

# Index of Financial Inclusion

(Very preliminary draft)

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## 1 Introduction

The academic literature has adequately discussed the close relation between financial development and economic growth<sup>1</sup>. However, there has not been much discussion on whether financial development implies financial inclusion. The importance of an inclusive financial system is widely recognised by policy makers, banks and academic communities all over the world, as evident from the various initiatives in different countries to promote financial inclusion.

Financial inclusion (or, alternatively, financial exclusion) has been defined in the literature mostly in the context of the larger issue of social inclusion (or exclusion) in a society. One of the oldest definitions by Leyshon and Thrift (1995) define financial exclusion as referring to *those processes that serve to prevent certain social groups and individuals from gaining access to the financial system*. According to Sinclair (2001), *financial exclusion means the inability to access necessary financial services in an appropriate form. Exclusion can come about as a result of problems with access, conditions, prices, marketing or self-exclusion in response*

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<sup>1</sup>See, for example, Levine (1997) for a survey of this debate.

to negative experiences or perceptions. Carbo et al. (2005) have defined financial exclusion as *broadly the inability (however occasioned) of some societal groups to access the financial system.*

In a speech in 2006, Reserve Bank of India (RBI) deputy Governor Rakesh Mohan said “*financial exclusion signifies the lack of access by certain segments of the society to appropriate, low-cost, fair and safe financial products and services from mainstream providers*”. Similar views were expressed by Usha Thorat (deputy Governor, RBI) in a speech in 2007, as “*by financial inclusion we mean the provision of affordable financial services, (viz., access to payments and remittance facilities, savings, loans and insurance services) by the formal financial system to those who tend to be excluded*”.

Thus, almost all of the these definitions of financial inclusion (or financial exclusion) emphasize financial exclusion to be a manifestation of a much broader issue of social exclusion of certain societal groups such as the poor and the disadvantaged. For the purpose of this paper, **we define financial inclusion as a process that ensures the ease of access, availability and usage of the formal financial system for all members of an economy.** This definition emphasizes on several dimensions of financial inclusion, viz., accessibility, availability and usage of the financial system. These dimensions together build an inclusive financial system.

As banks are the gateway to the most basic forms of financial services, financial inclusion/exclusion is often used as analogous to banking inclusion/exclusion. According to V. Leeladhar (Deputy Governor, RBI, in a speech in 2005), “*financial inclusion is the delivery of banking services at an affordable cost to the vast sections of disadvantaged and low income groups*”. Those who are excluded by the banks are often termed as “unbanked”. These are people without any form of transactional bank account. Associated with this notion is the concept of “underbanked”, i.e. those who have a bank account but do not use it regularly or adequately to manage their money. These are also sometimes referred to as “marginally banked”. The literature also points out that there are gradations of financial exclusion. These range from those who are “hyper-included” to those who are “unbanked” and have no ac-

cess to mainstream financial services . In between these extremes, fall the underbanked or the marginally banked ones (Kempson et al., 2000). A report on financial exclusion in Australia in 2004 by ANZ Banking Group has highlighted another group who are “included, but using inappropriate products” – these individuals are sometimes “victims” of inappropriate financial products.

An inclusive financial system facilitates efficient allocation of productive resources and thus can potentially reduce the cost of capital. In addition, access to appropriate financial services can significantly improve the day-to-day management of finances. For example, bills for daily utilities (municipality, water, electricity, telephone) can be more easily paid by using cheques or through internet banking, rather than standing in the queue in the offices of the service providers with cash. Similarly, transfer of money can be done more safely and easily by using the cheque, demand draft or through internet banking. Financially excluded people are exposed to the informal sources of credit with high interest rates and often have to face harsh and unethical recovery practices. Further, they indulge in unsafe saving practices. Further, a bank account also provides a passport to a range of other financial products and services such as short term credit facilities, overdraft facilities and credit card. Further, a number of other financial products, such as insurance and pension products, necessarily require the access to a bank account.

Thus, an all-inclusive financial system enhances efficiency and welfare by providing avenues for secure and safe saving practices and by facilitating a whole range of efficient financial services.

