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NEXUS BETWEEN FINANCIAL SECTOR DEVELOPMENT AND ECONOMIC GROWTH: empirical analysis of 112 countries

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This paper decomposes the nexus between financial sector development and economic growth. We reexamined the role of financial sector development in long run economic growth using panel data analysis for 112 country case. Our result confirmed that financial sector development has a significant and positive correlation with long run economic growth for various income group countries.

Keywords: economic growth, financial sector development, financial market, financial intermediation, economic development.

I. Introduction

International statistics show that almost 30 percent of total world population lives on less than \$765 GNI per capita per year in 2006. In comparison this indicator for developed countries is more than \$9,385 per year. This huge per capita income difference can be accounted for by various factors which affect to long-run economic growth. One of the vital aspects that contribute the economic growth is the financial sector development.

According to Levine (2004) the financial instruments, the markets, and the intermediaries are financial sector development factors that can promote economic growth. Well-functioning financial intermediaries and markets can promote long-run economic growth (Beck et.al, 2001). However, the financial sector development varies across countries because of different degree of the financial intermediation, the rule of law, and a number of other endogenous and exogenous reasons.

As outlined in a number of studies, financial sector development can affect to economic growth through five main functions. *Efficiently allocated savings* can offer low cost financial resources for industry and firms. Moreover, financial

intermediaries help decrease transaction cost, thereby, encouraging deposits. Thus, in turn, increases the funds available for investment. *Managing and reducing risk* can weaken the uncertainty of investment projects and strengthen deposits. The financial intermediaries prepare information on borrowers and provide this information to deposit owners in their role of *producing information*. *Monitoring firms and exerting corporate governance* can induce managers to maximize firm value; and improve allocation of resources. At the same time, the effectiveness of corporate governance impacts firm performance with potentially substantial consequences on national economic growth rates. By *easing exchange* function, financial arrangements lower transaction cost which promote specialized production function, technological innovation and growth. The financial arrangements lower transaction costs which will facilitate greater production specialization. Thus, markets that promote exchange encourage productivity gains and financial market development.

A number of studies have looked at the relationship between the financial sector development and economic growth. According to King and Levine (1993), the capital accumulation and technological innovation are main channels for economic growth. King and Levine argued that efficient saving policies can change capital accumulation and technology levels. Hermes and Lensink (2003) found that financial sector development is essential for productive FDI that leads to economic growth. Allen and Leonce (1998) argued that the financial sector development provides the motivation to increase fruitful investment.

The results of full sample regressions show that financial sector development indicators have a 5 percent significant level, with their predicted positive signs. The ratio of private sector credits to GDP shows that a 10 percentage point's increase in private sector credits increases growth by 0.31 percentage points in the period of 1970 to 2003. In low and lower middle income group, and upper middle and high income group countries' results also show that financial sector development indicators, the ratio of private sector credits to GDP and the ratio of liquid liabilities to GDP, have robust, significant and positive impacts on economic growth.

The paper is organized as follows: Section II discusses the empirical model, the data and methodology. Section III presents the results and interpretations of the empirical analysis for different income group countries using five-year average panel data for 33 years. The conclusions are presented in Section IV.

II. THE EMPIRICAL MODEL

The financial system influences the allocation of resources across time and space (Levine, 2004, pp.5). King and Levine's model (1993) look at how the financial system can affect the steady state by altering the rate of technological innovation. The theoretical approach is based on four main steps to achieve economic growth market friction, financial markets and intermediaries, financial functions, and channels to growth. (King and Levine, 1993)

According to King and Levine, the first step for economic growth is to focus on *market frictions* which consist of the information and the transaction costs. Many other researchers showed how well-developed financial systems reduce the information and the transaction costs, and influence the saving rates, the investment decisions, the technological innovation, and the long-run economic growth rates.

Financial markets and intermediaries are the second step for King and Levine's model. "Without intermediaries, each investor would face the large fixed cost associated with evaluating firms, managers, and economic conditions." (Levine, 2004, p.7) Financial intermediaries may reduce the cost of acquiring and processing information and thereby improve resource allocation (Boyd and Prescott, 1986). Financial markets and intermediaries can also provide *functions of financial system* by assisting to mobilize savings, allocate resources, exert corporate control, facilitate risk management, and ease trading of goods, services and contracts in the third stage. Lastly, King and Levine assumed that the two key *channels for economic growth* are capital accumulation and technological innovation.

