Half the World is Unbanked

Alberto **Chaia**
McKinsey & Company

Aparna **Dalal**
Financial Access Initiative

Tony **Goland**
McKinsey & Company

Maria Jose **Gonzalez**
McKinsey & Company

Jonathan **Morduch**
Financial Access Initiative

Robert **Schiff**
McKinsey & Company

The Financial Access Initiative is a consortium
of researchers at New York University, Harvard, Yale
and Innovations for Poverty Action.

FAI IMPACT THROUGH RESEARCH
financial access initiative

www.financialaccess.org

Over the past quarter century, the microfinance movement has propelled a global expansion of financial services for the world's poor. The Microcredit Summit Campaign, a leading advocacy group, counted 154 million clients world-wide at the end of 2008. That is impressive, but it is just a start relative to the unmet demand. Experts agree that unmet demand for finance is large, but the exact number (or even a rough but credible number) has been hard to pin down, with estimates ranging from half a billion people to three billion.

Limited information on the size and nature of the global population using financial services limits policymakers' abilities to identify what's working and what's not, and it limits financial services providers' abilities to identify where the opportunities lie and where they could learn from current successes.

This paper builds on a dataset compiled from existing cross-country data sources on financial access and socioeconomic and demographic characteristics to generate an improved estimate of the size and nature of the global population that does and does not use formal (or semi-formal)[1] financial services.

Our key findings are:
- 2.5 billion adults, just over half of world's adult population, do not use formal financial services to save or borrow.
- 2.2 billion of these unserved adults live in Africa, Asia, Latin America, and the Middle East.
- Of the 1.2 billion adults who use formal financial services in Africa, Asia, and the Middle East, at least two-thirds, a little more than 800 million, live on less than $5 per day.[2]

We also found that levels of financial inclusion are not determined by socioeconomic or demographic factors alone. We found considerable variance among countries when we correlated financial services usage with national levels of per capita income and urbanization for each country. The variation in the data suggests that socioeconomic and demographic factors are not the only drivers of financial inclusion. Regulatory and

2.5 billion adults, just over half of world's adult population, do not use formal financial services to save or borrow

62% of adults, nearly 2.2 billion, living in Asia, Africa, Latin America and the Middle East are unserved.

A little more than 800 million served adults live on less than $5 per day

1. This paper considers the use of formal and semi-formal financial services. We exclude informal financial sources such as moneylenders or informal rotating savings and credit schemes. Semi-formal sources include microfinance institutions, which might not be subjected to the same regulation as traditional banks. To keep things simple, throughout this paper, when we refer to "formal financial services," we are including semi-formal services such as those provided by microfinance institutions.

2. This paper uses regional definitions from the UN Human Development Index. High-income OECD countries, as well as Central Asia and Eastern Europe, and Latin America and the Caribbean are excluded from this analysis because the methodology employed is ineffective for these regions because of their relatively high incomes in comparison to the levels of usage. Please see the methodology section for further discussion.

policy environments, as well as the actions of individual financial services providers, shape the financial inclusion landscape and are, to a large extent, independent of countries' socioeconomic and demographic characteristics. Countries including India and Thailand have far wider usage of formal financial services than would be predicted by their level of GDP or urbanization.

Our findings provide empirical grounding for what many in the field already believe to be true. It is possible to serve low-income communities at scale with financial services, but there are still billions left to reach.

Approach

Our three core analyses address the number of adults who do and do not use formal financial services, levels of usage for people living above and below $5/day PPP-adjusted, and correlations between levels of financial services use and income and urbanization.

To conduct these analyses, we built a dataset with four components of country-level data. The country-level data for these components is included in Table 1:

i. Percentage of adults with a credit and/or savings account measured from Honohan (2008). Honohan presents estimates, for more than 160 countries, of the fraction of the adult population using formal financial and semi-formal (i.e., from unregulated microfinance institutions) services by combining data from banks and microfinance institutions with household surveys. Honohan's financial measures are based on population data from 2003.

ii. 2005 population data from the United Nation's Human Development Index online database. We define adult population as individuals 15 years or older.[3]

iii. Percentage of population living on more than and less than $5/day, PPP-adjusted, using most recently available data from World Bank's PovcalNet.[4]

iv. 2005 per capita income and level of urbanization from the Human Development Index online database.

There are two key terminological distinctions in this paper that are worth emphasizing: 1) use of financial services, rather than access; and 2) focus on number of adults or households.

Use of financial services: In the world of financial inclusion, experts often go back and forth between "use" of financial services and "access." There are important conceptual debates about which of these makes for more appropriate policy goals – do we aim for people to have the oppor-

3. A new version of the United Nations Human Development Index that uses 2007 population data is available at http://hdr.undp.org/en/statistics/data/

4. The World Bank's PovcalNet is an online computational tool that provides regional and country level poverty measures.

tunity to use formal financial services, or are there some services that we want all people to use (e.g., savings, health insurance)? This paper uses data that is explicitly focused on usage, in large part because that is what was available. Access is more difficult to measure (though it can be approximated by, for example, measuring proximity to formal financial services outlets). Access, by definition, is always larger than usage so the numbers here put a lower bound on access. Being undeserved does not necessarily mean that these populations lack access. This is especially true for low-income populations who lead active financial lives, and choose to use informal financial instruments even though they have access to formal services. Informal tools offer flexibility and convenience that might be missing from more structured financial services. However, informal financial services lack the reliability (e.g., consistent quality and availability), security (e.g., insured savings accounts, sound insurance), affordability and value (e.g., lower interest rates, positive real interest on savings), and potential for scale that formal financial services offer. The challenge in expanding use for policymakers and financial providers is how to provide formal financial services that match the flexibility afforded by informal tools, and are also reliable, secure, affordable and value-creating on a large scale.

