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ABSTRACT

World service exports have grown at a rapid rate over the past few decades. While some countries have benefited from the surge in service exports, others have been left behind. This paper provides a snapshot of the current state of trade in services using three measures of the Balassa index to reveal comparative advantage, both by country and by service sector. Ranking tables are reported for countries with a GDP above \$100 billion in 2005, although 147 countries are included in the analysis. (The full results are provided in the appendix). An overview of the performance of G8 and O5 countries is also provided.

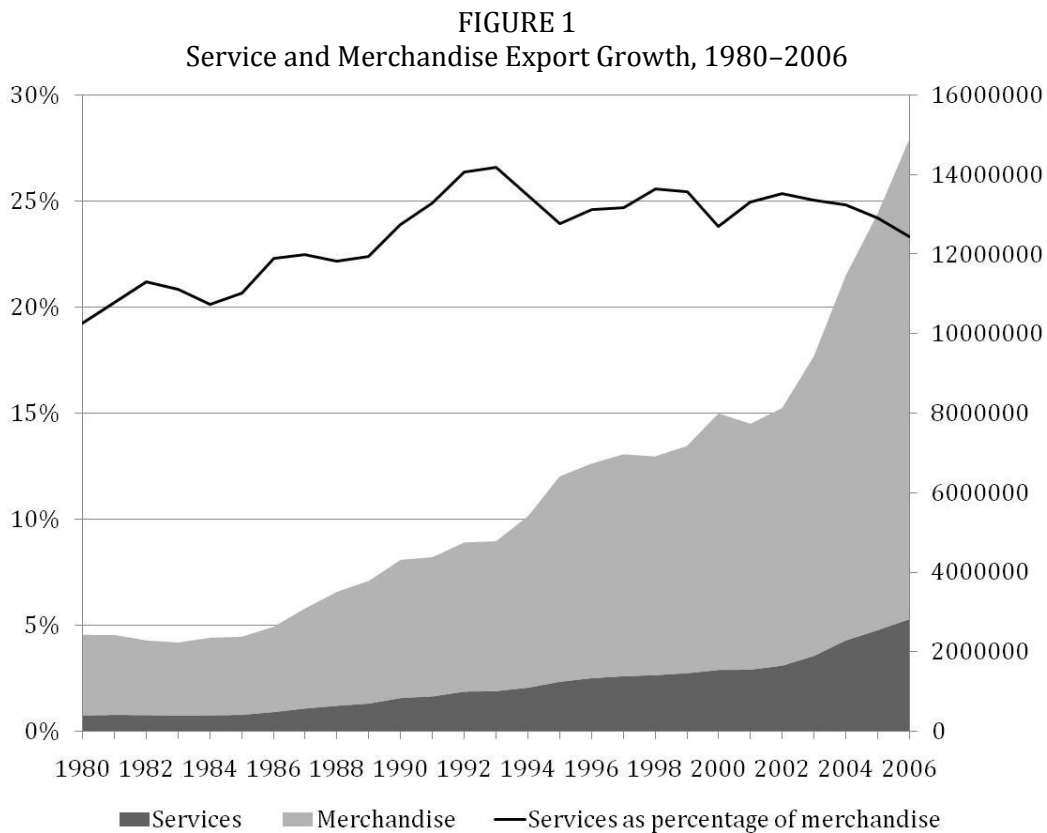
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1. INTRODUCTION

World service exports have grown at a rapid rate over the past few decades. Between 1980 and 2006, world service exports grew by 7.88% annually (UNCTAD, 2008). This rate has increased even more recently – between 2000 and 2006 – to 10.60% annually (UNCTAD, 2008).² Figure 1 shows the growth in world service and merchandise exports from 1980 to 2006. The dramatic growth in merchandise exports has, however, overshadowed the nevertheless impressive growth rates of service exports. In fact, service exports increased faster than merchandise exports until the early 1990s, after which growth was relatively similar, with merchandise reclaiming a bigger share towards the end of the sample period.



Source: UNCTAD (2008), own calculations.

² This resembles growth in merchandise exports. Between 1980 and 2006, merchandise exports maintained a growth rate of 7.09% annually, while, between 2000 and 2006, this increased to 10.98% annually.

However, while some countries have benefited from the surge in service exports, others have been left behind. Table 1 provides an overview of the growth in service exports across the globe. Asian countries have seen the highest growth in service exports since 1980, at 10.28% annually throughout the period. Since 2000, African countries have exhibited remarkably high growth rates in service exports, an annual rate of 12.84% over six years. Although such growth is from a small base, it is in sharp contrast to the modest growth rates of the preceding two decades.

TABLE 1
Service Exports by Region of Origin, various time periods

	1980- 2006	1992- 2006	2000- 2006
- Developing economies: Africa	6.46	7.59	12.84
- Developing economies: America	6.57	7.17	7.62
- Developing economies: Asia	10.28	10.71	12.73
- Developing economies: Oceania	6.27	3.19	7.31
- Developed economies: America	8.67	6.57	6.05
- Developed economies: Asia	7.10	6.73	8.37
- Developed economies: Europe	7.17	7.16	11.71
- Developed economies: Oceania	8.53	8.05	9.08
- Economies in transition: Asia	-	24.48	17.31
- Economies in transition: Europe	-	12.89	20.24

Source: UNCTAD (2008), own calculations.

Service exports consist of a diverse range of items. The fifth edition of the International Monetary Fund Balance of Payments Manual proposes that service trade statistics be collected for 11 sectors: transportation; travel; communication services; construction services; insurance services; financial services; computer and information services; royalties and licence fees; other business services³; personal, cultural and recreational services; and government services (WTO, 2006, p. 10). Table 2 shows the breakdown of service exports by type. Transport, travel and other business services cover more than 75% of total service exports. These categories are also the most reported per country (146 countries for transport, 147 for travel and

³ The category 'other business services' includes merchanting and other trade-related services, operational leasing services, and miscellaneous business, professional and technical services (UNCTAD, 2008).

136 for other business services), and therefore reveal the most reliable comparative advantage figures (see later). Fewer countries report complete disaggregated data over all categories; only 88 countries reported construction service exports. While this may influence the results, the countries excluded are of relatively moderate size compared to the leading industrial nations, and would therefore have little significance on the comparative advantage as calculated for the other countries.

TABLE 2
Size of Service Exports by Sector, 2005

Service sector	Obs	Exports (US\$)	% of exports	Country average (US\$)	% of country average
Transport	146	561980.2	23%	3849.179	21%
Travel	147	675373.6	28%	4594.378	24%
Communications	127	57439.2	2%	452.2772	2%
Construction	88	49485.8	2%	562.3386	3%
Insurance	130	49733.8	2%	382.5677	2%
Financial services	105	163505.4	7%	1557.194	8%
Computer and information	101	108259.1	4%	1071.872	6%
Royalties and licence fees	91	129057.1	5%	1418.21	8%
Other business services	136	619259.9	25%	4553.382	24%
Personal, cultural and recreational	91	29641.3	1%	325.7286	2%
Total services		2443735		18767.13	

Source: UNCTAD (2008), own calculations.

This paper provides a snapshot of the 2005 country rankings of service exporters using three measures of the Balassa index to reveal comparative advantage. This builds on the broad literature of revealed comparative advantage (RCA) in service exports (Hindley and Smith, 1984; Lall, 1986; Gray, 1989; Langhammer, 2002; and Banga, 2005). Previous quantitative work on service exports is, however, restricted mostly to developed countries as a result of data constraints.⁴ More recently, however, Seyoum (2007) has analysed RCA in developing countries, aggregating the analysis into four service categories.

This paper extends the existing literature, firstly, by including 147 countries for which data is available into the calculations. This allows for a much broader understanding of comparative advantage in the services sector in especially

⁴ Langhammer (2002) is the notable exception.

developing and emerging market economies. Secondly, the paper covers ten service sectors, which for the first time enables countries to assess their unique strengths and weaknesses relative to world markets. Thirdly, with reference to the three types of RCA, the research allows for a more nuanced understanding of the role each service export plays in the economy.

The paper proceeds as follows: Section 2 discusses the measurement of RCA; Section 3 reports the ranking tables for countries with a GDP above \$100 billion in 2005 and provides a brief overview of the performance of G8 and O5 countries; and Section 4 offers conclusions.

2. REVEALED COMPARATIVE ADVANTAGE (RCA)

The theory of comparative advantage is derived from David Ricardo's insight into the fact that trade benefits countries that specialise in the production of goods and services with the lowest opportunity costs. Empirically, comparative advantage is revealed through the Balassa index (Balassa, 1965).⁵

$$RCA_{ij} = \frac{X_{ij} / \sum_i X_{ij}}{\sum_j X_{ij} / \sum_i \sum_j X_{ij}}, \quad (1)$$

where X_{ij} represents exports of sector i from country j . The numerator represents the percentage share of a given service sector in national exports. The denominator represents the percentage share of a given service sector in world exports. When RCA_{ij} is above 1, country i 's competitiveness in product j is greater than its average competitiveness, in other words country i 's comparative advantage is revealed. Where RCA is between 1 and 2, the country has a weak comparative advantage, where RCA is between 2 and 3, the country has a strong comparative advantage and, where RCA is above 3, the country has a very strong comparative advantage.

This paper distinguishes between three RCA measures. The three measures are calculated using equation (1); however, the difference lies in the summation of the different sectors ($\sum_i X_{ij}$). RCA1 totals sector i over all service exports, RCA2 – the standard measure of RCA – totals sector i over all trade exports (merchandise and services), while RCA3 totals sector i over gross domestic product (GDP). Interpreting a country's comparative advantage depends on all three measures. China, for example, reports a comparative advantage in travel services, construction services and other business services when RCA1 is used as the measure. However, because of the size of China's merchandise trade, these RCAs are diminished when service exports are weighted by total trade – even more so when GDP is used. A careful reading of the results is therefore required.

Data were obtained from the United Nations Conference on Trade and

⁵ Various alternative measures have been proposed in literature (Baldwin, 1971; Bowen, 1983, Vollrath, 1991; and Laursen 1998). However, the Balassa index remains the most popular (Cai and Leung, 2008).

Development (UNCTAD) 2007 Handbook of Statistics (UNCTAD, 2008). All 11 categories are reported in the UNCTAD data for 186 unique countries and territories from 1980 to 2006. Government services are excluded from this analysis, as they are usually considered non-tradable. The snapshot view is taken for 2005, as most countries reported data for that year.