According to Levine, *on technological innovation*, growth models focuses on the innovation of new production processes and goods (Romer, 1990; Grossman et.al, 1991;). *On capital accumulation*, growth models uses either capital externalities or capital goods produced using constant returns to scale (Romer, 1986; Lucas, 1988;). In these models, the functions performed by the financial system affect steady state growth by influencing the rate of capital formation (Levine, 1997, pp.691). Levine argued that the financial system affects *capital accumulation* either by altering the saving rate or by reallocating savings among different capital producing technologies (Levine, 1997, pp.691).

This paper's empirical analysis is based on King and Levine's model (1997, 2004), and estimates the ratio of private credits to GDP and the ratio of liquid liabilities to GDP for financial sector development. The full sample includes 112; low income and lower middle income group includes 67; upper middle and high income group includes 45 countries respectively. As result of most studies have been mostly using the DEPTH²³ or the PRIVY in order to measure the financial sector development for their analyses.

The DEPTH indicator measures the size of financial intermediaries in the country, and is defined by the ratio of liquid liabilities of the financial system, (money and quasi money (M2)), to the GDP.

$$DEPTH = \frac{\text{Liquid Liability}}{\text{GDP}}$$

(1)

The PRIVY indicator measures the total credit which was provided to private

²³ Many researchers have been using the LIQUID LIABILITY or CREDIT indicators which have a same definition with the DEPTH and PRIVY from Levine.

enterprises, and is defined by the ratio of private sector credits to the GDP.

$$PRIVY = \frac{\text{Private Sector CREDIT}}{\text{GDP}}$$

(2)

The estimated model

$$G(j) = \alpha + \beta F(i) + \gamma X + \varepsilon \quad (3)^{24}$$

- $G(j)$ represents the value of the (j) th economic growth indicator;
- $F(i)$ represents the value of the (i) th indicator of financial sector development averaged over the period;
- X represents a matrix of conditioning information to control for other factors associated with economic growth such as income per capita, education, political stability, exchange rate, trade, fiscal, monetary policy, etc.
- (ε) represents an error term.

The empirical model of per capita GDP growth rate is given:

$$\text{Growth}_i = \alpha + \beta_1 \text{Depth}_i + \gamma_1 \ln \text{GDP}_i + \gamma_2 \text{Edu}_i + \gamma_3 \text{Gov}_i + \gamma_4 \text{Cpi}_i + \gamma_5 \text{Open}_i + \gamma_6 \text{FDI}_i + \gamma_7 \text{Save}_i + \varepsilon \quad (4)$$

- Growth equals the five-year average growth rate of real per capita GDP;
- Subscript i represent each country among n countries in total sample;

The following section discusses the finding on studies conducted to examine the relationship between these various factors, growth, initial per capita GDP, education, government expenditure, trade openness, and etc.

Data and Methodology

The empirical analysis in this paper relied on three main data sources to estimate the financial sector development and long-run economic growth dynamics. The data on DEPTH and PRIVY, the financial sector development indicators, are obtained from the International Financial Statistics, CD-ROM 2005. The data on secondary school enrolment rate obtained from Barro and Lee's dataset (2002). The other variables data sets were obtained from the World Development Indicators, CR-ROM 2005.

- Depth = The ratio of the liquid liabilities to the GDP, in logarithms;
- Privy = The ratio of private sector credits to the GDP, in logarithms;
- $\ln \text{GDP}$ = The Initial Per Capita GDP, in logarithms;
- Edu = Secondary School Enrolment Rate in the gross enrolment;

²⁴ The estimated equation the firstly was tested by King and Levine (1997, 2004).

- Gov = The ratio of Government Expenditure to the GDP, in logarithms;
- Cpi = The Consumer Price Index;
- Open = The ratio of export plus import to the GDP, trade openness, in logarithms;
- FDI = The ratio of Foreign Direct Investment (FDI) to the GDP, in logarithms;
- Save = The ratio of Gross Domestic Saving to the GDP, in logarithms;

The methodology of the empirical analysis complemented the substantial literature, on which growth regression undertaken by Lucas (1988), Romer (1990), Barro (1991), Beck (2000), Levine and King (1993) and Levine (2004).

The analysis is conducted using five-year averaged panel data set because it has a number of advantages. "A panel provides more precise estimates of the finance growth relationship." (Levine, 2004, pp. 54) Panel analysis also avoids biases associated with cross country regression (Levine, 2004). To analyze more specific country cases, the countries are divided into the two income groups according to the World Bank classification of 2005.

Low and lower middle income group:

- Low income countries of GNI per capita of \$765 or less and lower middle income countries of GNI per capita of \$765 to \$3,035 in 2003.