Adults and households: Honohan's data uses the concepts of adults and households interchangeably. We realize that policymakers and financial providers might value the estimates differently. For many policymakers, especially those concerned about financial inclusion as a tool for poverty alleviation, household-level data may be more appropriate due to the focus on how many families can benefit from formal financial services. Financial services providers may care about households for some products (e.g., credit), while others, such as savings accounts, payments products or health insurance, may be relevant at the individual level. Honohan's data sources provide a mix of household-level and adult-level information. "Some of the surveys are based on household units (such as those from the LSMS program); others, such as Finscope, use individual adults as the unit."(Honohan 2008, 2496) In the future, it could be helpful to get usage data at both the household and adult levels in a comparative way, to correct for a potential bias where data at the household level suggests more widespread usage than is taking place (e.g., if there are two adults in each household, and in half of all households one adult is using financial services, household data would tell us that 50% of households are using financial services, while only 25% of adults are using services).

> The challenge in expanding use for policymakers and financial providers is how to provide formal financial services that match the flexibility afforded by informal tools, and are also reliable, secure, affordable and value-creating on a large scale.

Key Findings

COUNTING THE UNBANKED

To obtain the total number of adults who do and do not use financial services, we multiplied the percentage of adults who use financial services in each country from Honohan's study with the number of adults in each country based on 2005 population data.

In 2005, out of a total world population of 6.4 billion people, 4.7 billion were adults. As illustrated in Figure 1, only 2.2 billion of these adults used some form of formal financial services to borrow and/or save. 2.5 billion adults, just over half of the world's adult population, did not use any formal (or semi-formal) financial services.

Figure 1: 2.5 billion adults globally do not use formal or semi-formal financial services

Adults who use and do not use formal or semi formal financial services globally
Billions of adults

Total adult population	Use financial services	Do not use financial services
4.7	2.2	2.5
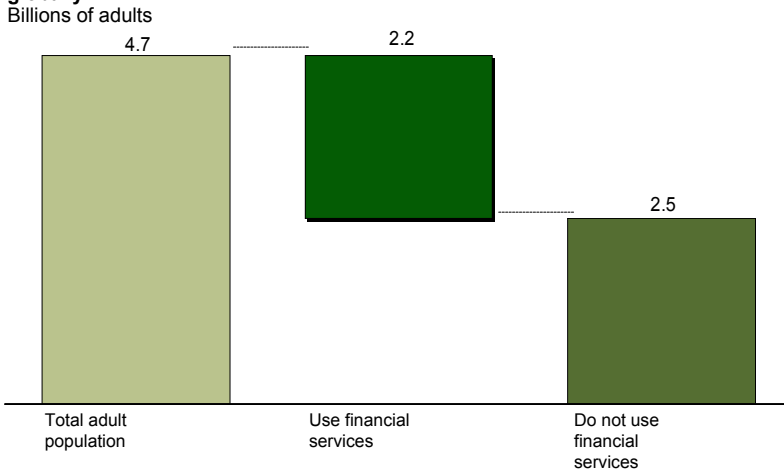
SOURCE: Honohan, 2008; Human Development Index

We had complete adult population and usage data for 95% of the population. To conduct the analysis for the remaining countries for which we had adult data but no data on usage, we used a "scaling-up" approach, as shown in Tables 2 and 3. We first conducted the analyses for all countries with complete data. We created a multiplier for each region (e.g., East Asia, Latin America, Sub-Saharan Africa) by dividing adult population for all countries by adult population for countries with complete data. We then multiplied the usage data drawn from countries with complete data with this multiplier to get the complete usage data for all countries.

Another way to measure financial access is to focus on supply side data. The *Financial Access 2009* report by the Consultative Group to Assist the

Poorest (CGAP, 2009) does just that. CGAP uses new data from a survey of financial regulators from 139 countries to estimate the number of unbanked adults in the world. They begin by counting the total number of deposit accounts in countries and then dividing by three (a rough estimate of the number of deposits per banked adult world-wide). The result from this approximation is that 2.8 billion adults are unbanked, a number which is very similar to ours. Wherever possible, data on households or individuals seems most appropriate for measuring financial usage, but it is helpful to know that a supply-side approach yields similar results.
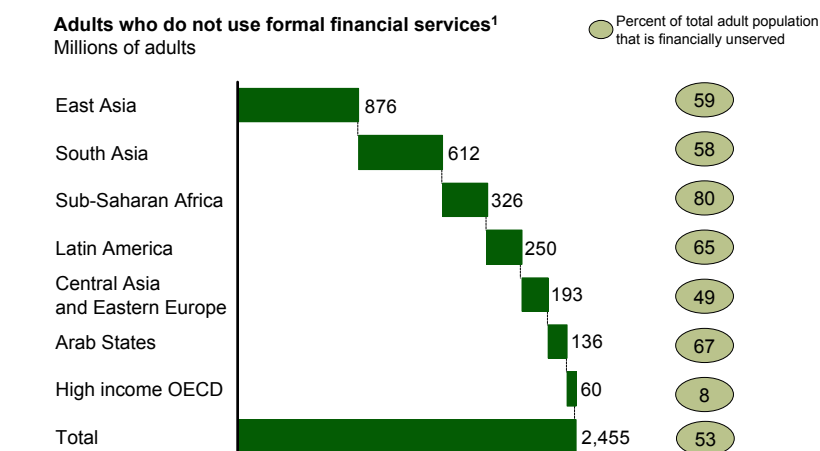
WHERE ARE THE UNBANKED?

Figure 2 depicts the geographical distribution of the adults who do not use formal financial services. The figure plots the number and percentage of unserved adults against the following regions: East Asia, South Asia, Sub-Saharan Africa, Latin America, Central Asia and Eastern Europe, Arab States and High income OECD countries.