Financial inclusion is seen as a policy priority in many countries in the recent times. Initiatives for financial inclusion have come from the financial regulators, the governments and the banking industry. For example, the German Bankers’ Association introduced a voluntary code in 1996 providing for an ‘everyman’ current banking account that facilitates basic banking transactions. In the United States, the Community Reinvestment Act (1997) requires banks to offer credit throughout their entire area of operation and prohibits them from targeting only the rich neighbourhoods. In France, the law on exclusion (1998) emphasises the right to

have a bank account. In South Africa, a low cost bank account called ‘Mzansi’ was launched for financially excluded people in 2004 by the South African Banking Association. In the United Kingdom, the Financial Inclusion Task Force has been constituted by the government in 2005 in order to monitor the development of financial inclusion. And in 2005, the Reserve Bank of India advised Indian banks to facilitate basic ‘no frills’ accounts with low or minimum stipulated balance and in 2006, banks were encouraged to set up bank linkages with micro-finance institutions and Self-Help Groups.

## **2 Index of Financial Inclusion**

While the importance of financial inclusion has been widely recognised, the literature on financial inclusion lacks a comprehensive measure that can be used to measure the extent of financial inclusion across economies. Several indicators have been used to indicate the extent of financial inclusion by different people. The most commonly used indicator has been the number of bank accounts (per 100 adult persons). Some other indicators are number of bank branches (per million people), number of ATMs (per million people), amount of bank credit and amount of bank deposit. Such indicators, while used individually, can provide only partial information on the inclusiveness of the financial system of an economy. A comprehensive measure of financial inclusion should be able to incorporate information on several aspects (dimensions) of financial inclusion, preferably in one single number.

A comprehensive measure of financial inclusion is useful for the following reasons:

1. It can be used to compare several countries with respect to their level of financial inclusion at a particular time point
2. It can be used to monitor the progress of policy initiatives for financial inclusion in a country over a period of time.
3. Such a measure can be of interest to address questions of academic interest that has been put forward in the growing literature on financial inclusion. Some of the questions raised by the academic community are whether high economic development leads to high

financial inclusion and whether low financial inclusion is associated with high income inequality (Kempson, 2006). In order to investigate such questions empirically, a robust and comprehensive measure of financial inclusion is required.

A good measure of financial inclusion, that is useful for the above purposes, should be such that it

1. incorporates information on many (or all) aspects (dimensions) of financial inclusion
2. is easy and simple to compute
3. is comparable across countries

In this paper, we propose an index of financial inclusion (IFI), which satisfies all the above criteria of a good measure of financial index. Our proposed IFI takes values between 0 and 1, zero indicating lowest financial inclusion (complete financial exclusion) and 1 indicating complete financial inclusion. Such an index, in our view, will be most useful for policy makers and academic researchers.

### 3 Methodology

The methodology for computing IFI is similar to that used by UNDP for computation of some well established development indexes such as the Human Development Index (HDI) and the Gender-related Development Index (GDI)<sup>2</sup>.

In order to compute IFI, first a dimension index is calculated for each dimension of financial inclusion. The IFI is the weighted average of the dimension indexes.<sup>3</sup>

The dimension index for the  $i^{th}$  dimension,  $D_i$ , is computed by the following formula

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<sup>2</sup>For details see UNDP's Human Development Reports available at <www.undp.org>.

<sup>3</sup>An inclusive financial system may be judged from different dimensions of inclusiveness. Some examples of dimensions of financial inclusion are – how much the financial system has penetrated amongst its users (financial depth), how easily available the services of the financial system are (availability) and how much the financial system is being utilised (usage).

$$D_i = \frac{A_i - m_i}{M_i - m_i} \quad (1)$$

where

$A_i$  = Actual value of dimension  $i$

$m_i$  = minimum value of dimension  $i$

$M_i$  = maximum value of dimension  $i$

The IFI is a weighted average of the dimension indexes.

$$\text{IFI} = \sum_{i=1}^n w_i D_i \quad (2)$$

where  $w_i$  is the weight of the  $i^{\text{th}}$  dimension and  $n$  is the number of dimensions.

If all dimensions are considered equally important, then an equally weighted averaging scheme can be adopted. In that case,

$$\text{IFI} = \frac{1}{n} \sum_{i=1}^n D_i \quad (3)$$

## 4 Empirical estimation of IFI and cross country comparisons

In the empirical exercise that follows, we consider three basic dimensions of financial inclusion, as follows:

Depth: An inclusive financial system should have as many users as possible – this gives an indication of how much the financial system has penetrated among its users. A proxy measure for this dimension is the number of bank accounts per 100 population.