Upper middle and high income group:

- Upper middle income countries of GNI per capita of \$3,036 to \$9,385 and high income countries of GNI per capita greater than \$9,385 in 2003.

The reason to include two income group countries is to increase the number of observations that can be estimated with fixed effect methods.

III. RESULTS AND INTERPRETATIONS

The estimates were carried out using five-year panel data from 1970 to 2003 with fixed effects estimations. The purpose of this analysis is to empirically investigate the hypothesis that Financial Sector Development has significant and positive impact in the growth rate of the economy.

Presented below are author's findings for each indicator. Overall these results are consistent with these of other researchers' findings.

The Result of FULL SAMPLE

Table 1 present the results of regressions from (1) to (5) for the full sample of 112 countries²⁵.

²⁵ Name of sample countries listed in appendix 1.

The result of full sample regressions (1)-(5) show that financial sector development indicators, (*DEPTH* and *PRIVY*), have a 5 percent significant level, with their predicted positive signs. The coefficient of *PRIVY* (reg.1) shows that a 10 percentage point increase in Privy increases growth by 0.31 percentage point in the period of 1970 to 2003. It is quite a big impact on economic growth which leads to the conclusion that the financial sector development is an important aspect to economic growth.

The Initial Per Capita GDP and Government Expenditure

The full sample regression results show that *The Initial Per Capita GDP* and the *Government Expenditure* explanatory variables have statistically significant and negative relationship with economic growth. The coefficients of the initial per capita GDP (reg.3) and the government expenditure show that a 10 percentage point increase in these variables decreases economic growth by 1.06 and 4.49 percentage point respectively.

The Trade Openness and Foreign Direct Investment (FDI)

Other explanatory variables, *the Trade Openness*, and *the FDI* have statistically significant and positive correlations with economic growth. The coefficient of the openness (reg.4) shows that a 10 percentage point increase in the trade openness increases economic growth by 0.24 percentage point. This means that more the trade openness more the economic growth.

The Gross Domestic Saving

Dornbusch et.al (1989) argued that more savings give more opportunity for future investment which can promote economic growth. Furthermore, studies by Hermes et.al (2003), Grossman et.al (1991), Barro and Sala-i-Martin (1995) also found that new technology and know-how are the fruits of well functioned and efficiently used FDI in the economy.

Table 1. Financial sector development and economic growth

Dependent variable: Growth Rate of Per Capita GDP					
Regression No	(1)	(2)	(3)	(4)	(5)
Full Sample					
<i>Privy</i>	0.031564 (3.7012)*		0.033526 (3.749764)*		0.029082 (3.648642)*
<i>Depth</i>		0.033 (2.114)*		0.023841 (1.732379)**	
<i>Initial Per capita</i>	-0.115259	-0.105123	-0.106442	-0.100566	-0.103898

<i>GDP</i>	(-6.024264)*	(-5.133504)*	(-5.480492)*	(-5.524133)*	(-6.0028)*
<i>Education</i>	-0.000291 (-0.124254)	-0.002438 (-0.962392)	-0.002124 (-0.898765)	0.00208 (0.939853)	0.002397 (1.149734)
<i>Government expenditure</i>	-0.379614 (-2.082715)*	-0.51869 (-2.585994)*	-0.449977 (-2.354494)*	-0.449415 (-2.618378)*	-0.419745 (-2.540298)*
<i>CPI</i>	-0.000128 (-0.098921)	-0.000783 (-0.535911)	-0.000629 (-0.457573)	-0.000161 (-0.133034)	-0.000278 (-0.241921)
<i>Openness</i>	0.019153 (1.990479)*	0.01723 (1.543515)	0.020801 (2.033838)*	0.024297 (2.425564)*	0.024466 (2.642253)*
<i>FDI</i>	0.149377 (4.636124)*	0.188644 (5.389921)*	0.177561 (5.380296)*		
<i>Saving</i>	0.021509 (2.984009)*			0.025843 (3.898028)*	0.025148 (3.928402)*
<i>Periods</i>	(1970-2003)	(1970-2003)	(1970-2003)	(1970-2003)	(1970-2003)
<i>R square</i>	0.573519	0.52827	0.546626	0.51877	0.535674
<i>No. observation</i>	290	288	303	322	336

t statistics in parenthesis

* significant at 5 percent level

** significant at 10 percent level

In a case of the gross domestic saving, (reg.5) shows that a 10 percentage point increase in the saving increases growth by 0.25 percentage point. The results of theoretical and empirical research suggest that trade openness, FDI, and gross domestic saving can affect the technology level, which leads to economic growth.

