

**MACROECONOMIC INSTABILITY
AND GROWTH:
CASE OF SELECTED OIC COUNTRIES**

BY:

JAMILAH MOHD. MAHYIDEEN

**A RESEARCH PAPER SUBMITTED IN
PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE DEGREE OF
MASTER OF ECONOMICS**

**KULLIYAH OF ECONOMICS AND
MANAGEMENT SCIENCES
INTERNATIONAL ISLAMIC UNIVERSITY
MALAYSIA**

JANUARY 2002

ABSTRACT

In the past decades, it is observed that there is a spectacular divergence of growth amongst developing countries. The performance of OIC countries with respect to the per capita income growth is not satisfactory as compared to the developing countries as a whole. This study is carried out to investigate whether macroeconomic instability is one of the factors, among others, to cause slower growth rates in OIC countries. The present study employs a time series and cross section data set of 11 selected OIC countries between 1980 and 1997. Some proxies of macroeconomic instability such as inflation, budget deficit as a percentage of GDP, external debt and balance of payment deficit are included in the equations as regressors. The results of the study are divided into three main groups. These includes; income groups; overall countries and individual countries. Overall, the results of this study based on income groups suggest that policy-induced macroeconomic instability does have a negative influence on growth for middle-income groups of the OIC countries, through external debts and budget deficit. As such, macroeconomic instability will determine growth for this income group and this is an area that should be looked into for better progress economically. For overall countries, none of the factors are found to affect growth significantly. The results for individual countries show that macroeconomic instability affects growth negatively in some OIC countries through inflation and balance of payment deficit.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a research paper for the degree of Master of Economics.



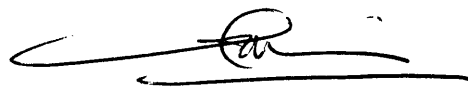
Ruzita Mohd. Amin
Supervisor

This research paper was submitted to the Department of Economics and is accepted as partial fulfilment of the requirements for the degree of Master of Economics.



Selamah Abdullah Yusof
Head, Department of Economics

This research paper was submitted to the Kulliyah of Economics and Management Sciences and is accepted as partial fulfilment of the requirements for the degree of Master of Economics.

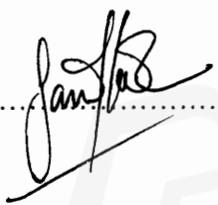


Mohd. Azmi Omar
Dean, Kulliyah of Economics and
Management Sciences

DECLARATION

I hereby declare that this research paper is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references and a bibliography is appended.

Name: Jamilah Mohd. Mahyideen

Signature:.....

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Macroeconomic Instability and Growth: Case of Selected OIC Countries

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ACKNOWLEDGEMENT

In the Name of Allah, The Merciful, The Mercy-Giving

Alhamdulillah, all thanks and praise are due to Allah, the Creator, the Most Gracious, the Most Merciful. May the Peace and Blessings of Allah be upon his beloved Muhammad, the Seal of Prophets and upon his family and followers, for giving me strength and facile to complete this research paper accordingly.

This research will not be a reality if not from the trust, support, opinion and guidance given by many individuals. It may be impossible to name every one of them to acknowledge their contributions and assistance. Nevertheless, several names deserve special mention.

The greatest appreciation is conveyed to my helpful and respectable supervisor, Assoc. Prof. Dr. Ruzita Mohd Amin, Kulliyah of Economics and Management Sciences, who has given me guidance, assistance, constructive ideas and valuable advice in completing this research. Without it, this research would not have been completed. Her patience, guidance and constructive criticism are the main factors that energized my efforts and creativity to complete this research successfully.

I wish also to express my sincere gratitude and warmest appreciation to Assoc. Prof. Dr. Mansur Hj. Ibrahim, Deputy Dean of Academic Affairs, Kulliyah of Economics and Management Sciences for his assistance and guidance in completing this research paper. This appreciation is also dedicated to Assoc. Prof. Dr. Nazirudin

Abdul Rahman for reviewing my proposal and for the valuable feedback and comments towards completing my research paper. At this time, I would also like to express my special thanks to UiTM for providing financial assistance.

Appreciation also goes to my colleagues especially Norasibah, Kashfia, Jarita, Nursilah and Izzeldin for instinctively devoting their precious time, sharing ideas and continuously motivating me to finish this paper.

Last but not least, I would like to express my sincere appreciation to my beloved husband, Wan Mustafa Wan Hanafi for his support and sacrifice throughout my study. His great patience has provided me comfort to complete this research paper. This appreciation also goes to my family who have always encouraged me to do the best in my studies and given me inspiration.