Nearly all of the 2.5 billion unserved adults live in Africa, Asia and Latin America. For these regions, the total percentage of unserved adults climbs to 62% of the adult population. The greatest number of unserved adults, almost 1.5 billion, reside in East and South Asia. In Sub-Saharan Africa 80% of the adult population, 325 million people, remains unserved, as compared to only 8% in high income OECD countries.

In Sub-Saharan Africa 80% of the adult population, 325 million people, remains unserved, as compared to only 8% in high income OECD countries.

Figure 2: Nearly all of the world's financially unserved adults live in Africa, Asia and Latin America

Adults who do not use formal financial services[1]
Millions of adults

Percent of total adult population that is financially unserved

Region	Millions of adults	Percent unserved
East Asia	876	59
South Asia	612	58
Sub-Saharan Africa	326	80
Latin America	250	65
Central Asia and Eastern Europe	193	49
Arab States	136	67
High income OECD	60	8
Total	2,455	53

1 Regional groupings based on UN Human Development Index

SOURCE: Honohan, 2008; Human Development Index; World Bank
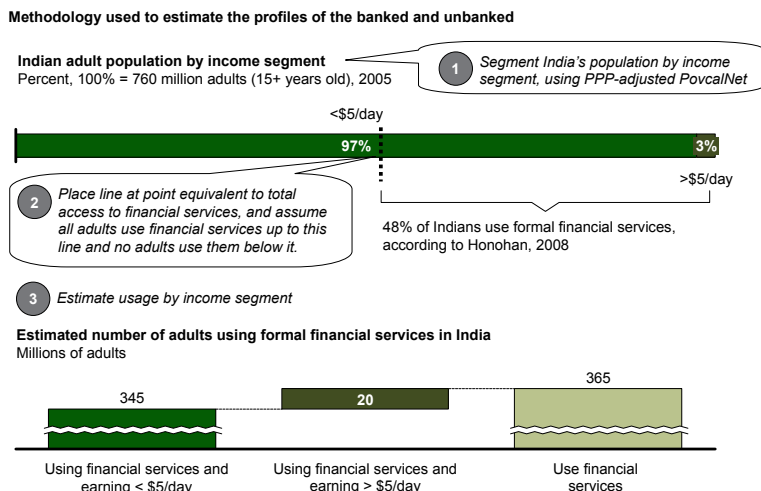
WHO ARE THE UNBANKED?

Given that financial inclusion is a stated goal for most governments, estimating the depth of financial services is a useful first step for policy-making. We examined usage by income distribution with the help of one strong, conservative assumption.

We divided countries' populations into two segments: the percentage of population living on more than $5 per day and the percent living on less than $5 per day. We assumed a positive 1-to-1 correlation between use of financial services and income level, meaning that financial usage starts with those above $5 per day.

This is an inherently conservative approach to estimating how far down-market financial services provision goes, since it is unlikely that every adult living on more than $5/day uses formal financial services. We use India as an example in Figure 3 to illustrate our approach:

- In 2005 India had 760 million adults
- Using Honohan estimates, we knew that 48% of these adults, 365 million, used formal or semi-formal financial services
- We assumed that financial services usage begins top-down, meaning that the first set of adults to use formal services were the richest adults
- Approximately 20m adults live on more than $5/day, PPP-adjusted
- We assume that all of the adults who live on more than $5/day are included in the ~365m adults who use financial services
- We then assume that the remainder of adults using financial services live on less than $5/day
- This means that roughly ~345m adults live on less than $5/day and use formal financial services

Figure 3: We have taken a conservative approach to estimating the "depth" of financial services penetration

Methodology used to estimate the profiles of the banked and unbanked

Indian adult population by income segment
Percent, 100% = 760 million adults (15+ years old), 2005

1 — *Segment India's population by income segment, using PPP-adjusted PovcalNet*

<$5/day

| 97% | 3% |

>$5/day

2 — *Place line at point equivalent to total access to financial services, and assume all adults use financial services up to this line and no adults use them below it.*

48% of Indians use formal financial services, according to Honohan, 2008

3 — *Estimate usage by income segment*

Estimated number of adults using formal financial services in India
Millions of adults

| 345 | 20 | 365 |

| Using financial services and earning < $5/day | Using financial services and earning > $5/day | Use financial services |

SOURCE: Honohan. 2008: Human Development Index: World Bank

We applied the same approach to countries in Africa, Asia and the Middle East. We omitted high-income OECD countries, Central Asia and Eastern Europe, and Latin America because of the relatively small percentage of the population living on less than $5/day, PPP-adjusted, in comparison to the amount of financial services usage.
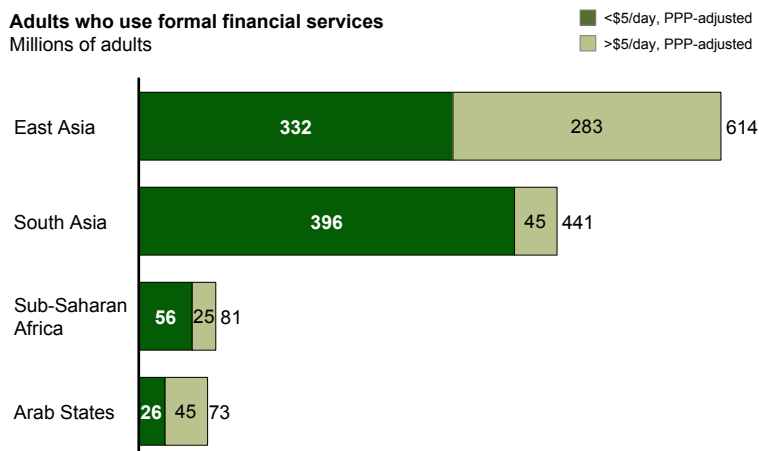
Figure 4 depicts the number of adults who live on less than $5/day and more than $5/day in East Asia, South Asia, Sub-Saharan Africa and the Middle East who use formal financial services.

