1977 and reached the level of 83.8 % in 1982. But from 1983, it dropped from 83.8 % in 1982 to 73.7 % in 1989. In the meantime, private capital formation as a percentage of GDP dropped from 24.0% in 1983 to 16.0 in 1989. Since the private investment declined during this period, the government offered attractive incentives to encourage the private sector and foreign sector participation in investment activities. The government continued to promote foreign private
investment by establishing the second EPZ at Biyagama which lies 24kms north east of the Port of Colombo that began its operation in 1986.

During 90's, private sector started rebuilding their confidence in the economy due to the second phase of structural reforms agenda of the government, introduced in late 1989. The third EPZ was established at Koggala in the southern province in 1991. In the meantime, the “Two Hundred Garment Factory Programme” commenced in the same year. It is seen that the liberalization policies and incentives for private investment resulted in further encouraging private sector participation in the economy during this period. This was the period in which the government sector investment reduced drastically. There was a mixed response observed between private and government capital formation. For some years, increase in the government capital formation increased the private capital formation and vice versa. However, private investment, with remarkable fluctuation, reached 2.48% of GDP in 2000 from 18.3% of GDP in 1990 and 24.0% of GDP in 1994. The increase in the private capital formation resulted in increasing the gross capital formation to 28.0% of GDP in 2000 from 22.2% of GDP in 1990 and 27.0% of GDP in 1994.
4.3 Financial Sector Participation in Capital Formation

Nationalization and government controls were the policy tools to control the financial sector in Sri Lanka before the liberalization of the economy. We have seen in Chapter 1 that the two state banks dominated the financial sector which was resulted them to own more than 70% of the total bank advances and deposits. During the pre-liberalization period, financing by the financial sector was concentrated on the plantation section and the other was neglected. It was expected that the efficiency in the financial sector could be attained through market mechanism and greater competition. We have seen in the Chapter 1 that financial sector could not encourage the private sector in capital formation.

Data reveal that as a per cent of GDP, share of government sector in GDCF improved from the low level of 16.0 per cent in 1960’s to 26.8 per cent in
1970’s. This was the consequence of the policy of deliberate expansion of the public sector investment in establishing government corporations. During this period, 26 corporations were established. As a part of the liberalization policies, financial deregulation was introduced in Sri Lanka in 1977 to attract private investment – domestic as well as foreign. Though the gross investment increased remarkably during 1978-1982, it suffered a set back due to the civil war. The increasing trend started declining in the 1980’s. The drop in the 90’s was mainly due to the privatization programme launched by the government to sell out government corporation to private sector. The general believe of the government was that the domestic sector play a key role in generating capital for developing countries. However, though the financial policies were in favour of the private sector, the country situation prevented the private sector to grow.

In Sri Lanka, retained earning of the firms are the main sources for financing the investment. An estimate shows that 65% to 75% of the private sector investment was financed through retained profits (Colombo Stock Exchange, 2000). Commercial banks are in second place in financing investment. The share of the stock market, finance companies, venture capital companies, leasing companies and merchant banks are very poor, each making 0.1% to 3.0% to the total investment. This shows that the stock market has lost ground in financing investment in the country over the past years and the Commercial banks together with DFI’s and internal funds have been the main sources of funding investment in Sri Lanka.
As seen earlier, the importance of the private investment has been underscored during the pre-liberalization period in Sri Lanka and it came to forefront in the later period in which, all the adjustments programmes were aimed at reducing the public sector investment activities in order to reduce the fiscal deficits. This phenomenon is not unique only in Sri Lanka. During the 1980s, in many developing countries, reduction in public investment was considered as the common effective policy variable used to reduce the fiscal deficits. The neoclassical economists proposed for deduction in public investment. This is in contrast with the Keynesian framework. However, the recent research suggests that private investment has been more directly related to economic growth in developing countries than public investment (Khan and Reinhart, 1990). They argue that private investment and public investment have different effects on the long-run rate of growth. In Sri Lanka, government investment is identified as a complementary to private investment.