3. RESULTS

Table 3 lists the countries for which results are reported (all with a GDP larger than \$100 billion in 2005), their international ISO 3166-1 alpha-3 code and their GDP in 2005. The ranking results for the RCA1 of each sector are provided in Table 3. Table 4 reports RCA2 results, while Table 5 reports RCA3 results. The full ranking results of countries are available in the appendix. Due to data constraints, several countries are excluded in each sector. These are reported below each table.

TABLE 3
Country List, Code and GDP

Country	Code	GDP in million US\$, 2005
Algeria	DZA	102334
Argentina	ARG	183196
Australia	AUS	737677
Austria	AUT	304809
Belgium	BEL	370815
Brazil	BRA	795925
Canada	CAN	1131764
Chile	CHL	118908
China	CHN	2278419
China, Hong Kong SAR	HKG	177783
China, Taiwan Province of	TWN	346405
Colombia	COL	123120
Czech Republic	CZE	123981
Denmark	DNK	259140
Egypt	EGY	101382
Finland	FIN	195713
France	FRA	2127674
Germany	DEU	2786897

Greece	GRC	283734
Hungary	HUN	110364
India	IND	808884
Indonesia	IDN	281276
Iran, Islamic Republic of	IRN	192020
Ireland	IRL	200422
Israel	ISR	129753
Italy	ITA	1762473
Japan	JPN	4559020
Malaysia	MYS	130770
Mexico	MEX	767970
Netherlands	NLD	628819
New Zealand	NZL	109757
Nigeria	NGA	113461
Norway	NOR	295513
Pakistan	PAK	129600
Poland	POL	302641
Portugal	PRT	183787
Republic of Korea	KOR	787627
Russian Federation	RUS	764382
Saudi Arabia	SAU	309772
Singapore	SGP	116704
South Africa	ZAF	242046
Spain	ESP	1126020
Sweden	SWE	357356
Switzerland	CHE	369387
Thailand	THA	176222
Turkey	TUR	362614
UAE	ARE	133583
UK and Northern Ireland	GBR	2226298
USA	USA	12484364
Venezuela, Bolivarian Republic of	VEN	143625

Table 4 reports the ranking of countries by RCA1 where local service exports are weighted against total international service exports. RCA1 therefore illustrates in which service sector a country has a comparative advantage compared to other countries' service exports. This reveals which service sectors are important in individual countries, even when services have a smaller role to play in the total export composition. Table 4 reports the ranking of countries where service exports

are weighted against total exports (merchandise and services). RCA2 is the standard RCA measure and is also used in country analysis. A country with relatively large resource or merchandise exports, such as China, therefore loses ground in the RCA2 ranking. This analysis, however, takes into account the importance of all exports in total economic activity. Table 5 reports the RCA3 ranking of countries where service exports are weighted against GDP. This ranking provides an indication of the relative importance of the service export for the entire economy. Relatively closed economies, by default, score poorly by this measure.

TABLE 4
RCA1 of Countries with GDP > \$100 billion, 2005

Rank	Transport	Travel	Communi- cations	Construction	Insurance	Financial services	Computer and infor- mation services	Royalties and licence fees	Other business services	Personal, cultural and re- creational services										
1	DNK	2.76	MEX	2.72	COL	3.57	RUS	4.49	IRL	7.26	CHE	3.39	IND	9.14	JPN	3.12	SAU	4.06	HUN	8.41
2	CHL	2.72	TUR	2.53	IDN	3.38	JPN	3.33	MEX	4.85	GBR	3.12	IRL	7.58	USA	3.01	NGA	3.32	MYS	6.76
3	KOR	2.36	ZAF	2.44	PAK	3.38	POL	2.68	CHE	4.83	IRL	1.55	ISR	6.00	SWE	1.58	FIN	2.01	TUR	3.43
4	NOR	2.35	NZL	2.18	VEN	2.71	DEU	2.56	CAN	2.93	HKG	1.52	FIN	2.06	FIN	1.38	TWN	1.88	CAN	3.19
5	GRC	2.28	AUS	2.02	NLD	2.05	MYS	2.10	AUT	1.78	USA	1.24	CAN	1.65	GBR	1.28	BRA	1.69	ARG	2.29
6	RUS	1.63	PRT	1.88	BEL	1.72	IDN	1.90	CHL	1.14	SGP	1.11	SWE	1.45	HUN	1.27	SGP	1.66	MEX	1.96
7	SGP	1.56	ESP	1.88	CAN	1.72	CHN	1.77	SGP	1.10	BEL	0.93	GBR	1.24	FRA	1.02	HKG	1.55	NZL	1.73
8	POL	1.50	VEN	1.78	PRT	1.65	NLD	1.74	USA	1.02	TWN	0.90	DEU	1.23	CAN	1.00	AUT	1.54	GBR	1.65
9	JPN	1.45	THA	1.77	IND	1.55	EGY	1.74	SWE	1.02	ZAF	0.74	CZE	1.16	NLD	0.94	NLD	1.52	USA	1.55
10	EGY	1.45	EGY	1.74	MEX	1.48	BEL	1.73	ITA	0.91	JPN	0.70	BEL	1.10	DEU	0.87	SWE	1.47	FRA	1.54
11	HKG	1.42	COL	1.70	SWE	1.47	FIN	1.71	AUS	0.86	DEU	0.64	NLD	1.08	KOR	0.82	ITA	1.28	COL	1.32
12	VEN	1.31	MYS	1.68	NZL	1.44	TUR	1.68	IND	0.84	KOR	0.56	ESP	0.88	DNK	0.69	CHN	1.27	AUS	1.19
13	COL	1.31	ARG	1.59	ARG	1.44	FRA	1.55	BEL	0.75	CZE	0.55	ARG	0.84	ISR	0.64	BEL	1.26	PRT	1.15
14	PAK	1.31	CZE	1.47	GBR	1.43	ITA	1.26	MYS	0.72	SWE	0.53	NOR	0.71	BEL	0.47	CHE	1.23	NOR	1.01
15	CZE	1.22	ITA	1.47	CZE	1.42	PRT	1.22	GBR	0.72	BRA	0.48	HUN	0.69	IDN	0.40	ISR	1.23	ESP	0.96
16	NLD	1.20	CHN	1.46	MYS	1.37	ISR	1.01	TWN	0.71	ESP	0.46	AUS	0.66	NOR	0.35	DEU	1.22	NLD	0.95
17	BEL	1.11	GRC	1.46	FRA	1.28	CZE	0.99	THA	0.70	AUT	0.45	CHN	0.57	AUS	0.35	GBR	1.15	ZAF	0.86
18	DEU	1.09	POL	1.44	HUN	1.16	AUT	0.93	DEU	0.68	CAN	0.44	DNK	0.56	IRL	0.25	IRL	1.10	CHL	0.84
19	FRA	1.06	FRA	1.38	RUS	1.15	IND	0.92	RUS	0.65	IDN	0.44	NZL	0.54	ITA	0.25	IND	1.06	BEL	0.77
20	THA	1.03	IDN	1.30	EGY	1.08	ESP	0.89	TUR	0.61	IND	0.40	MYS	0.52	NZL	0.22	CAN	1.06	ITA	0.72
21	TWN	1.03	HUN	1.24	ITA	1.07	SWE	0.78	NOR	0.59	NOR	0.38	USA	0.45	SGP	0.21	HUN	1.03	CZE	0.65

22	IDN	0.98	AUT	1.08	CHE	1.07	HUN	0.68	ZAF	0.56	AUS	0.38	RUS	0.39	RUS	0.20	THA	1.01	RUS	0.64
23	PRT	0.94	USA	0.99	FIN	1.01	THA	0.64	FRA	0.48	RUS	0.24	PAK	0.37	EGY	0.18	JPN	1.00	DEU	0.63
24	ISR	0.94	CAN	0.93	DEU	0.95	SGP	0.56	PAK	0.44	ITA	0.21	FRA	0.33	TWN	0.18	ARG	0.98	IRL	0.58
25	CHN	0.93	BRA	0.89	ZAF	0.90	USA	0.51	ESP	0.43	PRT	0.21	POL	0.28	ARG	0.15	NOR	0.95	AUT	0.56
26	MYS	0.93	RUS	0.87	AUS	0.88	NOR	0.44	BRA	0.42	POL	0.21	IDN	0.26	CHL	0.15	IDN	0.90	DNK	0.54
27	SWE	0.91	CHE	0.87	POL	0.83	GRC	0.43	JPN	0.40	TUR	0.20	CHL	0.25	BRA	0.12	FRA	0.89	KOR	0.50
28	ARG	0.90	TWN	0.72	AUT	0.82	ARG	0.36	GRC	0.39	PAK	0.20	JPN	0.24	ESP	0.12	RUS	0.86	POL	0.49
29	AUS	0.89	DEU	0.69	DNK	0.74	NZL	0.33	CHN	0.37	HUN	0.19	PRT	0.23	MEX	0.08	KOR	0.85	EGY	0.48
30	BRA	0.88	BEL	0.65	ESP	0.68	GBR	0.28	PRT	0.34	FRA	0.19	ZAF	0.23	PAK	0.08	USA	0.79	SWE	0.44
31	AUT	0.88	SWE	0.64	TUR	0.68	HKG	0.25	HKG	0.33	COL	0.18	SGP	0.22	ZAF	0.08	ESP	0.77	GRC	0.41
32	NZL	0.88	ISR	0.61	BRA	0.65	PAK	0.25	NLD	0.28	NLD	0.17	COL	0.18	PRT	0.08	CZE	0.72	IDN	0.37
33	TUR	0.80	HKG	0.60	HKG	0.65	TWN	0.24	DNK	0.25	NZL	0.16	AUT	0.18	HKG	0.07	POL	0.66	HKG	0.36
34	CAN	0.78	CHL	0.59	USA	0.63	DNK	0.24	POL	0.21	EGY	0.14	ITA	0.17	POL	0.07	PRT	0.66	SGP	0.32
35	NGA	0.78	GBR	0.54	CHL	0.59	CAN	0.17	EGY	0.20	CHL	0.07	VEN	0.14	COL	0.07	DNK	0.61	VEN	0.31
36	ESP	0.76	IND	0.50	NOR	0.56	ZAF	0.16	KOR	0.19	FIN	0.07	BRA	0.13	CZE	0.06	CHL	0.61	BRA	0.29
37	ITA	0.74	NLD	0.48	THA	0.56	AUS	0.15	FIN	0.18	DNK	0.05	GRC	0.12	AUT	0.06	MYS	0.57	IND	0.22
38	USA	0.72	KOR	0.48	TWN	0.54	KOR	0.12	NZL	0.17	GRC	0.05	HKG	0.10	IND	0.05	AUS	0.45	TWN	0.20
39	GBR	0.70	FIN	0.48	GRC	0.51	BRA	0.03	NGA	0.10	MYS	0.05	TWN	0.09	CHN	0.04	EGY	0.43	CHN	0.15
40	HUN	0.69	DNK	0.45	KOR	0.43			IDN	0.06	CHN	0.03	EGY	0.04	GRC	0.03	COL	0.41	JPN	0.07
41	FIN	0.64	NOR	0.42	ISR	0.40			ISR	0.05	ARG	0.01	KOR	0.03	MYS	0.03	NZL	0.39	FIN	0.06
42	ZAF	0.61	JPN	0.42	IRL	0.39			CZE	0.04				THA	0.02	PAK	0.36	PAK	0.05	
43	MEX	0.49	SGP	0.42	CHN	0.29			VEN	0.04						VEN	0.35	CHE	0.01	
44	IND	0.46	IRL	0.30	JPN	0.16			HUN	0.03						ZAF	0.30			
45	CHE	0.41	PAK	0.18												GRC	0.21			
46	IRL	0.20	NGA	0.02												TUR	0.05			