The news is not all bad. In these regions, 1.2 billion adults use formal financial services. About 800 million adults, two-thirds of the served population, actually live on less than $5/day. In South Asia alone financial providers serve 396 million low-income adults (mostly in India).

The key message from these analyses is that hundreds of millions of adults living on less than $5/day are already being reached with formal financial services. Serving these segments at scale is not only possible, but to a large extent, is already happening.

Serving adults living on less than $5/day at scale is not only possible, but to a large extent, is already happening.

Figure 4: Hundreds of millions of adults who use financial services live on less than $5/day, PPP-adjusted

Adults who use formal financial services
Millions of adults

Legend:
- <$5/day, PPP-adjusted
- >$5/day, PPP-adjusted

East Asia: 332 | 283 | 614
South Asia: 396 | 45 | 441
Sub-Saharan Africa: 56 | 25 | 81
Arab States: 26 | 45 | 73

SOURCE: Honohan, 2008; Human Development Index; World Bank

DRIVERS OF INCLUSION

We compared the data on financial services usage separately with national levels of per capita income and urbanization to identify possible drivers of financial inclusion through a standard correlation. Our dataset included complete data for 102 countries in Africa, Arab states, Asia and Latin America. We did not include the high-income OECD countries or Central Asia and Eastern Europe because we wanted to focus on the poorest countries.

Levels of financial inclusion are not determined by socioeconomic or demographic factors alone. Figure 5 plots the percentage of population who use formal financial services against GDP per capita (we had GDP per capital data for 94 of the 102 countries). We found a moderate to strong positive correlation between usage levels and per capita income across countries. Figure 6 plots the percentage of population who use formal financial services against level of urbanization. We found a weak positive relationship between use of services and urbanization.[5]

Many countries do not fit the overall pattern. For example, India and Thailand appear to be countries with relatively low per capita income and a large rural population, but have greater use of financial services than many relatively richer and more urban countries.

These findings support the idea that countries can improve levels of financial inclusion by creating effective regulatory and policy environments and enabling the actions of individual financial services providers.

Effective regulatory and policy environments can improve levels of financial inclusion.

Figure 5: There is a moderate to strong relationship between GDP per capita and usage of financial services

Correlation between levels of financial inclusion and GDP per capita for Arab states, Africa, Asia and Latin America (for countries with complete data)

Relationship between GDP per capita and financial services

The red line indicates the linear prediction.
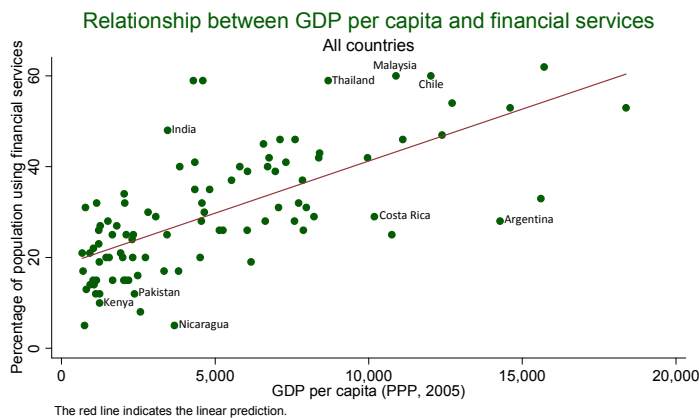
SOURCE: Honohan, 2008; Human Development Index; World Bank

5. The coefficient of correlation between percentage of population using financial services and GDP per capita is 0.64 and the coefficient of correlation between percentage of population using financial services and urbanization is 0.36. Both are statistically significant at 1%.

Figure 6: There is a weak positive correlation between usage of financial services and urbanization

Correlation between levels of financial inclusion and urbanization for Arab states, Africa, Asia and Latin America (for countries with complete data)

Relationship between urban population and financial services

All countries
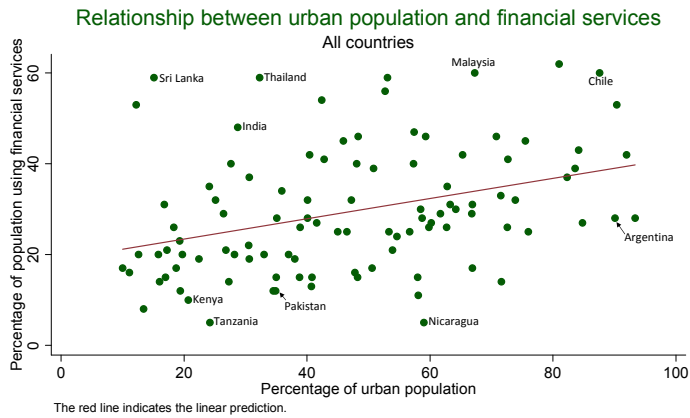
SOURCE: Honohan, 2008; Human Development Index; World Bank

Improving Data

The quality of these analyses hinge largely on the quality of Honohan's cross-country data on financial services usage. This data is widely cited and is used in *Finance For All*, the World Bank's 2008 publication on access to financial services.

We constructed an alternate measure for twelve countries using more recent select financial services country-specific data from domestic news sources and others' analyses. The countries account for about 2 billion people, almost one-third of the world's population.[6] In general, Honohan's data held up well against this anecdotal testing. Using these alternate financial measures, we estimate 2.4 billion adults who do not use formal financial services compared to our original estimate of 2.5 billion. The number of unserved adults in Asia, Africa, the Middle East and Latin America drops from 2.2 billion to 2.1 billion. Relatively speaking, these differences are small and do not change the fundamental findings.