Availability: An inclusive financial system should be easily accessible to its users. This dimension is measured by proxies such as number of bank branches or number of ATMs per 1000 population. In our estimation, we have used number of bank branches per 1000 population to measure this dimension.

Usage: An inclusive financial system should be utilised as much as possible by its users. The size of the bank credit and bank deposits, relative to the GDP of a country is used as a measure for this aspect.

## 4.1 Data

While computing an index such as the one proposed here, availability of data is an important challenge. We found that the latest year for which some data is available is 2004. When we consider all the 3 dimensions of financial inclusion, then data are available for only 55 countries. If we drop one of the dimensions, viz., financial depth, then we have data for a bigger set of 100 countries. Accordingly, two sets of IFI values are computed – using data for all the 3 dimensions for 55 countries and using only 2 dimensions (availability and usage) for 100 countries. All data pertain to the year 2004.

For financial depth dimension, we have used the data on “Bank Deposit Accounts” from World Development Indicators (2006) of World Bank. These are deposit accounts, including checking (or current), savings, and time deposit accounts for business, individuals and others. For the availability dimension, we have taken the data on deposit money bank branches<sup>4</sup> from the same source. For the usage dimension, we have taken the data on “domestic claims on the private and resident sector” (i.e. line 32d) and the data on “total deposits” (line 24 plus line 25 comprising of demand, time, and foreign currency deposits of resident sectors) from International Financial Statistics (IFS, 2006) of the IMF.

## 4.2 Results

Using data for 55 countries on all of the above dimensions and data for *availability* and *usage* dimensions for 100 countries for the year 2004, equally weighted IFI have been calculated. IFI computed for various countries is provided in Tables 1 and 2.

Depending on the value of IFI, countries are categorised into

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<sup>4</sup>Deposit money banks comprise commercial banks and other financial institutions that accept transferable deposits, such as demand deposits (International Financial Statistics, 2006, IMF).

1.  $0.6 < \text{IFI} \leq 1$  – high financial inclusion
2.  $0.4 < \text{IFI} < 0.6$  – medium financial inclusion
3.  $0 \leq \text{IFI} < 0.4$  – low financial inclusion

It is found that the majority of the countries belong to the category of low financial inclusion countries.

[Table 1 about here.]

[Table 2 about here.]

[Table 3 about here.]

[Table 4 about here.]

In the group of 55 countries for which a three dimensional IFI has been estimated, Spain leads with the highest value of IFI closely followed by Austria and Belgium (Table 1). It is found that only six countries, all belonging to the European Union, have high financial inclusion values of more than 0.6. Another seven countries belong to the medium IFI group. Among Asian countries, Singapore, Malaysia, mauritius and Lebanon are the better performers than the others and these four countries belong to the medium IFI group. All other countries have IFI values less than 0.4 and belong to the low IFI group of countries. India ranks 30 with a low IFI value of 0.153.

In the group of 100 countries (Table 2) for which IFI has been computed using two dimensions, Spain, Switzerland, Canada, Portugal, Netherlands and Germany form the group of high IFI countries. Spain leads with an IFI value of 0.853. There are sixteen countris in the medium IFI group and the rest 78 countries all belong to the low IFI group. United Kingdom ranks 10th (with IFI value of 0.55), Japan ranks 13th (with IFI value 0.544) and China ranks 18th with IFI value of 0.460. In this case, India is ranked 50<sup>th</sup> with an IFI value of 0.167 (Table 2).



### 4.3 Comparison with HDI

A comparison of the IFI ranks with the ranks of UNDP's Human Development Index (HDI) for various countries indicate that they seem to move in the similar direction.

Table 3 compares the ranks of countries with respect to IFI and HDI where the IFI has been computed by using all the three dimensions of financial inclusion here for 55 countries. It is observed that generally IFI and HDI tend to move in the similar direction.

Figure 1 provides a pictorial comparison of IFI and HDI for these 55 countries with the help of the scatterplots of values (top panel) and ranks (bottom panel). As shown by these scatterplots, both the indexes tend to have a positive correlation.

A comparison of the IFI and HDI for the 100 countries for which a two-dimension IFI have been computed is provided in Table 4 and Figure 2. Here also, a positive correlation between the two indexes is observed.

[Table 5 about here.]

[Figure 1 about here.]

[Table 6 about here.]

[Figure 2 about here.]

#### 4.4 Some Limitations

The IFI proposed here has the following limitations. Availability of comparable and adequate data for all countries will address some of the issues and future work will try to accomplish this.