TABLE 5
RCA2 of Countries with GDP > \$100 billion, 2005

Rank	Transport	Travel	Commu- nications	Con-struction	Insurance	Financial services	Computer and information	Royalties and licences fees	Other business services	Personal, cultural and recreational										
1	GRC	7.58	EGY	5.05	PAK	3.16	EGY	5.06	IRL	12.86	GBR	5.52	IND	16.50	USA	4.49	AUT	2.32	HUN	7.21
2	DNK	4.71	GRC	4.86	EGY	3.14	JPN	2.61	CHE	6.59	CHE	4.63	IRL	13.43	JPN	2.44	FIN	2.06	TUR	4.65
3	EGY	4.20	TUR	3.44	IND	2.79	TUR	2.28	AUT	2.69	IRL	2.74	ISR	8.75	GBR	2.27	GBR	2.04	MYS	4.14
4	NOR	2.63	ESP	3.10	GBR	2.53	RUS	2.09	CAN	1.96	USA	1.85	GBR	2.20	SWE	1.96	IRL	1.95	GBR	2.92
5	CHL	1.98	NZL	3.03	PRT	2.35	POL	2.07	MEX	1.71	HKG	1.38	FIN	2.12	FIN	1.42	IND	1.92	NZL	2.40
6	KOR	1.62	PRT	2.68	IDN	2.21	DEU	1.79	USA	1.53	SGP	1.01	SWE	1.81	DNK	1.18	SWE	1.83	USA	2.32
7	SGP	1.43	AUS	2.30	COL	2.00	FIN	1.75	IND	1.52	ESP	0.75	ESP	1.46	HUN	1.09	ISR	1.79	CAN	2.14
8	ISR	1.37	ZAF	2.18	NZL	2.00	PRT	1.74	GRC	1.31	IND	0.73	CAN	1.10	FRA	1.04	CHE	1.68	PRT	1.64
9	PRT	1.35	AUT	1.62	SWE	1.82	IND	1.66	GBR	1.27	AUT	0.68	DNK	0.96	ISR	0.93	SGP	1.52	ESP	1.59
10	AUT	1.33	USA	1.48	GRC	1.70	FRA	1.58	SWE	1.27	BEL	0.67	NLD	0.89	NLD	0.78	HKG	1.40	FRA	1.57
11	HKG	1.29	ITA	1.42	NLD	1.69	ESP	1.48	SGP	1.01	ZAF	0.66	DEU	0.86	CAN	0.67	NGA	1.32	ARG	1.57
12	ESP	1.26	FRA	1.41	CHE	1.47	ISR	1.47	AUS	0.98	SWE	0.65	NOR	0.80	DEU	0.61	ESP	1.27	EGY	1.39
13	GBR	1.25	THA	1.37	FRA	1.31	NLD	1.44	ITA	0.88	JPN	0.55	BEL	0.79	KOR	0.57	NLD	1.25	GRC	1.38
14	PAK	1.22	CHE	1.19	DNK	1.26	GRC	1.43	TUR	0.83	TWN	0.52	CZE	0.76	EGY	0.52	EGY	1.24	AUS	1.36
15	NZL	1.22	POL	1.11	AUT	1.24	AUT	1.40	CHL	0.83	DEU	0.45	AUS	0.75	IRL	0.44	ITA	1.24	NOR	1.14
16	POL	1.16	ARG	1.09	BEL	1.24	MYS	1.29	ESP	0.71	NOR	0.43	NZL	0.74	AUS	0.39	USA	1.18	IRL	1.04
17	JPN	1.14	HUN	1.06	CAN	1.15	IDN	1.24	NOR	0.66	AUS	0.43	USA	0.67	NOR	0.39	TWN	1.09	DNK	0.92
18	SWE	1.13	MYS	1.03	ESP	1.13	BEL	1.24	EGY	0.58	EGY	0.42	HUN	0.59	BEL	0.34	NOR	1.07	AUT	0.84
19	TUR	1.09	CZE	0.97	ITA	1.04	ITA	1.22	THA	0.54	KOR	0.39	ARG	0.57	NZL	0.30	DNK	1.05	NLD	0.79
20	FRA	1.08	GBR	0.96	FIN	1.04	SWE	0.97	BEL	0.54	CZE	0.36	GRC	0.39	IDN	0.26	BRA	1.02	ZAF	0.77
21	USA	1.08	MEX	0.96	AUS	1.00	CHN	0.79	ZAF	0.50	PRT	0.31	PAK	0.35	ITA	0.24	PRT	0.94	COL	0.74
22	AUS	1.01	COL	0.95	HUN	1.00	USA	0.76	FRA	0.49	CAN	0.30	FRA	0.34	ESP	0.19	FRA	0.91	ITA	0.70

23	NLD	0.99	IND	0.90	ARG	0.99	CZE	0.65	PRT	0.48	BRA	0.29	PRT	0.33	SGP	0.19	BEL	0.90	MEX	0.69	
24	IND	0.83	ISR	0.88	USA	0.94	HUN	0.59	DEU	0.47	IDN	0.29	MYS	0.32	GRC	0.11	HUN	0.88	CHL	0.61	
25	CZE	0.80	IDN	0.85	CZE	0.93	SGP	0.51	MYS	0.44	TUR	0.27	AUT	0.27	PRT	0.11	DEU	0.85	BEL	0.55	
26	THA	0.80	SWE	0.79	TUR	0.92	THA	0.50	DNK	0.43	NZL	0.22	CHN	0.26	CHL	0.11	JPN	0.79	SWE	0.54	
27	BEL	0.80	DNK	0.76	MYS	0.84	NOR	0.49	TWN	0.41	ITA	0.21	POL	0.22	ARG	0.10	THA	0.78	DEU	0.44	
28	RUS	0.76	CHN	0.65	ZAF	0.81	GBR	0.49	PAK	0.41	FRA	0.19	ZAF	0.20	TWN	0.10	CAN	0.71	CZE	0.43	
29	DEU	0.76	CAN	0.62	IRL	0.70	NZL	0.46	JPN	0.31	PAK	0.18	SGP	0.20	AUT	0.10	GRC	0.69	IND	0.40	
30	COL	0.73	HKG	0.54	DEU	0.66	DNK	0.40	RUS	0.30	HUN	0.16	JPN	0.19	RUS	0.09	ARG	0.67	POL	0.38	
31	ITA	0.72	BRA	0.54	POL	0.64	ARG	0.25	HKG	0.30	GRC	0.16	RUS	0.18	IND	0.08	SAU	0.65	KOR	0.35	
32	FIN	0.66	IRL	0.53	NOR	0.63	PAK	0.23	BRA	0.25	POL	0.16	CHL	0.18	PAK	0.07	IDN	0.59	HKG	0.33	
33	IDN	0.64	FIN	0.49	ISR	0.59	HKG	0.23	NLD	0.24	NLD	0.14	IDN	0.17	BRA	0.07	KOR	0.58	SGP	0.30	
34	ARG	0.61	DEU	0.48	HKG	0.59	AUS	0.18	NZL	0.23	RUS	0.11	ITA	0.16	ZAF	0.07	CHN	0.57	RUS	0.30	
35	TWN	0.59	NOR	0.47	RUS	0.54	ZAF	0.14	FIN	0.19	COL	0.10	EGY	0.11	HKG	0.07	NZL	0.54	IDN	0.24	
36	HUN	0.59	BEL	0.47	MEX	0.52	TWN	0.14	CHN	0.17	DNK	0.09	COL	0.10	POL	0.06	AUS	0.51	BRA	0.18	
37	MYS	0.57	CHL	0.43	THA	0.43	CAN	0.11	POL	0.16	FIN	0.07	HKG	0.09	CZE	0.04	POL	0.51	TWN	0.12	
38	CHE	0.57	TWN	0.42	CHL	0.43	KOR	0.09	KOR	0.13	CHL	0.05	BRA	0.08	COL	0.04	CZE	0.48	CHN	0.07	
39	ZAF	0.55	RUS	0.41	BRA	0.39	BRA	0.02	ISR	0.07	MYS	0.03	TWN	0.05	MEX	0.03	CHL	0.45	FIN	0.06	
40	BRA	0.53	NLD	0.40	VEN	0.32			NGA	0.04	CHN	0.01	KOR	0.02	CHN	0.02	RUS	0.40	JPN	0.06	
41	CAN	0.52	SGP	0.38	TWN	0.31			IDN	0.04	ARG	0.01	VEN	0.02	MYS	0.02	MYS	0.35	PAK	0.04	
42	CHN	0.41	JPN	0.33	KOR	0.29			CZE	0.03					THA	0.01	PAK	0.34	VEN	0.04	
43	IRL	0.35	KOR	0.33	CHN	0.13			HUN	0.03							ZAF	0.27	CHE	0.01	
44	NGA	0.31	VEN	0.21	JPN	0.12			VEN	0.00							COL	0.23			
45	MEX	0.17	PAK	0.17														TUR	0.07		
46	VEN	0.16	NGA	0.01														VEN	0.04		