Another consideration is that our estimates are based on population data from 2005. Given the rapid pace of change in financial inclusion over the last four years, it is likely that our analysis using Honohan's data under-reports the amount of financial inclusion today.

6. The countries were Botswana, Brazil, India, Indonesia, Kenya, Mexico, Namibia, Nigeria, South Africa, Tanzania Uganda, and Zambia. The alternate data sources included Finscope Africa surveys, Reserve Bank of India report, World Bank survey on Brazil, Business Latin America article and Bank Rakyat of Indonesia study.

We use Honohan's data across countries even where other data was available, however, to ensure quality and consistency. And even at the extreme, if financial inclusion had increased globally by as much as 20% in the last four years, there would still be 2 billion adults who do not use any formal credit or savings products today.

We undertook this analysis to create a reasonable estimate of financial services usage. This effort, even with its limitations, provides a quantitative starting point for future studies on the nature and amount of usage of financial services.

Conclusion

This study brings together available data to frame important debates on financial inclusion. The findings are striking: 1) approximately 2.5 billion adults do not currently use financial services, more than half of the world's adults; 2) existing practice shows that it is possible to serve low income populations on a large scale. Yet, billions of people, and especially those who live on less than $5/day, are not using formal financial services. This can inhibit their ability to build wealth, increase their income and manage uncertainty.

This is just a start. Updating and refining these analyses (and perhaps even refuting them) requires more detailed household and/or adult-level data. In the next few years we expect that there will be better data that can help identify gaps and pin down numbers more firmly. Those efforts are crucial if policymakers are to realize their ambitions to spur the creation of new markets and expand access to the under-served.

References

Honohan, Patrick (2008). "Cross-country variation in household access to financial services." Journal of Banking and Finance 32, May: 2493-2500.

World Bank (2008). "Finance for All? Policies and Pitfalls in Expanding Access." World Bank Policy Research Report. Washington DC: World Bank.

Consultative Group to Assist the Poorest [CGAP] (2009). "Financial Access 2009: Measuring Access to Financial Services around the World." September.

Source	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables" Calculated	Honohan (2008)	Calculated	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables"	PovcalNet (World Bank)	PovcalNet (World Bank)
Country	Population (m, 2005)	Population > 15 (m, 2005)	Use of financial services (%, adults)	Adults using financial services (m)	GCP per capita (PPP, $ Intl, 2005)	Urban (%, 2005)	< $5/day (%)	< $5/day (year of data)
Afghanistan	25.1	13.303	No data	No data	No data	No data	No data	No data
Albania	3.2	2.3584	34%	0.801856	No data	No data	0.5924	2005
Algeria	32.9	23.1616	31%	7.180096	7062	0.633	0.7644	1995
Angola	16.1	8.6296	25%	2.1574	2335	0.533	0.9134	2000
Argentina	38.7	28.4832	28%	7.975296	14280	0.901	0.2846	2006
Armenia	3	2.376	9%	0.21384	No data	No data	0.9296	2003
Australia	20.3	16.3415	No data	No data	No data	No data	No data	No data
Austria	8.3	6.9886	96%	6.709056	No data	No data	No data	No data
Azerbaijan	8.4	6.2748	17%	1.066716	No data	No data	0.7584	2005
Bahamas	0.3	0.2172	53%	0.115116	18380	0.904	No data	No data
Bahrain	0.7	0.5159	No data	No data	No data	No data	No data	No data
Bangladesh	153.3	99.3384	32%	31.788288	2053	0.251	0.9777	2005
Barbados	0.3	0.2433	56%	0.136248	0	0.527	No data	No data
Belarus	9.8	8.2614	16%	1.321824	No data	No data	0.1229	2005
Belgium	10.4	8.632	97%	8.37304	No data	No data	No data	No data
Belize	0.3	0.1872	46%	0.086112	7109	0.483	No data	No data
Benin	8.5	4.743	32%	1.51776	1141	0.401	0.9667	2003
Bhutan	0.6	0.402	16%	0.06432	0	0.111	0.862	2003
Bolivia	9.2	5.6948	30%	1.70844	2819	0.642	0.6088	2005
Bosnia and Herzegovina	3.9	3.2136	17%	0.546312	No data	No data	0.1718	2004
Botswana	1.8	1.1592	47%	0.544824	12387	0.574	0.819	1993.9
Brazil	186.8	134.8696	43%	57.993928	8402	0.842	0.3931	2007
Brunei Darussalam	0.4	0.2816	No data	No data	No data	No data	No data	No data
Bulgaria	7.7	6.6374	56%	3.716944	No data	No data	0.3673	2003
Burkina Faso	13.9	7.4782	26%	1.944332	1213	0.183	0.9748	2003
Burma	48	34.896	19%	6.63024	0	0.306	No data	No data
Burundi	7.9	4.3371	17%	0.737307	699	0.1	0.9941	2006
Cambodia	14	8.736	20%	1.7472	2727	0.197	0.9461	2004
Cameroon	17.8	10.3596	24%	2.486304	2299	0.546	0.9095	2001
Canada	32.3	26.6152	96%	25.550592	No data	No data	No data	No data
Cape Verde	0.5	0.3025	40%	0.121	5803	0.573	0.7951	2001
Central African Republic	4.2	2.4066	19%	0.457254	1224	0.38	0.9731	2003
Chad	10.1	5.4338	No data	No data	No data	No data	0.9786	2002.5
Chile	16.3	12.2413	60%	7.34478	12027	0.876	0.2509	2006