In Sri Lanka, current account deficit, balance of payment problem, rising inflation, growing foreign debt burdens have lead the country policy makers against the large scale government in the allocation and use of resources. It is the policy of the government to follow the market-based reforms. It is considered as part and parcel of the growth-oriented adjustment.
Table 4.2: Financing of Capital Formation, 1961-2000

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Saving</td>
<td>12.9</td>
<td>12.4</td>
<td>13.0</td>
<td>12.1</td>
<td>12.2</td>
<td>18.2</td>
</tr>
<tr>
<td>Govt. Savings</td>
<td>0.9</td>
<td>0.6</td>
<td>0.3</td>
<td>1.1</td>
<td>1.3</td>
<td>-2.1</td>
</tr>
<tr>
<td>Domestic Savings</td>
<td>13.8</td>
<td>13.1</td>
<td>13.3</td>
<td>13.2</td>
<td>13.5</td>
<td>16.1</td>
</tr>
<tr>
<td>Net Factor Income from Abroad</td>
<td>-0.5</td>
<td>-0.8</td>
<td>-0.9</td>
<td>-1.8</td>
<td>-2.3</td>
<td>-1.5</td>
</tr>
<tr>
<td>Net Private Transfers from Abroad</td>
<td>-0.4</td>
<td>-0.2</td>
<td>0</td>
<td>4.1</td>
<td>4.7</td>
<td>5.2</td>
</tr>
<tr>
<td>National Savings</td>
<td>12.8</td>
<td>12.1</td>
<td>12.4</td>
<td>15.5</td>
<td>15.9</td>
<td>19.8</td>
</tr>
<tr>
<td>Foreign Savings</td>
<td>2</td>
<td>4.6</td>
<td>3.3</td>
<td>10.2</td>
<td>8.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Gross Domestic Capital</td>
<td>14.8</td>
<td>16.7</td>
<td>15.7</td>
<td>25.7</td>
<td>24.3</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: Central Bank of Sri Lanka, Annual Report 2002 & Author’s Calculation

4.4 Private Investment in Sri Lanka

Private sector in Sri Lanka plays a major role in contributing towards increasing the economic growth of the country during the post-liberalization period as against the government sector. Its growth during the pre-liberalization period was not significant due to the various controls and restriction imposed on trade and foreign investment. It is noticed that the most of the manufacturing industries in Sri Lanka depended on imported intermediary goods for their final production. Import restrictions and control on them were affected the growth of sector. It is learnt that the policy measures were implemented to avert the balance of payment crisis. Sri Lankan economy depended on heavily on foreign exchange earnings form traditional exports of tea, rubber and coconuts, and the taxes
imposed on plantation sector. Around 90% of the foreign earnings were obtained through this sector. And more importantly, most of the foreign earnings were spent on imports of foodstuffs. It seems that the respective government did not encourage other sectors to grow. As Kelegama (1998) argued that the export earnings would have been ploughed back into investment to other sectors of the economy.

Private sector participation in investment activities was very significant during the last part of 70s and early part of 80s. But this had changed during the later periods. Many factors have attributed for the decline in the investment in Sri Lanka. These include, other than the civil war, falling prices for primary commodity exports, a decline in private external financing (foreign direct investment), the presence of a large stock of foreign debt, and balance of payment difficulties.

4.5 Public Sector Investment

Public sector investment is a part of the gross capital formation. At the beginning of the chapter, it was discussed that the level of investment should be increased sufficiently so as to enhance the rate of growth of the country. Though the government investment was very significant during the pre-liberalization period, it was not so in the latter period. Since it was the policy of the country to cut back the public investment and to privatize the government owned companies, the importance of the public investment started declining during 1980s and 1990s.
It may be argued that the less participation of the government would have discouraged the private sector in the process of economic development. Kelegama (2005) argued that the public investment is necessary to boost the private investment in the country. This is because that the government investment provides and upgrades the infrastructure facilities in the country which is the pre-requirement for private investment. Since private investment is profit motivated, the investment in infrastructure is naturally expected from the government side. Therefore, the government policies for deducing its investment would have affected the gross capital formation through non-private sector participation.

**4.6 Foreign Direct Investment in Sri Lanka**

Foreign direct investment is the third largest contributor to the total investment in Sri Lanka, following commercials banks and retained profits which are the first two sources in this line. Foreign investment is expected to supplement domestic private investment through foreign capital inflows. This happens only when the external resources gap, which is import over export, arises. In this situation, foreign investment is considered to be an important vehicle for economic growth and development.

In Sri Lanka, this is not an escaping fact that it compels to depend on foreign investment for her investment requirement. Since imports expenditure always excess of exports earnings, Sri Lanka always encourages foreign
investment by giving incentives and tax concessions to foreign investors. There are arguments on this line of thought. The numerous tax concessions other expenses on infrastructure might have contributed towards widening the fiscal deficit substantially in Sri Lanka.

In the literature, there are arguments for and against on the use of foreign capital for the development of a nation. It is seen that Sri Lanka is always in favour of inviting foreign capital to meet her foreign exchange difficulties, rather than creating money which is another way of meeting the current account deficit problem, simply because it may lead to inflation.