TABLE 6
RCA3 of Countries with GDP > \$100 billion, 2005

Rank	Transport	Travel	Commu- nications	Construc- tion	Insurance	Financial services	Computer and information	Royalties and licences fees	Other business services	Personal, cultural and recreational services										
1	SGP	12.60	MYS	4.62	NLD	4.81	MYS	5.78	IRL	39.86	HKG	10.03	IRL	41.65	SWE	3.48	SGP	13.38	MYS	18.59
2	HKG	9.38	EGY	4.62	BEL	4.77	BEL	4.79	CHE	11.31	SGP	8.93	ISR	14.87	HUN	2.70	HKG	10.19	HUN	17.94
3	DNK	8.60	HKG	3.96	HKG	4.26	EGY	4.62	SGP	8.92	IRL	8.49	IND	11.59	GBR	2.22	IRL	6.03	TUR	4.63
4	GRC	5.00	THA	3.71	MYS	3.78	SGP	4.52	AUT	5.78	CHE	7.95	FIN	3.29	FIN	2.20	AUT	4.99	IRL	3.21
5	NOR	4.28	AUT	3.49	SWE	3.24	NLD	4.08	CAN	2.63	GBR	5.39	SWE	3.21	NLD	2.20	NLD	3.55	CAN	2.87
6	EGY	3.84	TUR	3.42	EGY	2.87	AUT	3.01	SWE	2.25	BEL	2.58	BEL	3.04	DNK	2.16	BEL	3.49	GBR	2.85
7	BEL	3.07	SGP	3.36	IDN	2.85	FIN	2.73	HKG	2.16	AUT	1.47	NLD	2.52	USA	1.70	SWE	3.25	SGP	2.62
8	CHL	2.95	GRC	3.21	AUT	2.66	RUS	2.69	BEL	2.07	TWN	1.24	GBR	2.15	SGP	1.67	FIN	3.21	NZL	2.41
9	AUT	2.87	NZL	3.03	CHE	2.51	DEU	2.66	MYS	1.97	SWE	1.16	CZE	2.02	ISR	1.58	ISR	3.04	HKG	2.37
10	NLD	2.80	ESP	2.90	PRT	2.50	POL	2.64	MEX	1.87	CZE	0.97	DNK	1.76	JPN	1.38	CHE	2.89	NLD	2.23
11	MYS	2.55	PRT	2.85	HUN	2.48	ISR	2.50	THA	1.47	ESP	0.70	SGP	1.74	IRL	1.38	TWN	2.57	BEL	2.13
12	KOR	2.49	HUN	2.65	GBR	2.48	TUR	2.27	GBR	1.24	USA	0.70	HUN	1.48	BEL	1.30	NGA	2.24	NOR	1.85
13	ISR	2.33	CZE	2.57	CZE	2.47	PRT	1.85	CHL	1.23	NOR	0.70	CAN	1.48	FRA	1.04	HUN	2.20	AUT	1.81
14	THA	2.16	ZAF	2.07	DNK	2.31	CZE	1.73	NOR	1.07	DEU	0.66	MYS	1.42	CAN	0.90	THA	2.11	PRT	1.74
15	CZE	2.12	CHE	2.05	IRL	2.16	SWE	1.73	IND	1.07	ZAF	0.62	ESP	1.36	DEU	0.90	GBR	1.99	DNK	1.68
16	SWE	2.00	BEL	1.81	NZL	2.00	HKG	1.64	TWN	0.98	KOR	0.59	NOR	1.30	KOR	0.87	DNK	1.92	FRA	1.58
17	POL	1.48	IRL	1.63	IND	1.96	IDN	1.60	GRC	0.86	IND	0.51	DEU	1.27	NOR	0.63	NOR	1.74	ESP	1.48
18	HUN	1.47	AUS	1.56	PAK	1.76	FRA	1.59	ITA	0.85	HUN	0.41	NZL	0.74	HKG	0.49	MYS	1.58	ARG	1.47
19	PRT	1.43	ISR	1.50	FIN	1.61	JPN	1.48	TUR	0.83	NLD	0.41	HKG	0.63	EGY	0.48	SAU	1.42	EGY	1.27
20	TWN	1.40	POL	1.42	CAN	1.54	HUN	1.46	DNK	0.79	CAN	0.40	AUT	0.58	IDN	0.33	IND	1.35	CZE	1.13
21	NZL	1.22	SWE	1.41	COL	1.42	ESP	1.38	DEU	0.70	EGY	0.38	ARG	0.54	NZL	0.30	DEU	1.27	SWE	0.97
22	GBR	1.22	FRA	1.41	FRA	1.31	THA	1.35	NLD	0.67	IDN	0.37	AUS	0.51	AUS	0.27	CZE	1.26	AUS	0.92

23	ESP	1.18	DNK	1.40	THA	1.18	ITA	1.17	AUS	0.67	PRT	0.32	PRT	0.35	TWN	0.24	ITA	1.19	GRC	0.91
24	DEU	1.13	ITA	1.37	GRC	1.12	IND	1.16	ESP	0.66	JPN	0.31	CHN	0.34	ITA	0.23	ESP	1.18	CHL	0.91
25	FRA	1.09	NLD	1.13	ESP	1.05	CHN	1.06	USA	0.58	AUS	0.29	FRA	0.34	AUT	0.21	EGY	1.14	USA	0.88
26	TUR	1.09	IDN	1.10	NOR	1.03	GRC	0.94	EGY	0.53	TUR	0.27	POL	0.28	ESP	0.18	PRT	1.00	MEX	0.76
27	IRL	1.08	MEX	1.05	ITA	1.00	NOR	0.80	PRT	0.51	NZL	0.22	CHL	0.27	CHL	0.16	CAN	0.95	ZAF	0.73
28	FIN	1.02	ARG	1.02	ISR	1.00	DNK	0.73	FRA	0.49	POL	0.20	GRC	0.26	RUS	0.12	FRA	0.91	ITA	0.67
29	RUS	0.98	TWN	0.98	DEU	0.98	GBR	0.48	ZAF	0.48	ITA	0.20	USA	0.26	PRT	0.12	KOR	0.89	DEU	0.65
30	CHE	0.97	GBR	0.94	ARG	0.92	NZL	0.46	RUS	0.39	FRA	0.19	RUS	0.24	CZE	0.11	IDN	0.76	KOR	0.53
31	IDN	0.83	CHN	0.88	TUR	0.91	TWN	0.33	FIN	0.29	BRA	0.18	IDN	0.22	ARG	0.10	CHN	0.76	COL	0.52
32	CAN	0.70	CAN	0.83	POL	0.82	USA	0.29	NZL	0.23	DNK	0.16	PAK	0.19	GRC	0.08	CHL	0.66	POL	0.48
33	ITA	0.69	NOR	0.77	ZAF	0.77	ARG	0.23	PAK	0.23	RUS	0.14	ZAF	0.19	MYS	0.07	POL	0.65	RUS	0.38
34	AUS	0.69	FIN	0.76	TWN	0.74	CAN	0.15	CHN	0.22	MYS	0.13	ITA	0.15	POL	0.07	BRA	0.63	IDN	0.32
35	PAK	0.68	DEU	0.71	RUS	0.69	ZAF	0.13	POL	0.20	FIN	0.12	TWN	0.13	ZAF	0.07	ARG	0.63	IND	0.28
36	JPN	0.64	COL	0.68	AUS	0.68	KOR	0.13	KOR	0.20	GRC	0.11	JPN	0.11	IND	0.06	NZL	0.54	TWN	0.27
37	IND	0.58	CHL	0.64	CHL	0.64	PAK	0.13	JPN	0.18	PAK	0.10	EGY	0.10	BRA	0.05	RUS	0.52	BRA	0.11
38	ARG	0.57	IND	0.63	MEX	0.57	AUS	0.12	BRA	0.16	CHL	0.08	COL	0.07	PAK	0.04	GRC	0.46	FIN	0.10
39	CHN	0.56	USA	0.56	VEN	0.47	BRA	0.01	ISR	0.11	COL	0.07	BRA	0.05	THA	0.03	USA	0.45	CHN	0.09
40	NGA	0.53	RUS	0.52	KOR	0.45			CZE	0.08	CHN	0.02	KOR	0.03	MEX	0.03	JPN	0.45	VEN	0.05
41	ZAF	0.52	KOR	0.50	USA	0.36			NGA	0.07	ARG	0.01	VEN	0.02	COL	0.03	AUS	0.35	JPN	0.03
42	COL	0.52	BRA	0.33	BRA	0.24			HUN	0.06					CHN	0.02	ZAF	0.26	PAK	0.02
43	USA	0.41	VEN	0.31	CHN	0.17			IDN	0.05							PAK	0.19	CHE	0.02
44	BRA	0.33	JPN	0.19	JPN	0.07			VEN	0.01							COL	0.16		
45	VEN	0.23	PAK	0.10													TUR	0.07		
46	MEX	0.19	NGA	0.01													VEN	0.06		

a. Sectoral Analysis⁶

RCA2 is the standard measure used to interpret the results and is the default measure. When the two other RCA measures are referred to, this will be clearly indicated.

(i) Transport

Greece (7.58), Denmark (4.71), Egypt (4.20) and Norway (2.63) enjoy strong comparative advantage in transport service exports. Additionally, transport services (RCA1) are a relatively important component of service exports (RCA1) for Chile (2.72) and South Korea (2.36). Singapore (12.60), Hong Kong (9.38), Denmark (8.60), Greece (5.00), Norway (4.28) and Belgium (3.07) perform well where transport service exports are weighted against GDP (RCA3).

(ii) Travel

Egypt (5.05), Greece (4.86), Turkey (3.44), Spain (3.10), New Zealand (3.03), Portugal (2.68), Australia (2.30) and South Africa (2.18) all enjoy strong comparative advantage in travel service exports (RCA2). While travel service exports are an important service export in the case of Mexico (RCA1 = 2.72), the comparative advantage disappears when total exports are considered because service exports contribute relatively less to the economy than do merchandise exports. In terms of RCA3, travel service exports are a relatively important sector for Malaysia (4.62), Egypt (4.62), Hong Kong (3.96), Thailand (3.71), Austria (3.49), Turkey (3.42), Singapore (3.36), Greece (3.21) and New Zealand (3.03).

(iii) Communications

Pakistan (3.16) (note the caveats below), Egypt (3.14), India (2.79), the United Kingdom (UK) (2.53), Portugal (2.35), Indonesia (2.21), Colombia (2.00) and New Zealand (2.00) enjoy strong comparative advantage in communications. Communication exports are relatively important in terms of GDP (RCA3) for the Netherlands (4.81), Belgium (4.77), Hong Kong (4.26), Malaysia (3.78) and Sweden (3.24).