- The present index does not distinguish between resident bank accounts from non-resident accounts. Tax havens like Mauritius may show high financial inclusion due to this. Similarly for Switzerland.
- Geographical aspects (such as rural/urban divide) of financial inclusion has been ignored in the present IFI.

### 5 Conclusion

In this paper, we have proposed an Index of Financial Inclusion (IFI) – a measure developed in line with well known development indexes such as HDI, HPI and GDI. IFI can be used to compare extent of financial inclusion across different economies and to monitor the progress of the economies with respect to financial inclusion over time. IFI calculations based on the latest available data indicate that many economies are at low levels of financial inclusion. In general, IFI and HDI of an economy tend to move similarly; however exceptions exist. As future work, apart from addressing the present limitations, we will examine the relationship between IFI and the Gini coefficients; as it has been indicated in the literature that countries with high income inequality tend to have more financial exclusion (Kempson, 2006).

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Figure 1: Comparing IFI (3 dimension) with HDI

These figures present the scatter plots of the values (top) and the ranks (bottom) of HDI and IFI (computed using data on 3 dimensions of financial inclusion) for 55 countries.

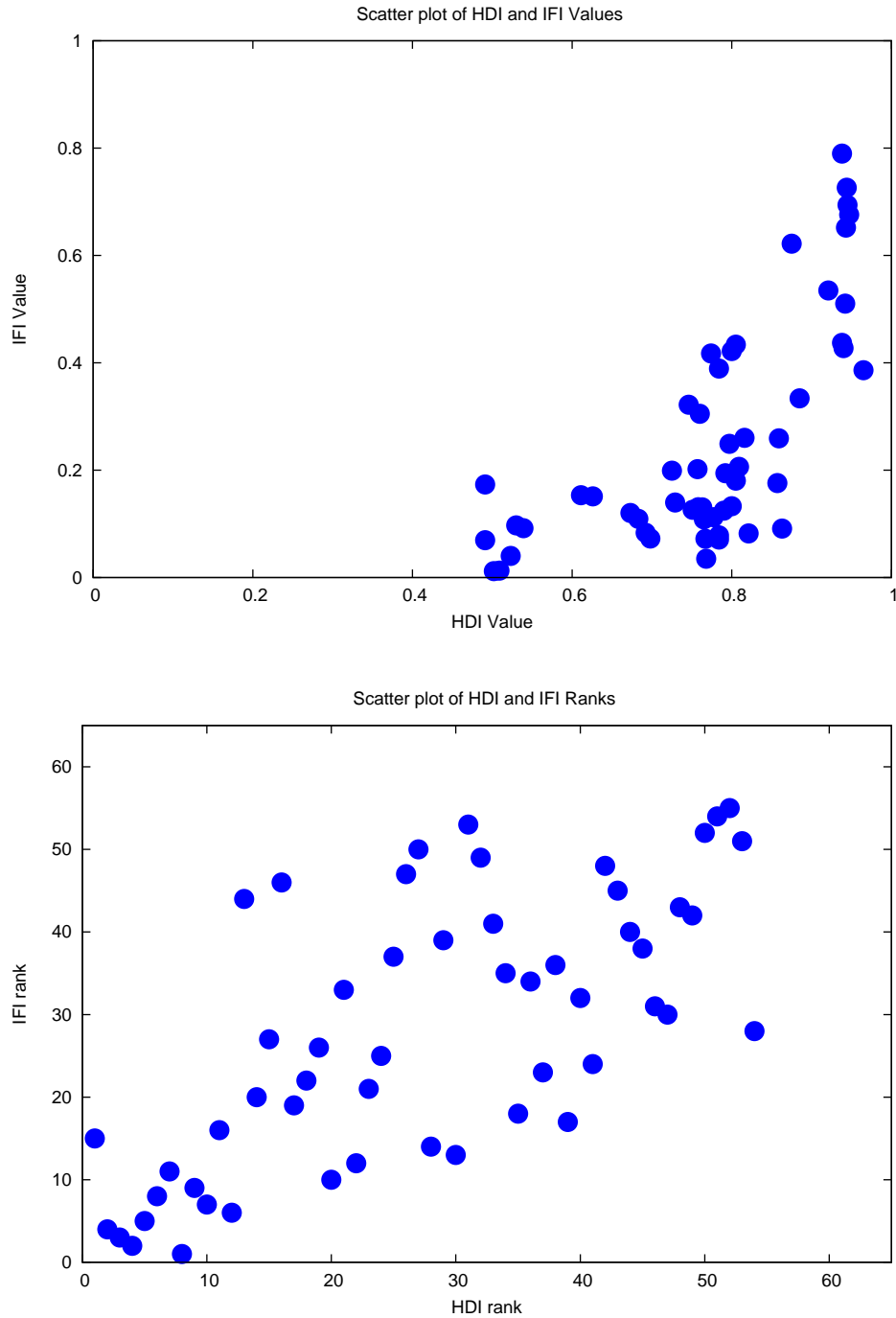


Figure 2: Comparing IFI (2 dimension) with HDI

These figures present the scatter plots of the values (top) and the ranks (bottom) of HDI and IFI (computed using data on 3 dimensions of financial inclusion) for 55 countries.

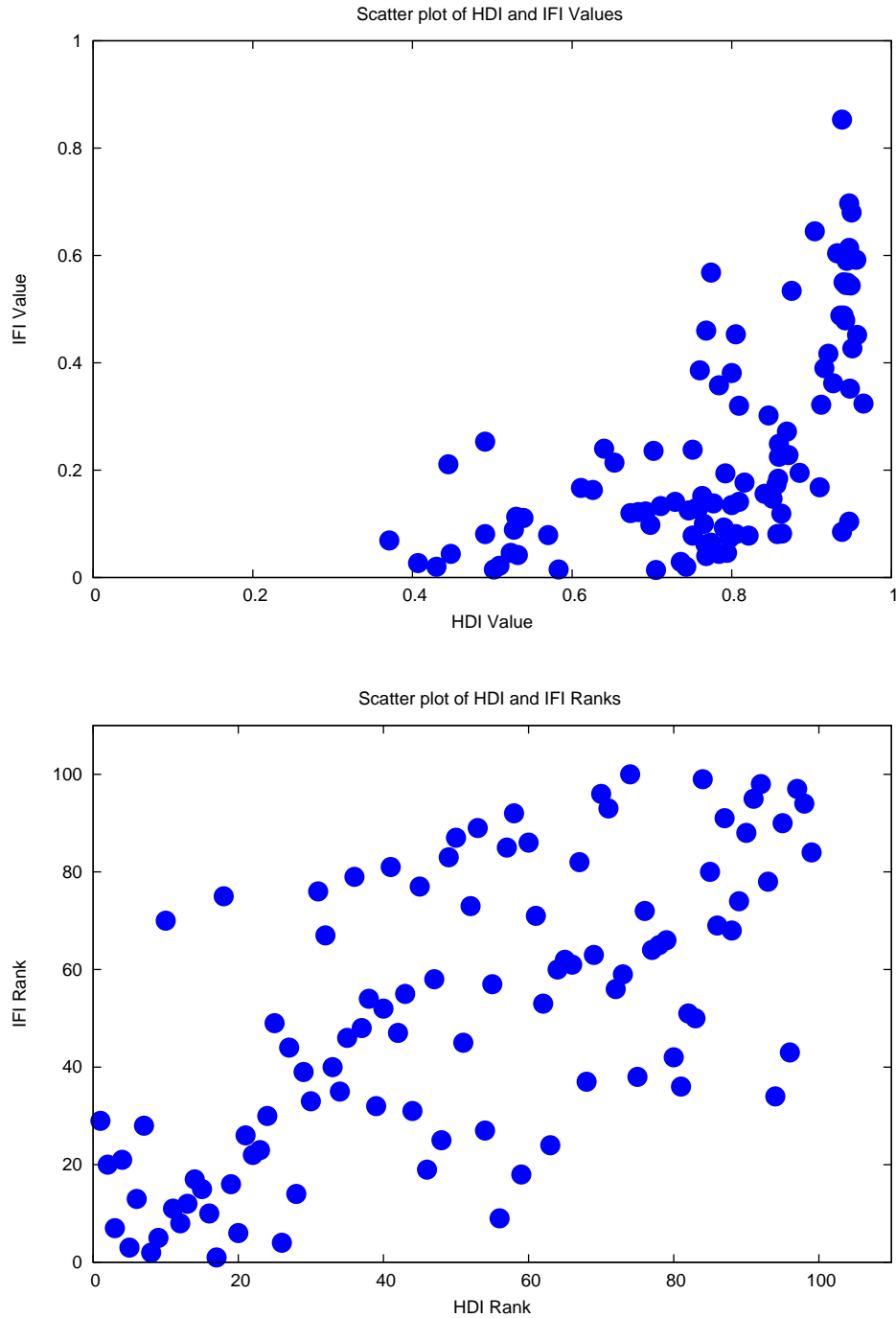


Table 1: Index of Financial Inclusion—using data on 3 dimensions of financial inclusion(2004)