4.7 A Brief Theoretical Perspective

Classical economists believed that the desire to invest and the desire to save both stem from the same source. A willingness to forgo consumption today would be used in future either increased consumption or investment. Classical economists saw that the desired saving is equal to investment because both are assumed to be functions of rate of investment. However, Keynes had a different view on saving and investment. He argued that these two behave based on two different psychological mechanisms. Since savings arises out of postponement of consumption, it is primarily a function of income whereas investment is primarily determined by expectation or optimism or animal spirits. An economy would suffer from lack of demand as savings tends to be greater than investment with the
link between the two getting severed. This means that if the “animal spirits” is very strong then the investment will be high, and vice versa.

Keynes (1936) also developed the theory of marginal efficiency of capital to explain how interest can affect investment. Tobin (1967) in line with Keynesian thinking introduced a concept, now known as Tobin’s q which is a ratio of the market value of capital to its replacement value. The market value is considered as the value of stock prices, and the replacement cost as the cost of capital that are traded on the stock market, to buy all the fixed assets needed to build the enterprise. This indicates that if the ratio of Tobin’s q is 1.0, then the stocks are neither overvalued nor under valued. In other words, a ratio is greater than 1.0, provides a strong motivation to invest more by the entrepreneurs. Here, the motivation more or less depends on the expected profit/loss arising from the difference between the market value of stocks and the cost of capital.

Kalecki (1971) theory on the determinants of investment is different from the above. He argues that it is determined by past levels of profits. As in Keynes, Kalecki showed that investment finances itself. That is to say that investment financed by bank credit or out of the fund of the firms, would create its counterpart in savings. These savings, which is accumulated in capitalist’s hand by the way of investment activities, accumulates as deposits. This is again circulated for investment purposes in the economy. Keynes’s theory leaves out the important elements in its analysis and is not a good vehicle for illustrating how investment is
determined in his model (Asimakopulos, 1971). Kalecki further argues that there is a time lag between the investment decision and the investment expenditure. It is investment decision, which determines investment, and the investment decision is determined by capitalist's profits. The above discussion clearly tells us that there is an interaction between the profit and the investment. The investment decision is driven by profit motivation of the capitalists. In support of the view, Asimakopulos (1971) noted that profit expectations of firms play a crucial role in the determination of investment decision, and these expectations are strongly affected by the current level of investment.

4.8 Determinants of Investment

Determinants of private investment have been studied extensively using different growth models such as neoclassical model and accelerator model in developing countries. The various studies indicate different factors in explaining private investment behaviour. The mostly employed determinants of private investment are expected demand proxied by output (Kuh, 1971; Jorgensen & Siebert, 1968), profits or cash flow (Elliott, 1973; Bischoff, 1971), cost of capital relative to wages (Bischoff, 1969; Eisner, 1970), and the level of capacity utilization (Feldstein & Foot, 1971; Eisner, 1972; Ajay & Sweder, 1996).

Classical economists' view on investment is that there is a negative direct relationship between interest rate and investment. Given the usual assumption in the classical theories, investment is expected to response negatively with regard to
interest. Another view provided by macroeconomic models is that the return on investment depends on the overall level of economic activity, which in turn is positively affected by the volume of gross investment (Steven and Solimano, 1992). As argued by Kiyotaki (1988) and Shleifer and Vishny (1989), economy may in trouble in an “insufficient investments” equilibrium, in which individual firms’ investment is too little under certain conditions that lead to lowering investment. This is because each firm expects gross investment to be low. This mechanism plays an important role in developing countries.

Until 1990s, the research on investment was limited to the gross investment. A recent research (Khan and Reinhart, 1990) suggests that private investment has been more directly related to economic growth in developing countries. In the same study, they found that the private investment was positively and significantly correlated with economic growth during 1975-1987. Further, in the same study it was found that the level of the private investment was a positive function of the trend level of government investment, which was taken as representing investment in infrastructure, but not of deviations from that trend. This finding suggests that there is long-run complimentarily of private to public investment, but short-run substitutability, in the sense that short-run increases in public sector investment appear to crowd-out private sector investment in developing counties.
4.8.1 Determinants of Private Investment

Economic prosperity requires certainty in macroeconomic policies which in turn increase the investment and economic growth. Socio-political instability hinders private investment.