(iv) Construction

Egypt (5.06) has very strong comparative advantage in construction, although this is only one of a number of service sectors where Egypt enjoys strong RCA. Japan (2.61), Turkey (2.28), Russia (2.09) and Poland (2.07) also reveal strong comparative advantage, while construction (RCA1) is another important service export for Germany (2.56). In terms of RCA3, construction is a relatively important component for the economies of Malaysia (5.78), Belgium (4.79), Singapore (4.52), the Netherlands (4.08) and Austria (3.01).

(v) Insurance

Ireland (12.86) has very strong comparative advantage in insurance services, followed by Switzerland (6.59) and Austria (2.69). Within services exports (RCA1), insurance is also important for Mexico (4.85). Apart from Ireland (39.86) and Switzerland (11.31), insurance services are important for Singapore (8.92) and Austria (5.78) as well.

(vi) Financial Services

The UK (5.52) and Switzerland (4.63) reveal very strong comparative advantage in the export of financial services. Financial services furthermore form an important share of these

⁶ Countries discussed: RCA1, RCA2 > 2; RCA3 > 3

two countries' service exports. Ireland (2.74) also has strong comparative advantage in this sector. In terms of RCA3, Hong Kong (10.03) and Singapore (8.93) share the top two positions, followed by Ireland (8.49), Switzerland (7.95) and the UK (5.39).

(vii) Computer and Information

In computer and information services, India (16.50) reveals very strong RCA2, followed by Ireland (13.43), Israel (8.75), the UK (2.20) and Finland (2.12). In Ireland (41.65), Israel (14.87), India (11.59), Finland (3.29), Sweden (3.21) and Belgium (3.01), computer and information service exports are a relatively important component of the economy.

(viii) Royalties and Licence Fees

The United States of America (USA) (4.49) has very strong comparative advantage in the exports of royalties and licence fees. Japan (2.44) and the UK (2.27) also reveal strong comparative advantage in this sector. Royalties and licence fees (RCA1) are the sector where Japan (3.12) and the USA (3.01) have the highest comparative advantage in terms of service exports as well. When measured in terms of impact on the economy, royalties and licence fees are a relatively important component in Sweden (3.48).

(ix) Other Business Services

Other business services include a number of smaller service categories (see the footnote above). Austria (2.32), Finland (2.06) and the UK (2.04) reveal strong comparative advantage in this sector. In terms of service exports, other business services (RCA1) are important for Saudi Arabia (4.06) and Nigeria (3.32) (note the caveats below). Other business services also make a relatively large contribution to the GDP of Singapore (13.38), Hong Kong (10.19), Ireland (6.03), Austria (4.99), the Netherlands (3.55), Belgium (3.49), Sweden (3.25), Finland (3.21) and Israel (3.04).

(x) Personal, Cultural and Recreational Services

Hungary (7.21) reveals very strong comparative advantage in personal, cultural and recreational services, followed by Turkey (4.65), Malaysia (4.14), the UK (2.92), New Zealand (2.40), the USA (2.32) and Canada (2.14). Personal, cultural and recreational services are a relatively important component of GDP in Malaysia (18.59), Hungary (17.94), Turkey (4.63) and Ireland (3.21).

Some caveats must be pointed out. Data for some countries are not available across all sectors. This may lead to a higher ranking in those sectors for which data are available. This may be true of countries such as Mexico, Turkey, Pakistan and Nigeria, which rank high in some sectors. However, only four countries are excluded from the three sectors that constitute more than 70% of all service export lists: Algeria, Iran, Saudi Arabia and the United Arab Emirates (UAE).

b. Country Analysis

(i) G8

The G8 countries perform relatively well on the rankings of RCA service exports (RCA1). Canada reveals strong comparative advantage in personal, cultural and recreational services (2.14), with weak RCA in communications (1.15), insurance (1.96) and computer and information (1.10). France also reveals weak comparative advantage in a number of

sectors, including transport (1.08), travel (1.41), communications (1.31), construction (1.58), royalties and licence fees (1.04) and personal, cultural and recreational services (1.57). Germany and Russia are the two G8 countries with the least specialisation in service sector exports, both, however, having RCA in construction (1.79 and 2.09, respectively). Italy has weak comparative advantage in travel services (1.42), communications (1.04), construction (1.22) and other business services (1.24). Japan reveals strong comparative advantage in construction (2.61) and royalties and licence fees (2.44). It ranks second on the overall list in royalties and licence fees, below the USA, which reveals very strong comparative advantage in royalties and licence fees (4.49) (Mann, 2004; Co, 2007). The USA also has strong comparative advantage in personal, cultural and recreational services (2.32) but weak RCA in transport (1.08), travel (1.48), insurance (1.27), financial services (1.85) and other business services (1.18). The UK is decidedly a service export economy. It reveals comparative advantage in eight of the ten service sectors, six of them enjoying strong RCA. In financial services (5.52), the UK has very strong comparative advantage (Flier, Bosch et al., 2001; Svaleryd and Vlachos, 2005), with strong RCA in communications (2.53), computer and information (2.20), royalties and licence fees (2.27), other business services (2.04) and personal, cultural and recreational services (2.92). Weak comparative advantage is found for transport services (1.25) and insurance (1.27).

(ii) 05

The leading developing countries are not as specialised as the G8 countries in services exports. China currently has no advantage, as measured by RCA2, while construction (1.06) seems relatively important for the economy but only weakly so. If China were to promote the development of service exports, then travel services, construction and other business services may be the sectors to target. Brazil and Mexico have weak comparative advantage in other business services and insurance, respectively. South Africa reveals strong comparative advantage in travel service exports (2.18) (Fourie, 2008). India, however, is the only 05 country with top ranking in a service sector. In line with the literature, India is remarkably specialised in computer and information services, with RCA2 of 16.5 (D'Costa, 2003; Gordon and Gupta, 2004; Kapur and Ramamurti, 2005; Tharakan, Van Beveren et al., 2005; Meyer, 2007). Furthermore, India also has strong RCA in communication service exports (2.79) but has weak RCA in construction (1.66), insurance (1.52) and other business services (1.92).

4. CONCLUSIONS

This paper ranks the revealed comparative advantage of 10 service export sectors across 147 countries. The rankings help to identify which countries are competitive in the export of certain services. A number of winners are identified: Greece, Denmark and Egypt in transport services; Egypt, Greece, Turkey, Spain and New Zealand in travel services; Pakistan and Egypt in communication services; Egypt in construction services; Ireland and Switzerland in insurance services; the UK and Switzerland in financial services; India, Ireland and Israel in computer and information services; the USA in royalties and licence fees; and Hungary, Turkey and Malaysia in personal, cultural and recreational services.⁷ Service exports tend to be more important for the economies of very small countries (by land area), such as Hong Kong (Leung, Chow et al., 2008) and Singapore. Caveats exist in dealings with the data, as some countries are not included in all service categories, which may inflate their RCA score on some of the other rankings.

⁷ Countries with very strong comparative advantage in RCA2 are mentioned here.

The G8 and O5 countries are individually assessed. Most of the G8 countries perform well in one or two service sectors, with the exception of the UK (which reveals strong comparative advantage in six of the ten service sectors). The O5 countries perform relatively poorly. China reveals little comparative advantage in service exports and Brazil and Mexico feature only in one sector each. South Africa reveals strong comparative advantage in travel service exports. India, however, is remarkably specialised in computer and information services, with RCA2 of 16.50.

These results can help countries to identify service sectors in which they have comparative advantage and enable them to plan trade and industrial policy accordingly. Given the importance of service exports for economic growth (Mattoo and Hoekman, 2008), such policies can have important implications for a country's growth and development trajectory.

5. REFERENCES

- Balassa, B. (1965), 'Trade Liberalization and "Revealed" Comparative Advantage', *The Manchester School of Economic and Social Studies*, **32**, 99–123.
- Baldwin, E. R. (1971), 'Determinants of the Commodity Structure of US Trade', *American Economic Review*, **61**, 126–46.
- Banga, R. (2005), 'Trade in Services: A Review', *Global Economy Journal*, **5**, 2, 1–22.
- Bowen, H. (1983), 'On the Theoretical Interpretation of Indices of Trade Intensity and Revealed Comparative Advantage', *Weltwirtschaftliches Archiv*, **119**, 464–72.
- Cai, J. and P. Leung (2008), 'Towards a More General Measure of Revealed Comparative Advantage Variation', *Applied Economics Letters*, **15**, 723–6.
- Co, C. Y. (2007), 'US Exports of Knowledge-intensive Services and Importing-country Characteristics', *Review of International Economics*, **15**, 5, 890–904.
- D'Costa, A. P. (2003), 'Uneven and Combined Development: Understanding India's Software Exports', *World Development*, **31**, 1, 211–26.
- Flier, B., F. A. J. v. d. Bosch et al. (2001), 'The Changing Landscape of the European Financial Services Sector', *Long Range Planning*, **34**, 179–207.
- Fourie, J. (2008), 'The Development and Importance of Travel Services Exports in South Africa', *Mimeo* (Stellenbosch: Stellenbosch University).
- Gordon, J. and P. Gupta (2004), 'Understanding India's Services Revolution', IMF Working Papers WP/04/171 (September).
- Gray, P. (1989), 'Services and Comparative Advantage Theory', *Services in World Economic Growth: Symposium 1988*, H. Giersch (Tubingen, Westview Press), 85–103.
- Hindley, B. and A. Smith (1984), 'Comparative Advantage and Trade in Services', *World Economy*, **7**, 4, 369–89.
- Kapur, D. and R. Ramamurti (2005), 'India's Emerging Competitive Advantage in Services', in H. Davis, S. Chatterjee and M. Heuer, *Management in India: Trends and Transition* (Thousand Oaks, CA: SAGE).
- Lall, S. (1986), 'The Third World and Comparative Advantage in Trade Services', in S. Lall and F. Stewart, *Theory and Reality in Development Essays in Honour of Paul Streeten* (New York: St Martin's Press), 122–38.
- Langhammer, R. (2002), 'Developing Countries as Exporters of Services: What Trade Statistics Suggest', *Journal of Economic Integration*, **17**, 2, 297–310.
- Laursen, K. (1998), 'Revealed Comparative Advantage and the Alternatives as Measures of International Specialisation', DRUID Working Paper No. 98–30 (Copenhagen: Danish Research Unit for Industrial Dynamics).
- Leung, F., K. Chow et al. (2008), 'Service Exports: The Next Engine of Growth for Hong Kong?', Working Papers No. 804 (Hong Kong: Hong Kong Monetary Authority).
- Mann, C. L. (2004), 'The US Current Account, New Economy Services, and Implications for Sustainability', *Review of International Economics*, **12**, 2, 262–76.
- Mattoo, A. and B. Hoekman (2008), 'Services Trade and Growth', Policy Research Working Paper Series No. 4461 (New York: The World Bank).
- Meyer, T. (2007), 'India's Specialisation in IT Exports: Offshoring Can't Defy Gravity', Research Notes (Frankfurt: Deutsche Bank Research).
- Seyoum, B. (2007), 'Revealed Comparative Advantage and Competitiveness in Services', *Journal of Economic Studies*, **34**, 5, 376–88.
- Svaleryd, H. and J. Vlachos (2005), 'Financial Markets, the Pattern of Industrial Specialization and Comparative Advantage: Evidence from OECD Countries', *European Economic Review*, **49**, 1, 113–44.
- Tharakan, P. K. M., I. van Beveren et al. (2005), 'Determinants of India's Software Exports

- and Goods Exports', *The Review of Economics and Statistics*, **87**, 4, 776–80.
- UNCTAD (2008), *Handbook of Statistics 2007* (Geneva: United Nations).
- Vollrath, T. (1991), 'A Theoretical Evaluation of Alternative Trade Intensity Measures of Revealed Comparative Advantage', *Weltwirtschaftliches Archiv*, **127**, 265–80.
- WTO (2006), *Measuring Trade in Services* (Geneva: WTO).