The results of LOW INCOME and LOWER MIDDLE INCOME COUNTRIES

Table 2 present the results of regressions from equations from (6) to (11) for the low and lower middle income countries. The financial sector development indicators, *PRIVY* and *DEPTH*, have robust, significant and positive impacts on economic growth. The coefficient of the depth (reg.6) shows that a 10 percentage point increase in the ratio of the liquid liabilities to GDP increases the economic growth by 0.38 percentage point. The *PRIVY* entered 5 percent significant level to economic growth in low and lower middle income countries.

The Initial Per Capita GDP and Government Expenditure

The initial per capita GDP and government expenditure still registered a negative impact and robustly entered at 5 percent significant level to growth. The initial level of per capita GDP has a negative and statistically significant relationship with economic growth.

Moreover, Jeffrey (1997) confirmed that large budget deficits or heavy tax burdens might retard growth. For instance, government borrowing can crowd out private capital accumulation. Also, unbalanced government fiscal policy might be a symptom of other, related problems such as an overall lack of good governance that could adversely affect a country's productivity growth.

Trade Openness, Foreign Direct Investment and Gross Domestic Saving

Trade openness, FDI and gross domestic saving have a robust and positive correlation with economic growth. The estimated regression (8) shows that a 10 percentage point increase in openness, FDI, and saving increase economic growth by 0.38; 1.29; and 0.15 percentage point respectively. The results are consistent with Romer et.al (1996), Grossman and Helpman (1991), and Barro and Sala-i-Martin (1995)'s findings.

Jeannine (2000) argued that the domestic financial sector plays a pivotal role in ensuring that international capital flows do indeed promote economic growth in developing countries. "The capital inflows foster higher economic growth, above and beyond any effects on the investment rate, but only for economies where the banking sector has reached a certain level of development." (Jeannine, 2000, pp.15)

Table 2. Financial sector development and growth

Dependent variable: Growth rate of Real Per Capita GDP

	(P)					
Regression No	(6)	(7)*	(8)	(9)	(10)	(11)
Low Income and Lower Middle Income Countries						

<i>Privy</i>		0.030969 (2.740701)*	0.030565 (2.820095)*			0.028272 (2.853144)*
<i>Depth</i>	0.038182 (2.424936)*			0.024445 (2.476824)*	0.027359 (1.956358)**	
<i>Initial per Capita GDP</i>	-0.126818 (-6.278754)*	-0.132738 (-5.228546)*	-0.136834 (-5.369823)*	-0.092037 (-5.112525)*	-0.139641 (-7.343267)*	-0.114812 (-4.968024)*
<i>Education</i>	-0.000196 -0.078746	-0.002359 -0.693437	3.67E-05 0.010541	0.001596 0.73467	0.001818 0.836321	0.002264 0.78571
<i>Government expenditure</i>	-0.815255 (-6.413056)*	-0.732459 (-3.103099)*	-0.619973 (-2.723953)*	-0.654213 (-6.931858)*	-0.646719 (-5.745178)*	-0.508404 (-2.52446)*
<i>CPI</i>	-0.001535 -1.341516	-0.000382 -0.218923	-1.97E-05 -0.011936	-5.75E-05 -0.045278	-0.000783 -0.75842	-0.000555 -0.36195
<i>Openness</i>	0.041132 (3.033516)*	0.039467 (2.428354)*	0.038836 (2.49798)*	0.051621 (4.790134)*	0.042436 (3.681702)*	0.042197 (2.84791)*
<i>FDI</i>	0.1532 (5.296941)*	0.16925 (4.172612)*	0.12926 (3.204429)*		0.119622 (5.635172)*	
<i>Saving</i>			0.015444 (2.098223)*	0.020104 (5.460621)*	0.023169 (4.064207)*	0.019803 (3.028977)*
<i>Sample</i>	1970-2003	1970-2003	1970-2003	1970-2003	1970-2003	1970-2003
<i>R square</i>	0.484595	0.506576	0.528105	0.428001	0.500236	0.448903
<i>observation</i>	210	213	201	216	198	238

t statistics in parenthesis

* significant at 5 percent level

** significant at 10 percent level

The results of UPPER MIDDLE and HIGH INCOME COUNTRIES

Regression (12) to (14) present results for upper middle and high income 45 countries. The *PRIVY* and *DEPTH*, financial sector development indicators, are significant at the 5 and 10 percent level impacts to economic growth in these group sample countries. The coefficient of the depth (reg.13) shows that a 10 percentage point increase leads to increases in economic growth by 0.69 percentage point at 10 percent significant level.