Source	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables" Calculated	Honohan (2008)	Calculated	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables"	PovcalNet (World Bank)	PovcalNet (World Bank)
Country	Population (m, 2005)	Population > 15 (m, 2005)	Use of financial services (%, adults)	Adults using financial services (m)	GCP per capita (PPP, $ Intl, 2005)	Urban (%, 2005)	< $5/day (%)	< $5/day (year of data)
China	1313	1029.392	42%	432.34464	6757	0.404	0.8006752	2005
Costa Rica	4.3	3.0788	29%	0.892852	10180	0.617	0.3573	2005
Côte d'Ivoire	18.6	10.8438	25%	2.71095	1648	0.45	0.8644	2002
Croatia	4.6	3.887	42%	1.63254	No data	No data	0.0059	2005
Cuba	11.3	9.1304	45%	4.10868	0	0.755	No data	No data
Czech Republic	10.2	8.6904	85%	7.38684	No data	No data	0.0104	1996
Democratic People's Republic of Korea	23.6	17.8888	No data	No data	No data	No data	No data	No data
Denmark	5.4	4.3848	99%	4.340952	No data	No data	No data	No data
Djibouti	0.8	0.492	No data	No data	No data	No data	0.8668	2002
Dominican Republic	9.5	6.3175	29%	1.832075	8217	0.668	0.4722	2006
Ecuador	13.1	8.8294	35%	3.09029	4341	0.628	0.4391	2007
Egypt	72.8	48.5576	41%	19.908616	4337	0.428	0.8478	2004.5
El Salvador	6.7	4.4153	26%	1.147978	5255	0.598	0.5398	2005
Equatorial Guinea	0.5	0.288	No data	No data	7874	0.389	No data	No data
Eritrea	4.5	2.565	12%	0.3078	1109	0.194	No data	No data
Estonia	1.3	1.1024	86%	0.948064	No data	No data	0.2205	2004
Ethiopia	79	43.845	14%	6.1383	1055	0.16	0.9817	2005
Fiji	0.8	0.5368	39%	0.209352	6049	0.508	No data	No data
Finland	5.2	4.2952	99%	4.252248	No data	No data	No data	No data
France	61	49.776	96%	47.78496	No data	No data	No data	No data
Gabon	1.3	0.8333	39%	0.324987	6954	0.836	0.6885	2005
Gambia	1.6	0.9408	21%	0.197568	1921	0.539	0.8927	2003
Georgia	4.5	3.6495	15%	0.547425	No data	No data	0.7828	2005
Germany	82.7	70.7912	97%	68.667464	No data	No data	No data	No data
Ghana	22.5	13.725	16%	2.196	2480	0.478	0.9063	2005.5
Greece	11.1	9.5127	83%	7.895541	No data	No data	No data	No data
Grenada	0.1	0.0658	37%	0.024346	7843	0.306	No data	No data
Guatemala	12.7	7.2263	32%	2.312416	4568	0.472	0.6267	2006
Guinea	9	5.094	15%	0.7641	2316	0.33	0.9812	2003
Guinea-Bissau	1.6	0.8416	No data	No data	No data	No data	0.9758	2002
Guyana	0.7	0.4823	20%	0.09646	4508	0.282	0.5785	1998
Haiti	9.3	5.766	15%	0.8649	1663	0.388	0.9294	2001
Honduras	6.8	4.08	25%	1.02	3430	0.465	0.6312	2006
Hong Kong	7.1	6.0279	38%	2.290602	No data	No data	No data	No data

Source	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables" Calculated	Honohan (2008)	Calculated	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables"	PovcalNet (World Bank)	PovcalNet (World Bank)
Country	Population (m, 2005)	Population > 15 (m, 2005)	Use of financial services (%, adults)	Adults using financial services (m)	GCP per capita (PPP, $ Intl, 2005)	Urban (%, 2005)	< $5/day (%)	< $5/day (year of data)
Hungary	10.1	8.5042	66%	5.612772	No data	No data	0.0622	2004
Iceland	0.3	0.2337	No data	No data	No data	No data	No data	No data
India	1134.4	760.048	48%	364.82304	3452	0.287	0.9730299	2004.5
Indonesia	226.1	161.8876	40%	64.75504	3843	0.481	0.9306022	2005
Iran	69.4	49.4128	31%	15.317968	7968	0.669	0.4952	2005
Iraq	28	16.38	17%	2.7846	0	0.669	No data	No data
Ireland	4.1	3.2513	88%	2.861144	No data	No data	No data	No data
Israel	No data	No data	No data	No data	No data	No data	No data	No data
Italy	58.6	50.396	75%	37.797	No data	No data	No data	No data
Jamaica	2.7	1.8441	59%	1.088019	4291	0.531	0.4032	2004
Japan	127.9	110.1219	No data	No data	No data	No data	No data	No data
Jordan	5.5	3.454	37%	1.27798	5530	0.823	0.4706	2006
Kazakhstan	15.2	11.5216	48%	5.530368	No data	No data	0.7079	2003
Kenya	35.6	20.4344	10%	2.04344	1240	0.207	0.8197	2005.4
Kuwait	2.7	2.0574	No data	No data	No data	No data	No data	No data
Kyrgyz Republic	5.2	3.588	1%	0.03588	No data	No data	0.9304	2004
Laos	5.7	3.4314	No data	No data	No data	No data	0.9761	2002.2
Latvia	2.3	1.9688	64%	1.260032	No data	No data	0.1654	2004
Lebanon	4	2.856	79%	2.25624	No data	No data	No data	No data
Lesotho	2	1.192	17%	0.20264	3335	0.187	0.8982	2002.5
Liberia	3.4	1.8054	11%	0.198594	0	0.581	0.994	2007
Libyan Arab Jamahiriya	5.9	4.1123	27%	1.110321	0	0.848	No data	No data
Lithuania	3.4	2.8288	70%	1.98016	No data	No data	0.2228	2004
Luxembourg	0.5	0.4075	99%	0.403425	No data	No data	No data	No data
Macedonia	2	1.606	20%	0.3212	No data	No data	0.3115	2003
Madagascar	18.6	10.4532	21%	2.195172	923	0.268	1	2005
Malawi	13.2	6.9828	21%	1.466388	667	0.172	0.9876	2004.3
Malaysia	25.7	17.6302	60%	10.57812	10882	0.673	0.476	2004
Maldives	0.3	0.198	No data	No data	No data	No data	No data	No data
Mali	11.6	6.0668	22%	1.334696	1033	0.305	0.9693	2006
Mauritania	3	1.791	16%	0.28656	No data	No data	0.873	2000
Mauritius	1.2	0.9072	54%	0.489888	12715	0.424	No data	No data
Mexico	104.3	72.1756	25%	18.0439	10751	0.76	0.3364	2006
Micronesia	0.1	0.0614	No data	No data	No data	No data	No data	No data
Moldova	3.9	3.12	13%	0.4056	No data	No data	0.8368	2004
Mongolia	2.6	1.8486	25%	0.46215	2107	0.567	0.9342	2005
Montenegro	0.6	0.4824	No data	No data	No data	No data	No data	No data
Morocco	30.5	21.2585	39%	8.290815	4555	0.587	0.6582	2007