TABLE 7
RCA1 of G8 and O5 Countries, 2005

RCA1	CAN	FRA	DEU	ITA	JPN	RUS	GBR	USA	BRA	CHN	IND	MEX	ZAF
Transport	0.78	1.06	0.64	0.21	1.45	1.63	0.70	0.72	0.88	0.93	0.46	0.49	0.61
Travel	0.93	1.38	0.69	1.47	0.42	0.87	0.54	0.99	0.89	1.46	0.50	2.72	2.44
Communications	1.72	1.28	0.95	1.07	0.16	1.15	1.43	0.63	0.65	0.29	1.55	1.48	0.90
Construction	0.17	1.55	2.56	1.26	3.33	4.49	0.28	0.51	0.03	1.77	0.92		0.16
Insurance	2.93	0.48	0.68	0.91	0.40	0.65	0.72	1.02	0.42	0.37	0.84	4.85	0.56
Financial services	0.44	0.19	0.64	0.21	0.70	0.24	3.12	1.24	0.48	0.03	0.40		0.74
Computer and information	1.65	0.33	1.23	0.17	0.24	0.39	1.24	0.45	0.13	0.57	9.14		0.23
Royalties and licence fees	1.00	1.02	0.87	0.25	3.12	0.20	1.28	3.01	0.12	0.04	0.05	0.08	0.08
Other business services	1.06	0.89	1.22	1.28	1.00	0.86	1.15	0.79	1.69	1.27	1.06		0.30
Personal, cultural and recreational	3.19	1.54	0.63	0.72	0.07	0.64	1.65	1.55	0.29	0.15	0.22	1.96	0.86

TABLE 8
RCA2 of G8 and O5 Countries, 2005

RCA2	CAN	FRA	DEU	ITA	JPN	RUS	GBR	USA	BRA	CHN	IND	MEX	ZAF
Transport	0.52	1.08	0.76	0.72	1.14	0.76	1.25	1.08	0.53	0.41	0.83	0.17	0.55
Travel	0.62	1.41	0.48	1.42	0.33	0.41	0.96	1.48	0.54	0.65	0.90	0.96	2.18
Communications	1.15	1.31	0.66	1.04	0.12	0.54	2.53	0.94	0.39	0.13	2.79	0.52	0.81
Construction	0.11	1.58	1.79	1.22	2.61	2.09	0.49	0.76	0.02	0.79	1.66		0.14
Insurance	1.96	0.49	0.47	0.88	0.31	0.30	1.27	1.53	0.25	0.17	1.52	1.71	0.50
Financial services	0.30	0.19	0.45	0.21	0.55	0.11	5.52	1.85	0.29	0.01	0.73		0.66
Computer and information	1.10	0.34	0.86	0.16	0.19	0.18	2.20	0.67	0.08	0.26	16.50		0.20
Royalties and licence fees	0.67	1.04	0.61	0.24	2.44	0.09	2.27	4.49	0.07	0.02	0.08	0.03	0.07
Other business services	0.71	0.91	0.85	1.24	0.79	0.40	2.04	1.18	1.02	0.57	1.92		0.27
Personal, cultural and recreational	2.14	1.57	0.44	0.70	0.06	0.30	2.92	2.32	0.18	0.07	0.40	0.69	0.77

TABLE 9
RCA3 of G8 and O5 Countries, 2005

RCA3	CAN	FRA	DEU	ITA	JPN	RUS	GBR	USA	BRA	CHN	IND	MEX	ZAF
Transport	0.70	1.09	1.13	0.69	0.64	0.98	1.22	0.41	0.33	0.56	0.58	0.19	0.52
Travel	0.83	1.41	0.71	1.37	0.19	0.52	0.94	0.56	0.33	0.88	0.63	1.05	2.07
Communications	1.54	1.31	0.98	1.00	0.07	0.69	2.48	0.36	0.24	0.17	1.96	0.57	0.77
Construction	0.15	1.59	2.66	1.17	1.48	2.69	0.48	0.29	0.01	1.06	1.16		0.13
Insurance	2.63	0.49	0.70	0.85	0.18	0.39	1.24	0.58	0.16	0.22	1.07	1.87	0.48
Financial services	0.40	0.19	0.66	0.20	0.31	0.14	5.39	0.70	0.18	0.02	0.51		0.62
Computer and information	1.48	0.34	1.27	0.15	0.11	0.24	2.15	0.26	0.05	0.34	11.59		0.19
Royalties and licence fees	0.90	1.04	0.90	0.23	1.38	0.12	2.22	1.70	0.05	0.02	0.06	0.03	0.07
Other business services	0.95	0.91	1.27	1.19	0.45	0.52	1.99	0.45	0.63	0.76	1.35		0.26
Personal, cultural and recreational	2.87	1.58	0.65	0.67	0.03	0.38	2.85	0.88	0.11	0.09	0.28	0.76	0.73

6. APPENDIX

Country list and code

Code	Country	Code	Country	Code	Country	Code	Country
ABW	Aruba	DOM	Dominican Republic	LBN	Lebanon	REU	Réunion
AFG	Afghanistan	DZA	Algeria	LBR	Liberia	ROU	Romania
AGO	Angola	ECU	Ecuador	LBY	Libyan Arab Jamahiriya	RUS	Russian Federation
AIA	Anguilla	EGY	Egypt	LCA	Saint Lucia	RWA	Rwanda
ALA	Åland Islands	ERI	Eritrea	LIE	Liechtenstein	SAU	Saudi Arabia
ALB	Albania	ESH	Western Sahara	LKA	Sri Lanka	SDN	Sudan
AND	Andorra	ESP	Spain	LSO	Lesotho	SEN	Senegal
ANT	Netherlands Antilles	EST	Estonia	LTU	Lithuania	SGP	Singapore
ARE	United Arab Emirates	ETH	Ethiopia	LUX	Luxembourg	SGS	South Georgia and the South Sandwich Islands
ARG	Argentina	FIN	Finland	LVA	Latvia	SHN	Saint Helena
ARM	Armenia	FJI	Fiji	MAC	Macao	SJM	Svalbard and Jan Mayen
ASM	American Samoa	FLK	Falkland Islands (Malvinas)	MAF	Saint Martin (French part)	SLB	Solomon Islands
ATA	Antarctica	FRA	France	MAR	Morocco	SLE	Sierra Leone
ATF	French Southern Territories	FRO	Faroe Islands	MCO	Monaco	SLV	El Salvador
ATG	Antigua and Barbuda	FSM	Micronesia, Federated States of	MDA	Moldova	SMR	San Marino
AUS	Australia	GAB	Gabon	MDG	Madagascar	SOM	Somalia
AUT	Austria	GBR	United Kingdom	MDV	Maldives	SPM	Saint Pierre and Miquelon
AZE	Azerbaijan	GEO	Georgia	MEX	Mexico	SRB	Serbia
BDI	Burundi	GGY	Guernsey	MHL	Marshall Islands	STP	Sao Tome and Principe
BEL	Belgium	GHA	Ghana	MKD	Macedonia, the former Yugoslav Republic of	SUR	Suriname
BEN	Benin	GI	N Guinea	MLI	Mali	SVK	Slovakia
BFA	Burkina Faso	GIB	Gibraltar	MLT	Malta	SVN	Slovenia
BGD	Bangladesh	GLP	Guadeloupe	MMR	Myanmar	SWE	Sweden
BGR	Bulgaria	GMB	Gambia	MNE	Montenegro	SWZ	Swaziland
BHR	Bahrain	GNB	Guinea-Bissau	MNG	Mongolia	SYC	Seychelles
BHS	Bahamas	GNQ	Equatorial Guinea	MNP	Northern Mariana Islands	SYR	Syrian Arab Republic
BIH	Bosnia and Herzegovina	GRC	Greece	MOZ	Mozambique	TCA	Turks and Caicos Islands