Country	$D_1$ (Depth)	$D_2$ (Avail)	$D_3$ (Usage)	IFI	IFI Rank
Spain	0.664	1.000	0.706	0.790	1
Austria	1.000	0.559	0.619	0.726	2
Belgium	0.987	0.552	0.543	0.694	3
Switzerland	0.635	0.393	1.000	0.676	4
Denmark	0.867	0.389	0.700	0.652	5
Malta	0.799	0.310	0.757	0.622	6
Greece	0.774	0.318	0.513	0.535	7
France	0.575	0.448	0.507	0.510	8
Singapore	0.533	0.090	0.688	0.437	9
Malaysia	0.398	0.097	0.806	0.434	10
Italy	0.310	0.541	0.432	0.427	11
Mauritius	0.506	0.119	0.640	0.422	12
Lebanon	0.119	0.183	0.950	0.417	13
Thailand	0.454	0.070	0.644	0.389	14
Norway	0.514	0.235	0.410	0.386	15
Czech Republic	0.615	0.111	0.276	0.334	16
Iran	0.720	0.082	0.164	0.322	17
Jordan	0.145	0.100	0.670	0.305	18
Bulgaria	0.430	0.140	0.210	0.260	19
Chile	0.332	0.093	0.353	0.259	20
Russia	0.605	0.018	0.124	0.249	21
Trinidad and Tobago	0.341	0.091	0.187	0.206	22
Turkey	0.354	0.084	0.168	0.202	23
Guyana	0.179	0.027	0.391	0.199	24
Brazil	0.198	0.147	0.237	0.194	25
Romania	0.384	0.139	0.019	0.181	26
Lithuania	0.371	0.030	0.127	0.176	27
Kenya	0.018	0.009	0.493	0.173	28
West Bank and Gaza	0.077	0.029	0.413	0.173	29
India	0.131	0.061	0.268	0.153	30
Namibia	0.132	0.041	0.281	0.151	31
El Salvador	0.142	0.043	0.234	0.140	32
Bosnia & Herzegovina	0.134	0.035	0.230	0.133	33
Fiji	0.138	0.052	0.202	0.131	34
Philippines	0.093	0.077	0.223	0.131	35
Dominican Republic	0.227	0.057	0.094	0.126	36
Colombia	0.192	0.086	0.095	0.125	37
Guatemala	0.125	0.101	0.135	0.120	38
Saudi Arabia	0.064	0.051	0.222	0.112	39
Honduras	0.088	0.002	0.238	0.109	40
Ecuador	0.130	0.092	0.103	0.108	41
Bangladesh	0.069	0.041	0.181	0.097	42
Pakistan	0.057	0.044	0.174	0.092	43
Argentina	0.114	0.099	0.060	0.091	44
Bolivia	0.008	0.010	0.231	0.083	45
Mexico	0.095	0.075	0.077	0.082	46
Venezuela	0.152	0.041	0.043	0.079	47
Nicaragua	0.026	0.024	0.167	0.073	48
Peru	0.097	0.038	0.081	0.072	49
Albania	0.047	0.017	0.148	0.071	50
Zimbabwe	0.051	0.029	0.129	0.070	51
Papua New Guinea	0.034	0.012	0.075	0.040	52
Armenia	0.031	0.074	0.000	0.035	53
Madagascar	0.000	0.001	0.037	0.013	54
Uganda	0.010	0.000	0.025	0.012	55

Table 2: Index of Financial Inclusion—using data on 2 dimensions of financial inclusion (2004)