Source	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables" Calculated	Honohan (2008)	Calculated	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables"	PovcalNet (World Bank)	PovcalNet (World Bank)
Country	Population (m, 2005)	Population > 15 (m, 2005)	Use of financial services (%, adults)	Adults using financial services (m)	GCP per capita (PPP, $ Intl, 2005)	Urban (%, 2005)	< $5/day (%)	< $5/day (year of data)
Mozambique	20.5	11.439	12%	1.37268	1242	0.345	0.9896	2002.5
Namibia	2	1.218	28%	0.34104	7586	0.351	0.8172	1993
Nepal	27.1	16.531	20%	3.3062	1550	0.158	0.9616	2003.5
Netherlands	16.3	13.3008	100%	13.3008	No data	No data	No data	No data
New Zealand	4.1	3.2185	No data	No data	No data	No data	No data	No data
Nicaragua	5.5	3.4155	5%	0.170775	3674	0.59	0.7222	2005
Niger	13.3	6.916	31%	2.14396	781	0.168	0.98	2005
Nigeria	141.4	78.7598	15%	11.81397	1128	0.482	0.9782	2003.7
Norway	4.6	3.6984	84%	3.106656	No data	No data	No data	No data
Oman	2.5	1.655	33%	0.54615	15602	0.715	No data	No data
Pakistan	158.1	99.2868	12%	11.914416	2370	0.349	0.9603	2004.5
Palestine	3.8	2.0558	14%	0.287812	0	0.716	No data	No data
Panama	3.2	2.2272	46%	1.024512	7605	0.708	0.4528	2006
Papua New Guinea	6.1	3.6234	8%	0.289872	2563	0.134	0.8815	1996
Paraguay	5.9	3.7878	30%	1.13634	4642	0.585	0.4641	2007
Peru	27.3	18.6186	26%	4.840836	6039	0.726	0.5378	2006
Philippines	84.6	53.9748	26%	14.033448	5137	0.627	0.8347	2006
Poland	38.2	31.9734	66%	21.102444	No data	No data	0.2146	2005
Portugal	10.5	8.8515	84%	7.43526	No data	No data	No data	No data
Qatar	0.8	0.6264	No data	No data	No data	No data	No data	No data
Republic of Korea	47.9	38.9906	63%	24.564078	No data	No data	No data	No data
Romania	21.6	18.2088	23%	4.188024	No data	No data	0.4649	2005
Russian Federation	144	122.256	69%	84.35664	No data	No data	0.2602	2005
Rwanda	9.2	5.198	23%	1.19554	1206	0.193	0.9861	2000
Saint Lucia	0.2	0.1442	40%	0.05768	6707	0.276	0.8453	1995
Saint Vincent and the Grenadines	0.1	0.0707	45%	0.031815	6568	0.459	No data	No data
Samoa	0.2	0.1184	19%	0.022496	6170	0.224	No data	No data
São Tomé and Príncipe	0.2	0.1168	15%	0.01752	2178	0.58	No data	No data
Saudi Arabia	23.6	15.458	62%	9.58396	15711	0.81	No data	No data
Senegal	11.8	6.8204	27%	1.841508	1792	0.416	0.9354	2005
Serbia	9.9	8.0685	No data	No data	No data	No data	No data	No data
Sierra Leone	5.6	3.2032	13%	0.416416	806	0.407	0.9592	2003
Singapore	4.3	3.4615	98%	3.39227	No data	No data	No data	No data
Slovakia	5.4	4.4928	83%	3.729024	No data	No data	0.0874	1996
Slovenia	2	1.718	97%	1.66646	No data	No data	0.0076	2004