BLM	Saint Barthélemy	GRD	Grenada	MRT	Mauritania	TCD	Chad
BLR	Belarus	GRL	Greenland	MSR	Montserrat	TGO	Togo
BLZ	Belize	GTM	Guatemala	MTQ	Martinique	THA	Thailand
BMU	Bermuda	GUF	French Guiana	MUS	Mauritius	TJK	Tajikistan
BOL	Bolivia	GUM	Guam	MWI	Malawi	TKL	Tokelau
BRA	Brazil	GUY	Guyana	MYS	Malaysia	TKM	Turkmenistan
BRB	Barbados	HKG	Hong Kong	MYT	Mayotte	TLS	Timor-Leste
BRN	Brunei Darussalam	HMD	Heard Island and McDonald Islands	NAM	Namibia	TON	Tonga
BTN	Bhutan	HND	Honduras	NCL	New Caledonia	TTO	Trinidad and Tobago
BVT	Bouvet Island	HRV	Croatia	NER	Niger	TUN	Tunisia
BWA	Botswana	HTI	Haiti	NFK	Norfolk Island	TUR	Turkey
CAF	Central African Republic	HUN	Hungary	NGA	Nigeria	TUV	Tuvalu
CAN	Canada	IDN	Indonesia	NIC	Nicaragua	TWN	Taiwan, Province of China
CCK	Cocos (Keeling) Islands	IMN	Isle of Man	NO	R Norway	TZA	Tanzania, United Republic of
CHE	Switzerland	IND	India	NIU	Niue	UGA	Uganda
CHL	Chile	IOT	British Indian Ocean Territory	NLD	Netherlands	UKR	Ukraine
CHN	China	IRL	Ireland	NPL	Nepal	UMI	United States Minor Outlying Islands
CIV	Côte d'Ivoire	IRN	Iran, Islamic Republic of	NRU	Nauru	URY	Uruguay
CMR	Cameroon	IRQ	Iraq	NZL	New Zealand	USA	United States
COD	Congo, the Democratic Republic of the	ISL	Iceland	OMN	Oman	UZB	Uzbekistan
COG	Congo	ISR	Israel	PAK	Pakistan	VAT	Holy See (Vatican City State)
COK	Cook Islands	ITA	Italy	PAN	Panama	VCT	Saint Vincent and the Grenadines
COL	Colombia	JAM	Jamaica	PCN	Pitcairn	VEN	Venezuela
COM	Comoros	JEY	Jersey	PER	Peru	VGB	Virgin Islands, British
CPV	Cape Verde	JOR	Jordan	PHL	Philippines	VIR	Virgin Islands, U.S.
CRI	Costa Rica	JPN	Japan	PLW	Palau	VNM	Viet Nam
CUB	Cuba	KAZ	Kazakhstan	PNG	Papua New Guinea	VUT	Vanuatu
CXR	Christmas Island	KEN	Kenya	POL	Poland	WLF	Wallis and Futuna
CYM	Cayman Islands	KGZ	Kyrgyzstan	PRI	Puerto Rico	WSM	Samoa
CYP	Cyprus	KHM	Cambodia	PRK	Korea, Democratic People's Republic of	YEM	Yemen
CZE	Czech Republic	KIR	Kiribati	PRT	Portugal	ZAF	South Africa
DEU	Germany	KNA	Saint Kitts and Nevis	PRY	Paraguay	ZMB	Zambia

DJI	Djibouti	KOR	Korea, Republic of	PSE	Palestinian Territory, Occupied	ZWE	Zimbabwe
DMA	Dominica	KWT	Kuwait	PYF	French Polynesia		
DNK	Denmark	LAO	Lao People's Democratic Republic	QAT	Qatar		

RCA1 of all countries, 2005

	Transport	Travel	Communications	Construction	Insurance	Financial services	Computer and information services	Royalties and license fees	Other business services	Personal, cultural and recreational										
1	BLR	2.79	MAC	3.44	KWT	11.98	BIH	7.99	GRD	10.11	LUX	9.52	IND	9.14	LSO	6.35	SAU	4.06	HUN	8.41
2	DNK	2.76	AIA	3.36	GUY	8.65	MKD	5.95	IRL	7.26	SWZ	8.23	IRL	7.58	PRY	5.77	NGA	3.32	MYS	6.76
3	CHL	2.72	DOM	3.34	HND	7.82	RUS	4.49	BRB	4.97	CHE	3.39	ISR	6.00	AGO	5.44	PNG	2.85	TUR	3.43
4	PAN	2.52	MDV	3.30	MLI	7.05	KGZ	3.77	MEX	4.85	GBR	3.12	CRI	2.26	GUY	4.68	FIN	2.01	ECU	3.22
5	LVA	2.52	LCA	3.29	MDA	6.45	PSE	3.58	CHE	4.83	VUT	1.67	FIN	2.06	JPN	3.12	COG	1.95	CAN	3.19
6	ISL	2.38	NAM	3.14	ROU	5.79	JPN	3.33	BWA	4.15	IRL	1.55	CAN	1.65	USA	3.01	TWN	1.88	MLT	2.60
7	KOR	2.36	ABW	3.13	BIH	5.46	MOZ	3.28	LBY	4.07	HKG	1.52	ARM	1.57	SWE	1.58	BRA	1.69	TON	2.50
8	NOR	2.35	BHS	3.10	PHL	5.04	EST	3.01	BOL	3.66	USA	1.24	ROU	1.51	FIN	1.38	SGP	1.66	SYR	2.49
9	LTU	2.28	SLE	3.05	YEM	4.86	POL	2.68	CAN	2.93	BRB	1.23	UGA	1.50	GBR	1.28	LBN	1.63	ARG	2.29
10	GRC	2.28	HTI	3.05	SLV	4.70	PNG	2.57	PER	2.61	SGP	1.11	URY	1.46	HUN	1.27	HKG	1.55	KGZ	2.22
11	MNG	2.15	SDN	2.91	NPL	4.56	DEU	2.56	GTM	2.53	CIV	1.00	SWE	1.45	FRA	1.02	AUT	1.54	AGO	2.20
12	UKR	2.14	UGA	2.79	CIV	4.52	TJK	2.50	LUX	2.41	PAN	0.96	LUX	1.32	CAN	1.00	NLD	1.52	MEX	1.96
13	KWT	2.09	KHM	2.79	PSE	4.12	WSM	2.32	GUY	2.40	GUY	0.95	GBR	1.24	NLD	0.94	AZE	1.49	NZL	1.73
14	ETH	2.06	KNA	2.78	KEN	4.12	MYS	2.10	LKA	2.39	BEL	0.93	LKA	1.24	DEU	0.87	SWE	1.47	GBR	1.65
15	KAZ	2.05	GHA	2.78	GMB	4.12	ROU	1.95	PNG	2.17	LVA	0.91	DEU	1.23	KOR	0.82	ANT	1.42	PSE	1.56
16	GEO	2.02	HRV	2.76	TJK	4.03	IDN	1.90	CIV	2.03	TWN	0.90	CZE	1.16	DNK	0.69	SUR	1.34	USA	1.55
17	LKA	1.95	ALB	2.73	NIC	4.01	TUN	1.82	ARM	1.81	TJK	0.87	BEL	1.10	ISR	0.64	ITA	1.28	FRA	1.54
18	MDA	1.88	MEX	2.72	ARM	3.72	CHN	1.77	AUT	1.78	URY	0.77	NLD	1.08	MLT	0.57	CHN	1.27	ROU	1.54
19	BHR	1.84	ATG	2.64	COL	3.57	NLD	1.74	MSR	1.72	ZAF	0.74	ESP	0.88	BEL	0.47	PRY	1.26	ALB	1.32
20	EST	1.76	GMB	2.63	AGO	3.46	EGY	1.74	TZA	1.51	JPN	0.70	ARG	0.84	MDV	0.45	BEL	1.26	COL	1.32
21	KEN	1.75	BLZ	2.59	ECU	3.46	BEL	1.73	ATG	1.49	DEU	0.64	MKD	0.82	IDN	0.40	CHE	1.23	MKD	1.28
22	CPV	1.71	GTM	2.56	MKD	3.46	FIN	1.71	SLV	1.44	CYP	0.63	ISL	0.78	NOR	0.35	ISR	1.23	ARM	1.23
23	TJK	1.71	WSM	2.55	IDN	3.38	SVN	1.70	MLT	1.39	MLT	0.61	CYP	0.77	AUS	0.35	TGO	1.22	AUS	1.19
24	RUS	1.63	TUR	2.53	PAK	3.38	TUR	1.68	PRY	1.25	KOR	0.56	GUY	0.74	UGA	0.28	DEU	1.22	PRT	1.15
25	OMN	1.63	SYR	2.51	BOL	3.28	ARM	1.62	HND	1.24	CZE	0.55	NOR	0.71	GEO	0.26	TON	1.17	JAM	1.08