Furthermore, the initial per capita GDP has a 5 percent significant and negative correlation with economic growth. This explanatory variable has a strong robust and negative impact to economic growth for all estimated regression results.

Table 3. Financial sector development and growth

(Dependent variable: Growth rate of Real Per Capita GDP)

Regression. No	(12)	(13)	(14)
Upper Middle and High Income			
<i>Privy</i>	0.025759 (1.721216)**		0.044095 (2.307620)*
<i>Depth</i>		0.069220 (1.701809)**	
<i>Ini per capita GDP</i>	-0.089391 (-2.732958)*	-0.102674 (-2.041087)*	-0.092284 (-2.723097)*
<i>Education</i>	-0.002025 (-0.612886)	-0.001670 (-0.387763)	0.001748 (0.480662)
<i>Government expenditure</i>	-0.204531 (-0.574201)	0.086084 (0.133740)	-0.529016 (-1.449839)
<i>CPI</i>	0.002454 (1.057373)	0.002204 (0.726320)	0.002061 (1.045930)
<i>Openness</i>	0.016954 (1.299109)	0.003642 (0.193925)	0.007654 (0.526619)
<i>FDI</i>			-0.013933 (-0.569035)
<i>Saving</i>	0.173745 (3.027800)*	0.238099 (2.429240)*	
<i>Periods</i>	1975-2003	1970-2003	1970-2003
<i>R square</i>	0.524504	0.602553	0.567454
<i>No. observation</i>	104	71	95

t statistics in parenthesis

* significant at 5 percent level

** significant at 10 percent level

The regression (12) and (13) shows the gross domestic saving has a positive and significant impact to economic growth. The coefficient of the depth (reg.13) shows that a 10 percentage point increase in the ratio of the liquid liabilities to GDP increases the economic growth by 0.69 percentage point per year. This result

supports Dornbusch and Reynoso's (1989) well-known findings. These empirical findings support the investigated hypothesis that the financial sector development significantly and positively affects the economic growth of different income group countries. Financial sector development can help the poor by increasing the economic growth. It can also help to sustain the achieved growth rate in developed countries.

IV. CONCLUSION

This paper re-examined the link between financial sector development and economic growth. It reviewed the literature on this subject. Moreover, it was conducted empirical analysis for 112 countries to study the nexus between financial sector development and economic growth. The empirical study investigates the hypothesis that financial sector development has a significant and positive impact on the economic growth rate of a country. The major findings of this study are as follows:

As outlined in a number of studies, a well developed financial system can reduce the information and transaction costs, and increase the saving rates, the investment decisions, enhance technological innovation, and contribute to the long-run economic growth.

The *DEPTH* (to measure the size of financial intermediaries) and *PRIVY* (to measure the allocation of credits in the market) are the main indicators of financial sector development in all stages of economic development.

The empirical analyses show the evidence that *financial sector development* has a positive and significant impact on *economic growth*. The results of regression analysis for *full sample analysis* (112 countries) show that financial sector development indicators, *DEPTH*, *PRIVY*, have the predicted positive signs at the 5 percent level of significance. The coefficient of *PRIVY* shows 10 percentage point increase in *PRIVY* increased economic growth by 0.31 percentage point during the period of 1970 to 2003 for the countries studied in this thesis.

The results of the regression analysis for *the low and lower middle income countries* (low income countries of GNI per capita of \$765 or less and lower middle income countries of GNI per capita of \$765 to \$3,035 in 2003) show that the financial sector development indicators, *PRIVY* and *DEPTH*, have robust, significant and positive impacts on economic growth. The coefficient of the depth shows that a 10 percentage point increase in the ratio of liquid liabilities to GDP increases economic growth by 0.38 percentage point.

The results of the regression analysis for *the upper middle and high income countries* (upper middle income countries of GNI per capita of \$3,036 to \$9,385 and high income countries of GNI per capita greater than \$9,385 in 2003) also confirmed that the *PRIVY* and *DEPTH*, are robustly significant at the 5 and 10 percent level and show a positive impact on economic growth. The coefficient of the *DEPTH* shows that a 10 percentage point increase leads to increases in economic growth by 0.69 percentage point at 10 percent level of significance.