Country	$D_2$ (Avail)	$D_3$ (Usage)	IFI	IFI Rank
Spain	1.000	0.706	0.853	1
Switzerland	0.394	1.000	0.697	2
Canada	0.474	0.886	0.680	3
Portugal	0.536	0.754	0.645	4
Netherlands	0.355	0.873	0.614	5
Germany	0.514	0.694	0.604	6
Ireland	0.241	0.943	0.592	7
Austria	0.560	0.620	0.590	8
Lebanon	0.185	0.950	0.568	9
United Kingdom	0.188	0.912	0.550	10
Belgium	0.553	0.544	0.549	11
Denmark	0.390	0.701	0.545	12
Japan	0.101	0.986	0.544	13
Malta	0.311	0.758	0.534	14
Italy	0.541	0.434	0.488	15
New Zealand	0.290	0.685	0.488	16
France	0.449	0.509	0.479	17
China	0.010	0.911	0.460	18
Malaysia	0.099	0.807	0.453	19
Australia	0.309	0.594	0.452	20
Sweden	0.225	0.630	0.427	21
Greece	0.319	0.514	0.417	22
Singapore	0.092	0.689	0.390	23
Jordan	0.101	0.671	0.386	24
Mauritius	0.121	0.641	0.381	25
Israel	0.151	0.573	0.362	26
Thailand	0.072	0.645	0.358	27
United States	0.319	0.384	0.352	28
Norway	0.236	0.412	0.324	29
Korea	0.137	0.507	0.322	30
Panama	0.131	0.509	0.320	31
Croatia	0.241	0.362	0.302	32
Hungary	0.292	0.251	0.272	33
Kenya	0.011	0.495	0.253	34
Bahrain	0.138	0.360	0.249	35

**Table 2** Index of Financial Inclusion – contd.

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Country	$D_2$ (Avail)	$D_3$ (Usage)	IFI	IFI Rank
Morocco	0.065	0.415	0.240	36
Belize	0.150	0.326	0.238	37
Egypt	0.034	0.438	0.236	38
Kuwait	0.083	0.373	0.228	39
Chile	0.095	0.355	0.225	40
West Bank and Gaza	0.031	0.415	0.223	41
South Africa	0.059	0.368	0.214	42
Guyana	0.029	0.393	0.211	43
Czech Republic	0.113	0.278	0.195	44
Brazil	0.149	0.240	0.194	45
Estonia	0.155	0.212	0.184	46
Bulgaria	0.142	0.213	0.177	47
Slovak Republic	0.104	0.242	0.173	48
Slovenia	0.019	0.317	0.168	49
India	0.062	0.271	0.167	50
Namibia	0.043	0.283	0.163	51
Costa Rica	0.097	0.215	0.156	52
Philippines	0.078	0.225	0.152	53
Uruguay	0.063	0.230	0.147	54
Trinidad and Tobago	0.093	0.189	0.141	55
El Salvador	0.045	0.237	0.141	56
Saudi Arabia	0.053	0.224	0.138	57
Bosnia & Herzegovina	0.037	0.233	0.135	58
Indonesia	0.085	0.181	0.133	59
Fiji	0.054	0.205	0.129	60
Sri Lanka	0.068	0.190	0.129	61
Turkey	0.085	0.171	0.128	62
Iran	0.084	0.167	0.125	63
Bolivia	0.012	0.233	0.123	64
Honduras	0.004	0.240	0.122	65
Guatemala	0.102	0.137	0.120	66
Poland	0.082	0.157	0.119	67
Bangladesh	0.043	0.183	0.113	68
Pakistan	0.046	0.177	0.111	69
Finland	0.196	0.013	0.104	70

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**Table 2** Index of Financial Inclusion – contd.

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Country	$D_2$ (Avail)	$D_3$ (Usage)	IFI	IFI Rank
Ecuador	0.094	0.106	0.100	71
Nicaragua	0.026	0.170	0.098	72
Colombia	0.088	0.098	0.093	73
Nepal	0.014	0.164	0.089	74
Albania	0.019	0.151	0.085	75
Argentina	0.101	0.063	0.082	76
Romania	0.140	0.022	0.081	77
Zimbabwe	0.031	0.131	0.081	78
Lithuania	0.032	0.130	0.081	79
Botswana	0.036	0.122	0.079	80
Mexico	0.076	0.080	0.078	81
Dominican Republic	0.059	0.097	0.078	82
Russia	0.020	0.127	0.073	83
Ethiopia	0.001	0.137	0.069	84
Kazakhstan	0.022	0.107	0.065	85
Peru	0.040	0.084	0.062	86
Belarus	0.046	0.046	0.046	87
Papua New Guinea	0.014	0.078	0.046	88
Venezuela	0.043	0.046	0.044	89
Nigeria	0.013	0.075	0.044	90
Ghana	0.013	0.070	0.042	91
Armenia	0.076	0.003	0.040	92
Azerbaijan	0.039	0.018	0.029	93
Zambia	0.012	0.042	0.027	94
Madagascar	0.003	0.040	0.022	95
Georgia	0.029	0.010	0.020	96
Tanzania	0.002	0.037	0.020	97
Uganda	0.002	0.028	0.015	98
Cambodia	0.000	0.030	0.015	99
Kyrgyz Republic	0.029	0.000	0.014	100

