

Costs 2: Cash in Transit

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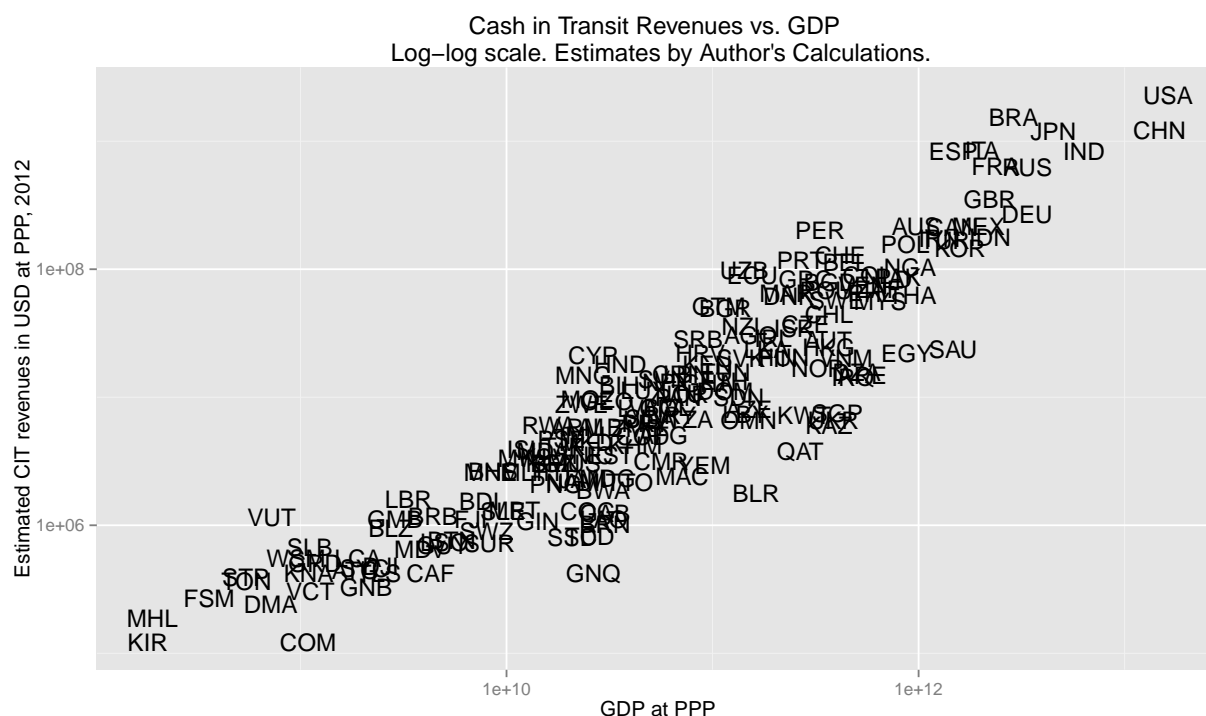
Global Cost of Cash Benchmarking Database
Institute for Business in the Global Context
Principal Investigator: Bhaskar Chakravorti

Overview

This is §2, Cash in Transit, of eight (8) to be completed: ATMs, Cash in transit, Household costs, Currency operations, Tax gap, Fraud, Foregone growth, and Seigniorage.

Top 20 markets

The top 20 and bottom 20 CIT markets appear in Tables 1 and 2. Cash in transit revenues are estimated in USD at PPP for 2012, nearest whole dollar. *Estimates are very rough* and should not be quoted to more than 2 digits. No formal confidence intervals should be reported under the methodology used.



By region

See regional market size ranks in Tables 3, 4, 5, 6 and 7

Table 1: 20 Largest CIT Markets

	country	CITest
1	Korea, Rep.	144,453,539
2	Poland	156,019,741
3	Turkey	167,897,651
4	Iran, Islamic Rep.	174,486,363
5	Indonesia	178,135,314
6	Peru	199,729,965
7	Canada	214,116,453
8	Australia	215,410,443
9	Mexico	218,282,146
10	Germany	270,046,118
11	United Kingdom	354,440,816
12	Russian Federation	629,406,779
13	France	631,499,093
14	India	835,858,480
15	Spain	837,128,430
16	Italy	841,718,799
17	Japan	1,190,932,702
18	China	1,217,540,381
19	Brazil	1,538,669,583
20	United States	2,303,415,115