Finally, for those who were patient, supportive, understanding and tolerant in helping me directly or indirectly to finish this report, may ALLAH bless them with good health, happiness and prosperity.

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LIST OF ABBREVIATIONS

BD	Budget Deficit
BOP	Balance of Payment
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
INF	Inflation
LDCs	Least Developed Countries
MI	Middle Income Countries
OE	Oil-Exporting Countries
OIC	Organisation of Islamic Conferences
TC	Transition Countries

CHAPTER 1

INTRODUCTION

Over the years, most countries have enjoyed growth in national income. Economists have used data on GDP per capita as a measure of economic growth rather than GDP, as the former gives a better sense of a country's improvement in the standard of living. This is because GDP per capita takes into consideration the size of population in its measurement. However, there are two main questions that have attracted the attention of economists through the years; i.e., (i) why do some countries grow faster than others; and (ii) what are the factors and policies that lead to significant divergences in economic performance across countries. For example, the performance of OIC countries with respect to the per capita income growth is not satisfactory as compared to the developing countries as a whole. Between 1960 and 1990, developing countries as a group enjoyed per capita income growth of 3.5 per cent a year while the OIC countries realised per capita income growth was only 2.6 per cent a year (Table 1). Even in the last ten years, the developing countries have achieved a considerably higher income growth than OIC countries (Table 2).

Table 1
GDP Per Capita and GDP Growth Rates

	Growth in GDP Per Capita (1960-1990)	Growth in GDP (1960-90)
Developing Countries	3.5	5.8
OIC Countries	2.6	5.3

Source: Extracted from Oker Gürler, "Population Growth and Economic Development in the OIC Countries, Journal of Islamic Economic Cooperation 21, 3 (2000), pp. 17.

Table 2
Real GDP Growth Rates In OIC Countries and Developing Countries

	1991	1992	1993	1994	1995	1996	1997	1998	1999
OIC	1.8	2.3	2.5	2.7	3.7	5.8	4.6	-1.4	1.43
Developing Countries	4.77	6.33	6.39	6.69	6.11	6.5	5.74	3.48	3.76

Source: Data for developing countries are taken from The World Economic Outlook (WEO) Database, September 2000 while that of OIC from SESRTCIC Database.

Although there is no magical formula for success, there is conventional wisdom in the literature of economic development, and in the World Bank, that some of the huge policy differences between countries or block countries may account for at least part of the observed divergence in growth performance. Easterly and Rebelo (1993), for instance, suggested that a significant fraction of divergence in economic performance between East Asia and Latin America, and between East Asia and Africa between 1960 and 1989 can be explained by policy differences. An influential paper by Olson (1996) claimed that the disparities in income per capita growth among countries may be linked to the differences in economic policy and institutions, that in turn shaped the structure of incentives in each nation. With regard to

economic policy, there are two areas that are important to macroeconomic performance and being practised differently across the developing nations. They are external trade orientation (for details, see Edwards, 1992) and macroeconomic management. This is based on a study done by the World Bank (1993, p.105) of fast-growing East Asian countries which found that macroeconomic stability and rapid export growth were two key elements in starting the virtuous circles of high rates of capital accumulation, efficient allocation of resources, and strong productivity growth that formed the basis for East Asia's success. As macroeconomic stability is widely accepted as a necessary though insufficient factor for sustained growth (World Bank, 1992), it is essential to look at how the macroeconomic policies matter.

Macroeconomic policies refer to monetary, fiscal, and exchange rate policies that help determine the rate of inflation, the budget deficit and the balance of payments. A country with a stable macroeconomic framework provides an environment that is conducive to growth. The World Bank (1990a) defined a stable macroeconomic framework as low inflation and predictable, appropriate interest rate, stable and sustainable fiscal policy, competitive and predictable real exchange rate and a viable balance of payments situation. Nevertheless, not all variables are directly controllable by policy. This is due to the kind of shock that is exogenous such as terms-of-trade shock and other external shocks. In such cases, government policy can only influence the reaction to the shock but not to the shock itself. The ability of a country to minimise the destabilising impact of exogenous shocks and to avoid creating unnecessary uncertainty by its own policy reflects the quality of good macroeconomic management (Bleaney, 1996). Poor macroeconomic management is characterised by

persistent budget deficits, repeated failures to halt unrestrained inflation, and ill-advised exchange rate policies (Bruno et al., 1988). According to Pindyck (1991), countries with poor macroeconomic management will create uncertainty on relative and absolute prices which in turn will affect the level of investment by affecting the real interest rate. Another consequence of poor macroeconomic management is that it may also restrain growth of total productivity more directly. An example of this is the slowing down of resource transfers between countries (Bleaney, 1996). Based on this, it can be concluded that macroeconomic management determines macroeconomic stability. Thus poor macroeconomic management will result in macroeconomic instability while good macroeconomic management will result in macroeconomic stability. For the purpose of this research, the terms 'macroeconomic instability' and 'poor macroeconomic management' are used interchangeably.