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Table 3: Comparing countries by ranks of IFI (with 3 dimension) and HDI

Country	IFI Rank	HDI Re-Rank	Country	IFI Rank	HDI Re-Rank
Spain	1	8	Kenya	28	54
Austria	2	4	India	29	47
Belgium	3	3	Namibia	30	46
Switzerland	4	2	El Salvador	31	40
Denmark	5	5	Bosnia & Herzegovina	32	21
Malta	6	12	Fiji	33	36
Greece	7	10	Philippines	34	34
France	8	6	Dominican Republic	35	38
Singapore	9	9	Colombia	36	25
Malaysia	10	20	Guatemala	37	45
Italy	11	7	Saudi Arabia	38	29
Mauritius	12	22	Honduras	39	44
Lebanon	13	30	Ecuador	40	33
Thailand	14	28	Bangladesh	41	49
Norway	15	1	Pakistan	42	48
Czech Republic	16	11	Argentina	43	13
Iran	17	39	Bolivia	44	43
Jordan	18	35	Mexico	45	16
Bulgaria	19	17	Venezuela	46	26
Chile	20	14	Nicaragua	47	42
Russia	21	23	Peru	48	32
Trinidad & Tobago	22	18	Albania	49	27
Turkey	23	37	Zimbabwe	50	53
Guyana	24	41	Papua New Guinea	51	50
Brazil	25	24	Armenia	52	31
Romania	26	19	Madagascar	53	51
Lithuania	27	15	Uganda	54	52

Table 4: Comparing countries by ranks of IFI (with 2 dimensions) and HDI

Country	IFI Rank	HDI Re-Rank	Country	IFI Rank	HDI Re-Rank
Spain	1	17	Namibia	51	82
Switzerland	2	8	Costa Rica	52	40
Canada	3	5	Philippines	53	62
Portugal	4	26	Uruguay	54	38
Netherlands	5	9	Trinidad & Tobago	55	43
Germany	6	20	El Salvador	56	72
Ireland	7	3	Saudi Arabia	57	55
Austria	8	12	Bosnia & Herzegovina	58	47
Lebanon	9	56	Indonesia	59	73
United Kingdom	10	16	Fiji	60	64
Belgium	11	11	Sri Lanka	61	66
Denmark	12	13	Turkey	62	65
Japan	13	6	Iran	63	69
Malta	14	28	Bolivia	64	77
Italy	15	15	Honduras	65	78
New Zealand	16	19	Guatemala	66	79
France	17	14	Poland	67	32
China	18	59	Bangladesh	68	88
Malaysia	19	46	Pakistan	69	86
Australia	20	2	Finland	70	10
Sweden	21	4	Ecuador	71	61
Greece	22	22	Nicaragua	72	76
Singapore	23	23	Colombia	73	52
Jordan	24	63	Nepal	74	89
Mauritius	25	48	Albania	75	18
Israel	26	21	Argentina	76	31
Thailand	27	54	Romania	77	45
United States	28	7	Zimbabwe	78	93
Norway	29	1	Lithuania	79	36
Korea	30	24	Botswana	80	85
Panama	31	44	Mexico	81	41
Croatia	32	39	Dominican Republic	82	67
Hungary	33	30	Russia	83	49
Kenya	34	94	Ethiopia	84	99
Bahrain	35	34	Kazakhstan	85	57
Morocco	36	81	Peru	86	60
Belize	37	68	Belarus	87	50
Egypt	38	75	Papua New Guinea	88	90
Kuwait	39	29	Venezuela	89	53
Chile	40	33	Nigeria	90	95
South Africa	42	80	Ghana	91	87
Guyana	43	96	Armenia	92	58
Czech Republic	44	27	Azerbaijan	93	71
Brazil	45	51	Zambia	94	98
Estonia	46	35	Madagascar	95	91
Bulgaria	47	42	Georgia	96	70
Slovak Republic	48	37	Tanzania	97	97
Slovenia	49	25	Uganda	98	92
India	50	83	Cambodia	99	84
			Kyrgyz Republic	100	74