Table 2: 20 Smallest CIT Markets

	country	CITest
1	Comoros	121,677
2	Kiribati	121,745
3	Marshall Islands	187,988
4	Dominica	242,245
5	Micronesia, Fed. Sts.	270,027
6	St. Vincent and the Grenadines	303,647
7	Aruba	315,331
8	Guinea-Bissau	329,644
9	Tonga	363,093
10	Sao Tome and Principe	394,356
11	Central African Republic	418,435
12	Timor-Leste	422,141
13	St. Kitts and Nevis	423,016
14	Equatorial Guinea	424,878
15	Antigua and Barbuda	443,062
16	Seychelles	458,081
17	Djibouti	477,927
18	Grenada	502,578
19	St. Lucia	553,999
20	Samoa	557,020

Table 3: 10 Largest CIT Markets in Latin America, Caribbean

	country	CITest
1	Costa Rica	15,087,965
2	Honduras	18,006,788
3	Chile	44,471,810
4	Guatemala	51,004,275
5	Venezuela, RB	75,264,019
6	Colombia	88,978,869
7	Ecuador	89,962,763
8	Peru	199,729,965
9	Mexico	218,282,146
10	Brazil	1,538,669,583

Table 4: 10 Largest CIT Markets in East Asia, Pacific

	country	CITest
1	Hong Kong SAR, China	24,628,674
2	New Zealand	35,933,394
3	Malaysia	56,003,067
4	Thailand	62,983,133
5	Philippines	64,357,852
6	Korea, Rep.	144,453,539
7	Indonesia	178,135,314
8	Australia	215,410,443
9	Japan	1,190,932,702
10	China	1,217,540,381

Table 5: 10 Largest CIT Markets in Middle East, North Africa

	country	CITest
1	Iraq	14,308,298
2	United Arab Emirates	14,846,743
3	Lebanon	15,123,503
4	Tunisia	15,541,181
5	Algeria	15,568,265
6	Egypt, Arab Rep.	21,920,752
7	Saudi Arabia	23,647,807
8	Israel	34,472,079
9	Morocco	65,326,180
10	Iran, Islamic Rep.	174,486,363

Methodology

Cash in transit costs are benchmarked to the number of bank branches in a country. We take CIT to be a linear multiple of bank branches in the country, adjusted for PPP price ratios. In expensive countries, CIT revenues are higher than in cheaper countries, as reflected in the price level ratio between the countries.

World Bank Data

Variable	Indicator
bankdensity	Bank branches per 100k population
pop	Population, Total (millions)
gdp	GDP, constant 2005 USD at PPP (millions)

US Economic Census Data

Gross receipts for armored car service in the United States are \$2,323 million. There are 781 establishments with a total of 29,748 employees (2012).¹

Model

CIT revenues are forecast as a straight multiple of the number of bank branches in a country. CIT revenues will be scaled down with the price level in each country, as measured by the PPP ratio indicator.

$$CIT_i = CIT_{\omega} \frac{b_i \Pi_i}{b_{\omega}}$$

Where

Var	Description
CIT_i	Cash in transit in country i
CIT_{ω}	Cash in transit in the United States
b_i	Bank branches in country i
b_{ω}	Bank branches in the United States
Π_i	Price level ratio in country i, relative to the United States

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¹United States Census Bureau. 2012. Economic Census: Industry Snapshots. Available at http://thedataweb.rm.census.gov/TheDataWeb_HotReport2/econsnapshot/2012/snapshot.html?NAICS=561613

Table 6: 10 Largest CIT Markets in Sub-Saharan Africa

	country	CITest
1	Cote d'Ivoire	8,199,737
2	Zimbabwe	8,818,073
3	Mozambique	9,667,439
4	Sudan	9,998,178
5	Ghana	12,803,947
6	Ethiopia	13,445,745
7	Kenya	18,041,204
8	Angola	30,380,194
9	South Africa	70,164,134
10	Nigeria	103,189,332

Table 7: 10 Largest CIT Markets in South Asia

	country	CITest
1	Maldives	645,762
2	Bhutan	767,109
3	Afghanistan	5,086,553
4	Nepal	12,970,705
5	Sri Lanka	23,815,182
6	Bangladesh	79,256,291
7	Pakistan	86,577,563
8	India	835,858,480