Source	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables" Calculated	Honohan (2008)	Calculated	HDI 2007/8 "Build your own tables"	HDI 2007/8 "Build your own tables"	PovcalNet (World Bank)	PovcalNet (World Bank)
Country	Population (m, 2005)	Population > 15 (m, 2005)	Use of financial services (%, adults)	Adults using financial services (m)	GCP per capita (PPP, $ Intl, 2005)	Urban (%, 2005)	< $5/day (%)	< $5/day (year of data)
Solomon Islands	0.5	0.2975	15%	0.044625	2031	0.17	No data	No data
Somalia	8.2	4.5838	No data	No data	No data	No data	No data	No data
South Africa	47.9	32.5241	46%	14.961086	11110	0.593	0.724	2000
Spain	43.4	37.1504	95%	35.29288	No data	No data	No data	No data
Sri Lanka	19.1	14.4778	59%	8.541902	4595	0.151	0.8618	2002
Sudan	36.9	21.8817	15%	3.282255	2083	0.408	No data	No data
Suriname	0.5	0.351	32%	0.11232	7722	0.739	0.6211	1999
Swaziland	1.1	0.6622	35%	0.23177	4824	0.241	0.9648	2000.5
Sweden	9	7.434	99%	7.35966	No data	No data	No data	No data
Switzerland	7.4	6.1642	88%	5.424496	No data	No data	No data	No data
Syria	18.9	11.9826	17%	2.037042	3808	0.506	No data	No data
Tajikistan	6.6	3.9996	16%	0.639936	No data	No data	0.9337	2004
Tanzania	38.5	21.406	5%	1.0703	744	0.242	0.9999	2000.4
Thailand	63	49.329	59%	29.10411	8677	0.323	0.5742	2004
Timor-Leste	1.1	0.605	13%	0.07865	No data	No data	0.9673	2001
Togo	6.2	3.5154	28%	0.984312	1506	0.401	0.9647	2006
Tonga	0.1	0.0625	No data	No data	No data	No data	No data	No data
Trinidad and Tobago	1.3	1.0114	53%	0.536042	14603	0.122	0.5333	1992
Tunisia	10.1	7.474	42%	3.13908	8371	0.653	0.5674	2000
Turkey	73	52.341	49%	25.64709	No data	No data	0.4349	2005
Turkmeni-stan	4.8	3.2736	No data	No data	No data	No data	0.8912	1998
Uganda	28.9	14.6234	20%	2.92468	1454	0.126	0.9604	2005
Ukraine	46.9	40.0057	24%	9.601368	No data	No data	0.2369	2005
United Arab Emirates	4.1	3.2882	No data	No data	No data	No data	No data	No data
United Kingdom	60.2	49.364	91%	44.92124	No data	No data	No data	No data
United States	299.8	237.4416	91%	216.071856	No data	No data	No data	No data
Uruguay	3.3	2.5146	42%	1.056132	9962	0.92	0.2808	2006
Uzbekistan	26.6	17.7688	16%	2.843008	No data	No data	0.9734	2003
Venezuela	26.7	18.3429	28%	5.136012	6632	0.934	0.4308	2006
Vietnam	85	59.84	29%	17.3536	3071	0.264	0.8975	2006
Yemen	21.1	11.4151	14%	1.598114	930	0.273	0.9162	2005
Zambia	11.5	6.2445	15%	0.936675	1023	0.35	0.9655	2004.3
Zimbabwe	13.1	7.9255	34%	2.69467	2038	0.359	No data	No data

Table 2: Total usage of financial services for 149 countries with data on adult population and financial services usage

Region	Adult Population (m)	Using financial services (m)	Not using financial services (m)	% using
Arab States	191.7022	63.283081	128.419119	33%
Central Asia and Eastern Europe	381.8651	194.997908	186.867192	51%
East Asia	1471.1953	607.900493	863.294807	41%
High income OECD	588.9427	539.652729	49.289971	92%
Latin America and the Caribbean	387.1273	136.815373	250.311927	35%
South Asia	1039.4968	435.756134	603.740666	42%
Sub-Saharan Africa	370.0234	74.426923	295.596477	20%
Total	4430.3528	2052.832641	2377.520159	46%

Table 3: Total usage of financial services scaled up to 177 countries which had data on adult population but no data on usage

Region	Multiplier to scale-up	Adult population (m)	Using financial services (m)	Not using financial services (m)	% using
Arab States	1.060321165	203.2659	67.10039016	136.1655098	33%
Central Asia and Eastern Europe	1.030965124	393.6896	201.0360423	192.6535577	51%
East Asia	1.01476738	1492.921	616.8775906	876.0434094	41%
High income OECD	1.220591239	718.8583	658.6953932	60.16290678	92%
Latin America and the Caribbean	1	387.1273	136.815373	250.311927	35%
South Asia	1.012988015	1052.9978	441.4157412	611.5820588	42%
Sub-Saharan Africa	1.101498986	407.5804	81.98118024	325.5992198	20%
Total		4656.4403	2203.921711	2452.518589	47%

We created a multiplier for each region based on total adult population for all countries (Adult population column in Table 3) divided by adult population for each region from Table 2. We used this multiplier to scale up the figures for financial services usage. For example, for Arab States, we first divided adult population 203 m (Table 3) by 188 m (Table 2) to obtain the multiplier 1.07. We then multiplied the figure for the population using financial services 58 m in Table 2 with 1.07 to obtain the 63 m adults using financial services in all 177 countries.

Table 4: Usage by income for countries with usage and income data

Region	Adult population (m)	Usage <$5/day (m)	Usage >$5/day (m)	Total served (m)	# of countries with data
Arab States	115.3208	15.90756064	25.48714036	41.394701	6
East Asia	1386.8666	308.128521	262.618309	570.74683	10
South Asia	1039.4968	391.0915648	44.6645692	435.756134	7
Sub-Saharan Africa	358.5089	48.9139094	22.0031356	70.917045	36
Total	2900.1931	764.0415558	354.7731542	1118.81471	59

Table 5: Scaled-up usage by income data for all countries

Region	Multiplier to scale-up	Adult population (m)	Usage <$5/day (m)	Usage >$5/day (m)	Total served (m)
Arab States	1.762612642	203.2659	28.03886749	44.92395581	72.96282
East Asia	1.076470513	1492.921	331.691267	282.7008658	614.3921
South Asia	1.012988015	1052.9978	396.1710679	45.2446733	441.4157
Sub-Saharan Africa	1.136876658	407.5804	55.60908184	25.01485126	80.62393
Total		3156.7651	811.5102842	397.8843461	1209.395

Figures scaled up to cover all of Arab States, East Asia, South Asia, and Sub-Saharan Africa. Similar approach as described in Table 2.