World experience has shown that macroeconomic stability is a key factor for facilitating economic growth. Macroeconomic stability means that inflation is kept low and that the real exchange rate is stable at a competitive level. Also, the government budget deficit and foreign debt are kept within limits consistent with price and exchange rate stability (Fischer, 1992). As reported in the *Annual Economic Report on OIC, SESTRCIC, 1999*, one of the reasons for East Asia's rapid growth was that in the past three decades, these countries experienced inflation stabilised at 6%, relatively small government budget deficit and relatively stable exchange rate.

In view of the effects of macroeconomic stability on growth, the present paper will analyse this issue empirically. This paper will draw extensively on the experiences of Islamic countries. A growth model includes some indicators, such as inflation rate and government deficit as proxies of macroeconomic instability will be tested. The result of this study will explain whether the slower growth rate in Islamic countries, among others, is due to their macroeconomic instability. First, however, it would be useful to give some background information about the countries in question and the Organisation of Islamic Conferences.

1.1 Background on Islamic Countries

Islamic countries are defined as the members of the Organisation of Islamic Conferences (OIC). The OIC was established in 1969 and presently has 56 members (Table A1 in Appendix). It is the second largest international organisation after the United Nations.¹ The member countries of the OIC are scattered over three continents; 28 in Africa, 26 in Asia and 2 in Europe. As such, the OIC member countries as a whole account for one-sixth and one-fifth of the world land and population, respectively². All OIC members are developing countries.

¹ Ilhan Udurel, External Debt of Islamic Countries, *Journal of Economic Corporation*, Vol. 20, No.4, page 75

² Ibid, page 78

Table 3
Number of OIC Countries by Continent

Continent	No. of OIC Member Countries
Africa	28
Asia	26
Europe	2

Source: Annual Economic Report on OIC Countries, (1998), page 10

The OIC countries can be classified according to income groups³. Each country can be classified either as low-income, middle-income (subdivided into lower-middle and upper-middle), or high income. The low-income group consists of 27 countries, namely Afghanistan, Albania, Azerbaijan, Bangladesh, Benin, Burkina Faso, Cameroon, Chad, Comoros, Gambia, Guinea, Guinea-Bissau, Kyrgyzstan, Mali, Mauritania, Mozambique, Niger, Nigeria, Pakistan, Palestine, Senegal, Sierra Leone, Somalia, Sudan, Tajikistan, Togo, Turkmenistan, Uganda and Yemen. These countries represent 48 per cent of the total number of the low-income countries in the world (61 countries) and the majority of these countries are located in the Sub-Saharan Africa (19 countries or 66 percent of the total).

³ Based on 1998 World Bank Classification. Economies are divided among income groups (low-income, \$785 or less; lower-middle-income, \$785-\$3,125; upper-middle-income, \$3,126-\$9,665; and high-income \$9,655 or more) according to 1997 GNP per capita, calculating the World Bank *Atlas* method - the use of official exchange rates for converting GNP data, expressed in different national currencies, to a common denomination-conventionally US\$. The Atlas conversion factor for any year is the average of the exchange rate for that year and the exchange rates for the two preceding years, after adjusting them for differences in relative inflation between the country and the US.

The middle-income group consists of 23 countries that are made up of Algeria, Bahrain, Djibouti, Egypt, Gabon, Guyana, Indonesia, Iran, Iraq, Libya, Jordan, Kazakhstan, Lebanon, Malaysia, Maldives, Morocco, Oman, Saudi Arabia, Surinam, Syria, Tunisia, Turkey and Uzbekistan.. The third group comprises high-income countries and these countries are Brunei, Kuwait, Qatar and the United Arab Emirates (U.A.E.). Among the OIC countries, 13 of them are oil-exporting countries; namely Algeria, Brunei, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE).

Table 4
Number of OIC Countries according to Grouping

Group Division Of OIC	Number of Countries
Low-Income Group	29
Middle-Income Countries (MI)	23
High-Income Group	4

Note: Grouping is based on 1998 World Bank Classification

1.2 Recent Performance and Selected Macroeconomic Indicators of OIC Countries

1.2.1 Growth

The data in Table 5 shows that the overall performance of OIC countries as a group has improved from 1994 to 1996, before realising lower growth rate in the next two years (also see Table A2 for selected OIC countries in the Appendix). It must be noted that the group even registered a negative growth rate in 1998. As mentioned earlier, this is the period of financial crisis that had an impact not only on the affected (Asian) countries but also on other developing countries, including OIC countries.