Most of the previous studies on private investment concentrate only on the economic determinants of private investment (Pfeffermann and Madarassy, 1991; Serven and Solimano, 1993). Political scientists and economists have found that the reason for a decline in economic growth is not only the macroeconomic factors but also the political failures, such as civil war, violent etc. Recent research has focused on the economic as well as political factors which affect the economic growth (Paster and Sung, 1995; and Feng, 2001).

As seen in Chapter 1, Sri Lanka experienced through political turmoil during the last two decades. Therefore, there is a need to see whether the civil war raged from 1983 had any impact on the growth of the economy.

Socio – political instability (SPI) deduces the investment in two ways: First, it destroys physical capital and displaces human capital, resulting in deducing job opportunities and disrupting personal savings, hence lowering investment. Second, due to the political instability, investors shift their assets from fixed capital stocks to more liquid forms. Socio – political unrest can be caused by either by violent (purges, destroying property, assassinations people
Investment Patterns etc.,) or non-violent (picketing, strike, anti government demonstration etc.,). It is argued that non-violent has a small positive impact on investment because countries experiencing non-violent carry out political and economic reform to cope with that situation. The violent, on the other hand, has a large negative impact on investment because violent are always outside the control of the governments.

The other reason for the political instability is the instability in the ruling government. If the regime changes frequently, there is a future uncertainty for investment. Feng (1997) correctly point out that there are two different types of government change.

But in case of Sri Lanka, it is caused by violent which leads to civil war in the country for more than 20 years.

4.9 Black Investment

Black profits are either spent on consumption or invested in black investment or both. Therefore, black income not spent for consumption is invested in black investments. As argued by Kumar (1993 & 1999), black investments are created through seven channels, namely, 1. under invoiced inventories, 2. over invoiced plant and equipment, 3. informal sector savings and deposits in banks, 4. holdings of gold, silver and holdings cash and gems, 5. flight of capital for investment in
abroad, 6. speculation in secondary share markets, real estate etc., 7. illegal activities like smugglings, drugs etc.

Inventories are part of the gross capital formation. These are created in the process of production of goods and services. According to the trading and profit & loss account which are prepared by enterprises to calculate their profits, manipulations are made to show less profits for business enterprises. It is done by the undervaluation of inventories to show less profit. The costs involved in the hidden stocks are the black investment. Further, it raises black profits of the capitalists and their level of output.

Over invoiced plant and equipment means that the actual investment is lower than the reported one by the amount overstated. This black investment is associated with white investment because it is a fraction of the white investment. This is a negative black investment since it reduces the white investment. However, it raises black profit of the capitalists by the amount it is over-invoiced. It doesn't contribute to capital formation in short run.

The type of black investment, such as informal sector savings, and deposits in banks, holding cash etc. has a positive influence on white investment and income. Informal sector lies outside the sphere of the usual financial system in the economy. It raises profit of the capitalists and output. Part of these funds
can be flown into speculative markets, but it does not increase the level of
investment.

Holding gold, silver and gems may be categorized as unproductive
investment and therefore it does not contribute to capital formation within the
country. This implies the leakage of savings from the country flowing to foreign
countries. Since investment of these precious metals is made outside the system,
the capitalist profits or output may not rise, but it involves capital gains.

Flight of capital is taking place through mis-invoicing of exports or
imports. In this process, funds are transferred from the country which implies a
leakage of savings from the country. As in the case above, it does not raise the
capitalist profit or output in the national economy, not resulting capital formation
in the country.

Speculation in secondary share markets and real estate etc. does not result
in higher investment since it is transfer of fund activities in nature. It may not
accumulate capital formation due to the reasons mentioned earlier. Investment in
illegal activities has impact on income and it raises output in the economy.
Therefore, it increases black profits of the capitalists. Kumar (1999) argues that
major portion of it accrues outside the economy and promotes criminalization of
society.
We have seen above that investment out of black incomes go through seven channels. It is likely that black investment rate ($I_b$) would be lower than the investment in white economy ($I_w$) since most of the above components are either leakages for the economy or transfers in nature. Therefore, we can safely claim that share of the gross investment in the economy ($I_t$) would be less than white components of it. This could be written as follows:

$$\frac{I_w}{Y_w} > \frac{I_t}{Y_t} > \frac{I_b}{Y_b}$$

Due to the black investment in the black economy, it may be said that the white economy should use much more investment because the inefficiencies are associated with it.

Since the black investor is already counted in the white economy, much more capital is shown that are used in the course of normal production in the white economy.

Therefore, it may be argued that black economy tends to lower the rate of growth of an economy and true rate of investment would be lower than the reported rate of investment of an economy.