Although this study focused on financial sector development, some other interesting results were found for all estimated regressions which support the findings of other researchers. First, *The Initial Per Capita GDP* and the *Government Expenditure* explanatory variables have a statistically significant and negative relationship with economic growth. Second, *the Trade Openness*, and the *FDI* variables have a statistically significant and positive correlation with economic growth. In the case of the *Gross Domestic Saving* a 10 percentage point increase in the savings increases economic growth by 0.25 percentage point. These findings lead to conclude that *the Trade Openness*, *FDI*, and *Gross Domestic Saving* can affect the technology level and capital accumulation, which drives to economic growth.

Although some economists have found important evidences, this topic needs more research on financial structure and its effect to economic growth. Specifically, it needs a more specific analysis on how market and bank based financial structure lead to economic growth.

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APPENDIX 1 List of countries included in the empirical analysis

HIGH INCOME AND UPPER MIDDLE 45 COUNTRIES

- | | | | |
|--------|----------------------|--------|--------------------------------|
| 1.AUS | Australia | 26.BRB | Barbados |
| 2.BHS | Bahrain | 27.BLZ | Belize |
| 3.CAN | Canada | 28.BWA | Botswana |
| 4.CYP | Cyprus | 29.CHL | Chile |
| 5.DNK | Denmark | 30.CRI | Costa |
| 6.FIN | Finland | 31.DMA | Dominica |
| 7.FRA | France | 32.HUN | Hungary |
| 8.DEU | Germany | 33.GAB | Gabon |
| 9.HKG | Hong Kong, China | 34.LVA | Latvia |
| 10.ISL | Iceland | 35.MYS | Malaysia |
| 11.IRL | Ireland | 36.MEX | Mexico |
| 12.ISR | Israel | 37.OMN | Oman |
| 13.ITA | Italy | 38.PAN | Panama |
| 14.JPN | Japan | 39.SAU | Saudi Arabia |
| 15.KOR | Korea | 40.SYC | Seychelles |
| 16.KWT | Kuwait | 41.KNA | St. Kitts and Nevis |
| 17.MLT | Mali | 42.YCT | St. Vincent and the Grenadines |
| 18.NZL | New Zealand | 43.TTO | Trinidad and Tobago |
| 19.NOR | Norway | 44.URY | Uruguay |
| 20.SGP | Singapore | 45.VEN | Venezuela |
| 21.SWE | Sweden | | |
| 22.CHE | Switzerland | | |
| 23.ARE | United Arab Emirates | | |

LOW AND LOWER MIDDLE INCOME 67 COUNTRIES

1. BGD	Bangladesh	40. CHL	Chile
2. BEN	Benin	41. COL	Colombia
3. BFA	Burkina Faso	42. DOM	Dominican Republic
4. BDI	Burundi	43. ECU	Ecuador
5. CMR	Cameroon	44. EGY	Egypt
6. CAF	Central African Republic	45. SLV	EL Savador
7. TCD	Chad	46. FJI	Fiji
8. ZAR	Congo, Dem. Rep	47. GTM	Guatemala
9. COG	Congo, Rep	48. GUY	Guyana
10. CIV	Cote d'Ivoire	49. HND	Honduras
11. GMB	Gambia, The	50. IDN	Indonesia
12. GHA	Ghana	51. IRN	Iran, Islamis Rep
13. GNB	Guinea-Bissau	52. JAM	Jamaica
14. IND	India	53. JOR	Jordan
15. KEN	Kenya	54. MAR	Morocco
16. LSO	Lesotho	55. PRY	Paraguay
17. LBR	Liberia	54. PER	Peru
18. MDG	Madagascar	57. PHL	Philippines
19. MWI	Malawi	58. WSM	Samoa
20. MLI	Malta	59. ZAF	South Africa
21. MRT	Mauritania	60. LKA	Sri Lanka
22. NPL	Nepal	61. SUR	Suriname
23. NIC	Nicaragua	62. SWZ	Swaziland
24. NGA	Nigeria	63. SYR	Syrian Arab Republic
25. PAK	Pakistan	64. THA	Thailand
26. PNG	Papua New Guinea	65. TUN	Tunisia
27. RWA	Rwanda	66. TUR	Turkey
28. SEN	Senegal	67. URY	Uruguay
29. SLE	Sierra Leone		
30. SLB	Solomon Island		
31. SDN	Sudan		
32. SUR	Suriname		
33. SWZ	Swaziland		
34. TGO	Togo		
35. ZMB	Zambia		
36. ZWE	Zimbabwe		
37. DZA	Algeria		
38. BOL	Bolivia		
39. BRA	Brazil		