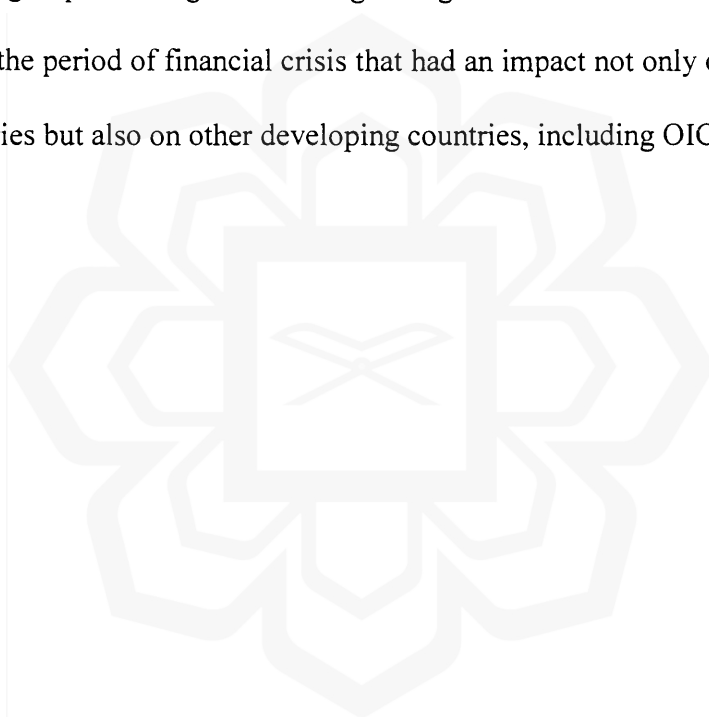


Table 5

Real GDP Growth Rates in OIC Countries (Annual average, in percent)

	1994	1995	1996	1997	1998
LDC Average	2.6	8.8	5.4	5.3	4.5
MI Average	2.3	5.7	6.4	4.9	2.3
OE Average	2.6	2.7	5.0	4.0	-1.6
TC Average	-10	-5.2	1.1	0.1	1.3
OIC Countries	2.7	3.7	5.8	4.6	-1.4
Developing Countries	6.69	6.11	6.5	5.74	3.48
Developed Countries	3.32	2.71	3.17	3.39	2.41
World	3.7	3.6	4.1	4.1	2.6

Note (1): Averages were computed on the basis of percentage changes for individual countries weighted by 1995 GDP values in terms of the US Dollar.

Source: Data for OIC countries are extracted from Annual Economic Report on OIC Countries:1999, pp.15, SESRTCIC while that of developing countries, developed countries and world are taken from World Economic Outlook Database, September 2000.

To compare the growth performance of OIC countries with other groups, Table 5 presents the data on the performance of developing and developed countries. It also displays average growth rates for different sub-groups of OIC countries. When OIC countries are analysed on the basis of sub-groups, except in 1994, the performance of middle-income (MI) countries was better than the average of OIC countries. The group of least developed countries LDCs has grown at moderate rates before 1995 but reached 8.8 percent, the highest growth rate in 1995 due to a large increase in

their export by 29.5 percent (Annual Economic Report on OIC Countries, 1999, SESRTCIC).

In the case of oil-exporting (OE) countries, it was observed that since 1994, these countries experienced lower growth rates than OIC averages. The growth performance of OE group improved slightly from 1994 to 1996. This higher rate of growth was a result of an increase in the price of crude oil⁴. When the price fell in 1997, the OE growth rate also declined before recording a negative rate in 1998. This is because the countries' income is generated mainly from oil production. Therefore, any change in the price of crude oil will also affect the growth performance of these countries. On the other hand, the transition countries (TC) group recorded a negative growth rate during and before 1995, but then managed to perform better in the years that followed. These countries were able to reach positive growth rates and even an increase in growth rates during the crisis period.

1.2.2 Inflation

Inflation is not good for the economy's health. Having high inflation means greater instability, which in turn causes further decline in the growth of an economy. A low level of inflation is regarded as a sign of stability of an economy. Compared to the developing countries as a whole, the OIC rate of inflation remained considerably higher during the period under consideration (see Table 6 and Table A2 in Appendix for individually selected OIC countries). The OIC rate of inflation was almost twice

⁴ As reported in the Annual Economic Report on OIC Countries (1999), the average crude oil price increased from \$15.95 per barrel in 1994 to \$17.20 in 1995 and \$20.37 in 1996.

as high than that of developing countries. Nevertheless, it is noteworthy that the OIC were quite successful in reducing the average rate of inflation, at least up to 1997. However, they were not that successful in further reducing the inflation rate, where the inflation rate went up to 26.2 per cent in 1998. The declining trend of inflation was also observed in developing countries although there was a slight increase in 1998. In contrast, industrial countries were very successful in curbing inflation. They were able to maintain and stabilise the rate to around 2 percent to 2.5 percent during the last five years, despite having high inflation during the 1980s.

If the rates are examined on the basis of sub-groups of OIC, the LDC of OIC were able to maintain the inflation rate below the OIC average. As shown in Table 6, TC countries were quite successful in reducing the average inflation rate from four-digit level (1552.5% in 1994) to three-digit level (272.1% and 108.1% in 1995 and 1996, respectively) and reduce the further to two-digit level in the next two years (38.2% and 15.2% in 1997 and 1998), despite having hyperinflation during the first half of 1990s. However, the MI's group inflation rate did not change much where they managed to reduce inflation rate by only a small percentage.

Table 6
Average Inflation Rates In OIC Countries (In Per Cent)

	1994	1995	1996	1997	1998
LDC average (1)	30.9	22.6	22.0	10.4	9.1
MI average (1)	41.3	36.6	31.6	31.8	31.1
OE average (1)	20.9	41.0	13.8	10.2	25.4
TC average (1)	1552.5	272.1	108.1	38.2	15.1
OIC countries (1)	68.5	44.2	23.3	18.9	26.2
Developing countries	51.8	22.2	14.3	9.4	10.4
Developed countries	2.6	2.5	2.4	2.1	1.6

Note (1): OIC averages were computed on the basis of percentage changes for individual countries weighted by 1995 GDP values in terms of the US Dollar.

Source: Extracted from Annual Economic Report on OIC Countries, 1999, page 24.

1.2.3 External Debts

Foreign debt continues to be one of the most troublesome problems facing a number of OIC countries. This external debt problem is faced by almost all of the developing countries as it is needed to finance their growth and development programmes. The OIC countries, like other developing countries, have been facing rapidly-growing debt. The total outstanding external debt of the OIC countries as a group grew quite rapidly in the 1980s where it reached \$390.1 billion in 1988. However, there was a sharp drop in the total debt to \$224.4 in 1990 (Annual Economic Report on OIC Countries, 1990). The total debt continued to increase until 1994 amounting to \$660.6 billion and reached \$712 billion in 1997.

Table 7
Total Outstanding External Debt (in US billion)

	1994	1995	1996	1997
OIC Countries	660.6 (51)	692.0 (51)	708.6 (51)	712.0(49)
Developing Countries	1993.6	2162.6	2238.4	2316.6
Share of OIC in developing Countries (%)	33.1	32	31.7	30.7
Debt to GNP Ratio (%)				
LDC group of OIC	115.8	112.4	97.4	80.6
MI group of OIC	65.3	101.7	79.4	58.2
OE group of OIC	75.9	70.1	56.5	53.6
TC group of OIC	13.2	15.4	15.2	21.5
OIC Countries	71.5 (44)	86.2 (44)	68.8 (43)	56.5 (43)

Note: Figures in parenthesis indicate the number of countries.

Source: Extracted from Annual Economic Report on OIC Countries, 1999, page 34.

Table 7 shows data on the outstanding external debt of the OIC countries from 1994 to 1997. The debt crisis is serious for OIC countries, especially for small countries with weak economies, such as the least developed countries (LDCs) of OIC. The debt

burden of OIC countries can be analysed by looking at the ratio of the percentages of Total Debt Outstanding to Gross National Product. As shown in Table 7, the ratio of Total Debt Outstanding to Gross National Product was 36% in 1980, but then jumped to 86.2% in 1995 before it came down to 56.5% in 1997.

1.3 The Objectives of the Study

Having realised the importance of macroeconomic stability on growth, this study will attempt the following;

1. to investigate the impact of macroeconomic instability on economic performance of OIC countries,
2. to identify the macroeconomic variables that may provide the channels through which macroeconomic policy influences growth,
3. to provide some general policy recommendations that OIC countries can adopt to achieve macroeconomic stability for growth.

This study is carried out on 11 selected OIC countries for the period 1980 – 1997. The countries in this sample are: Malaysia, Tunisia, Morocco, Jordan, Indonesia, Egypt, Bahrain, Sierra Leone, Pakistan, Nigeria and Burkina Faso.