26	SYC	1.62	NIC	2.49	CPV	2.97	BLR	1.56	CHL	1.14	SDN	0.55	HUN	0.69	IRL	0.25	GBR	1.15	NOR	1.01
27	URY	1.58	VCT	2.49	TGO	2.89	FRA	1.55	SGP	1.10	SWE	0.53	AUS	0.66	ITA	0.25	CIV	1.12	ESP	0.96
28	AZE	1.57	DMA	2.48	JAM	2.79	CYP	1.28	USA	1.02	UGA	0.51	SVN	0.65	NZL	0.22	IRL	1.10	NLD	0.95
29	SGP	1.56	JAM	2.47	VEN	2.71	ITA	1.26	SWE	1.02	BRA	0.48	LVA	0.58	SGP	0.21	IND	1.06	ZAF	0.86
30	SUR	1.53	ZAF	2.44	ALB	2.68	PRT	1.22	LBN	0.97	ESP	0.46	CHN	0.57	RUS	0.20	CAN	1.06	CHL	0.84
31	POL	1.50	BWA	2.44	MAR	2.41	BGR	1.18	ITA	0.91	AUT	0.45	DNK	0.56	ROU	0.18	HUN	1.03	BEL	0.77
32	ECU	1.48	TZA	2.41	AZE	2.28	SLV	1.07	KWT	0.89	GEO	0.45	NZL	0.54	EGY	0.18	THA	1.01	BGR	0.76
33	COG	1.46	CRI	2.37	WSM	2.27	CIV	1.02	AUS	0.86	CAN	0.44	MYS	0.52	KEN	0.18	JPN	1.00	ITA	0.72
34	JPN	1.45	HND	2.32	BLR	2.10	ISR	1.01	DMA	0.84	IDN	0.44	PHL	0.46	TWN	0.18	MSR	0.99	ISL	0.68
35	EGY	1.45	JOR	2.30	NLD	2.05	CZE	0.99	IND	0.84	IND	0.40	USA	0.45	KGZ	0.17	ARG	0.98	CZE	0.65
36	TGO	1.43	BRB	2.29	OMN	1.94	LKA	0.97	GEO	0.80	ETH	0.39	SYR	0.43	TJK	0.16	KGZ	0.96	RUS	0.64
37	HKG	1.42	MSR	2.28	ETH	1.78	AUT	0.93	BEL	0.75	NOR	0.38	MLT	0.43	ARG	0.15	VCT	0.96	DEU	0.63
38	SLV	1.42	VUT	2.18	NAM	1.78	IND	0.92	VCT	0.74	BIH	0.38	RUS	0.39	CHL	0.15	NOR	0.95	SVN	0.61
39	DJI	1.35	NZL	2.18	BEL	1.72	ESP	0.89	KNA	0.74	AUS	0.38	PAK	0.37	HRV	0.14	CYP	0.94	IRL	0.58
40	BOL	1.31	OMN	2.18	CAN	1.72	BWA	0.82	MYS	0.72	JAM	0.33	BRB	0.36	LUX	0.14	PSE	0.93	AUT	0.56
41	VEN	1.31	PER	2.13	SYR	1.69	SWE	0.78	GBR	0.72	ROU	0.31	BGD	0.35	MKD	0.13	DMA	0.91	DNK	0.54
42	COL	1.31	MAR	2.12	KHM	1.67	MDA	0.76	UGA	0.72	SLE	0.30	JAM	0.34	MOZ	0.13	MDG	0.90	CYP	0.54
43	PAK	1.31	GRD	2.08	PRT	1.65	MUS	0.75	TWN	0.71	PRY	0.28	FRA	0.33	BRA	0.12	IDN	0.90	KOR	0.50
44	ROU	1.30	BHR	2.06	MLT	1.64	PHL	0.74	THA	0.70	RUS	0.24	EST	0.32	ESP	0.12	FRA	0.89	LUX	0.50
45	SVN	1.29	BGR	2.04	IND	1.55	AZE	0.70	AIA	0.69	MLI	0.24	BLR	0.31	JAM	0.11	RUS	0.86	POL	0.49
46	TUN	1.27	LSO	2.03	UGA	1.54	GTM	0.70	DEU	0.68	BEN	0.23	POL	0.28	MDG	0.09	MKD	0.86	EGY	0.48
47	MKD	1.27	AUS	2.02	MNG	1.52	HUN	0.68	RUS	0.65	KGZ	0.23	IDN	0.26	LVA	0.09	KOR	0.85	SWE	0.44
48	ARM	1.24	MLI	2.01	SYC	1.49	THA	0.64	BIH	0.62	EST	0.22	CHL	0.25	MEX	0.08	ROU	0.84	GRC	0.41
49	CZE	1.22	BIH	2.00	MEX	1.48	ANT	0.63	TUR	0.61	TUN	0.22	MUS	0.24	SVN	0.08	USA	0.79	GEO	0.39
50	BGR	1.21	MUS	2.00	SWE	1.47	ETH	0.63	MLI	0.59	BGD	0.22	JPN	0.24	PAK	0.08	ESP	0.77	WSM	0.38
51	NLD	1.20	BEN	1.98	SDN	1.46	UKR	0.62	NOR	0.59	BOL	0.22	PRT	0.23	ZAF	0.08	CZE	0.72	PHL	0.37
52	MOZ	1.17	TUN	1.97	RWA	1.45	BGD	0.58	LCA	0.58	ITA	0.21	ZAF	0.23	MDA	0.08	ISL	0.71	IDN	0.37
53	BEL	1.11	SYC	1.94	BGR	1.45	SGP	0.56	AZE	0.58	PRT	0.21	SGP	0.22	PRT	0.08	EST	0.70	AZE	0.37
54	DEU	1.09	ANT	1.92	NZL	1.44	LTU	0.56	ZAF	0.56	ALB	0.21	LTU	0.21	BOL	0.08	BEN	0.70	HKG	0.36
55	CYP	1.06	LBN	1.89	ARG	1.44	USA	0.51	PAN	0.55	POL	0.21	MDA	0.21	HKG	0.07	MOZ	0.69	SGP	0.32
56	MUS	1.06	PRT	1.88	KAZ	1.43	NOR	0.44	MKD	0.52	TUR	0.20	HRV	0.20	POL	0.07	BGD	0.68	VEN	0.31
57	FRA	1.06	ESP	1.88	GBR	1.43	GRC	0.43	SLE	0.52	PAK	0.20	COL	0.18	COL	0.07	NPL	0.68	BRA	0.29
58	MDG	1.06	PHL	1.86	CZE	1.42	TGO	0.40	NPL	0.52	HUN	0.19	AUT	0.18	TUN	0.07	MUS	0.66	LTU	0.28
59	KGZ	1.06	AGO	1.86	MYS	1.37	MLI	0.37	TUN	0.51	FRA	0.19	BGR	0.17	CZE	0.06	POL	0.66	HRV	0.25
60	RWA	1.04	BOL	1.82	MOZ	1.36	ARG	0.36	SYC	0.49	MNG	0.19	ITA	0.17	AUT	0.06	PRT	0.66	BOL	0.24

61	THA	1.03	YEM	1.81	DOM	1.32	NZL	0.33	FRA	0.48	PHL	0.18	LCA	0.14	UKR	0.05	WSM	0.62	IND	0.22
62	TWN	1.03	ECU	1.78	PER	1.31	LVA	0.33	NIC	0.46	COL	0.18	VEN	0.14	IND	0.05	GRD	0.62	LVA	0.20
63	CIV	1.01	VEN	1.78	FRA	1.28	BLZ	0.28	MAR	0.45	NLD	0.17	CIV	0.14	CYP	0.05	DNK	0.61	TWN	0.20
64	IDN	0.98	SLV	1.77	LKA	1.25	GBR	0.28	ANT	0.45	MUS	0.16	PAN	0.13	CHN	0.04	MLT	0.61	MDA	0.17
65	LBY	0.97	THA	1.77	GEO	1.24	HKG	0.25	CYP	0.44	NZL	0.16	BRA	0.13	SLV	0.04	CHL	0.61	CHN	0.15
66	PHL	0.95	LBY	1.74	SVN	1.24	PAK	0.25	PAK	0.44	ARM	0.15	GRC	0.12	GRC	0.03	SVN	0.60	UKR	0.14
67	PRT	0.94	EGY	1.74	LVA	1.23	TWN	0.24	ESP	0.43	KHM	0.15	TUN	0.11	EST	0.03	MYS	0.57	EST	0.14
68	ISR	0.94	MLT	1.71	BEN	1.22	DNK	0.24	BRA	0.42	EGY	0.14	UKR	0.11	BLR	0.03	JOR	0.57	MUS	0.13
69	CHN	0.93	COL	1.70	BLZ	1.19	MDG	0.23	JPN	0.40	SYR	0.13	KGZ	0.11	MAR	0.03	BLR	0.57	PNG	0.11
70	MYS	0.93	PSE	1.69	GTM	1.19	SYR	0.22	GRC	0.39	PNG	0.13	MOZ	0.11	MYS	0.03	MAR	0.57	KHM	0.11
71	SWE	0.91	URY	1.69	HUN	1.16	HRV	0.22	GHA	0.38	KAZ	0.13	HKG	0.10	PHL	0.03	LVA	0.54	BLR	0.10
72	JOR	0.90	MYS	1.68	TZA	1.16	SWZ	0.20	CHN	0.37	GTM	0.12	TWN	0.09	BRB	0.02	BHS	0.54	MOZ	0.10
73	ARG	0.90	SVN	1.68	RUS	1.15	LUX	0.18	BGR	0.34	MDA	0.12	DOM	0.09	BGR	0.02	GUY	0.53	MLI	0.09
74	AUS	0.89	CPV	1.64	LUX	1.13	CAN	0.17	PRT	0.34	KWT	0.11	PNG	0.07	THA	0.02	KNA	0.53	TUN	0.08
75	BRA	0.88	ARG	1.59	PRY	1.12	ZAF	0.16	HKG	0.33	MKD	0.11	ALB	0.06	PER	0.02	LTU	0.52	BGD	0.07
76	VUT	0.88	MNG	1.59	BWA	1.11	AUS	0.15	OMN	0.32	SLV	0.10	TGO	0.05	MLI	0.01	CRI	0.51	JPN	0.07
77	AUT	0.88	ARM	1.58	KGZ	1.10	BRB	0.13	WSM	0.32	BWA	0.09	MNG	0.04	LTU	0.01	LKA	0.49	FIN	0.06
78	NZL	0.88	TON	1.49	LTU	1.08	KOR	0.12	BEN	0.31	SVN	0.09	WSM	0.04	BWA	0.01	PHL	0.47	TZA	0.05
79	PER	0.88	CZE	1.47	VUT	1.08	ALB	0.12	JAM	0.31	LBN	0.08	EGY	0.04	ALB	0.01	BRB	0.47	PAK	0.05
80	JAM	0.87	ITA	1.47	EGY	1.08	KNA	0.11	CPV	0.29	LTU	0.08	PSE	0.03	KHM	0.01	AUS	0.45	SWZ	0.03
81	GMB	0.86	CHN	1.46	EST	1.08	MNG	0.10	NLD	0.28	CHL	0.07	BWA	0.03	BGD	0.00	EGY	0.43	URY	0.03
82	MLT	0.85	GRC	1.46	ITA	1.07	KHM	0.09	KEN	0.28	FIN	0.07	GTM	0.03	ANT	0.00	BLZ	0.43	GTM	0.02
83	TUR	0.80	POL	1.44	CHE	1.07	KAZ	0.05	MNG	0.28	DOM	0.07	KOR	0.03	URY	0.00	TJK	0.42	MNG	0.02
84	ATG	0.79	MOZ	1.41	HRV	1.05	BOL	0.04	ROU	0.28	BGR	0.06	ANT	0.02	CRI	0.00	COL	0.41	KEN	0.02
85	TZA	0.78	RWA	1.40	DJI	1.02	BEN	0.03	ETH	0.27	UKR	0.06	BOL	0.02	AZE	0.00	BWA	0.40	BRB	0.02
86	CAN	0.78	FRA	1.38	FIN	1.01	BRA	0.03	TGO	0.26	MOZ	0.06	TJK	0.02	TGO	0.00	BDI	0.40	ANT	0.01
87	NGA	0.78	MDG	1.37	BRB	0.98	ISL	0.00	DNK	0.25	MAC	0.06	PRY	0.01	MUS	0.00	ABW	0.39	CHE	0.01
88	ESP	0.76	CYP	1.33	LBN	0.97	LBN	0.00	GMB	0.25	HRV	0.05	KEN	0.01	KAZ	0.00	NZL	0.39	KAZ	0.01
89	BEN	0.76	IDN	1.30	UKR	0.95			ALB	0.25	CRI	0.05	KAZ	0.01	ETH	0.00	HRV	0.38	CRI	0.00
90	ITA	0.74	GEO	1.29	DEU	0.95			LVA	0.24	TGO	0.05	MDG	0.01	PSE	0.00	BGR	0.38	LBN	0.00
91	USA	0.72	NPL	1.28	PAN	0.91			SWZ	0.21	DNK	0.05	TZA	0.01	SWZ	0.00	PER	0.37	CPV	0.00
92	MAR	0.72	UKR	1.24	ZAF	0.90			ISL	0.21	GRC	0.05	AZE	0.00			UKR	0.37		
93	GBR	0.70	HUN	1.24	AUS	0.88			POL	0.21	ANT	0.05	GEO	0.00			MDA	0.36		
94	HUN	0.69	KAZ	1.17	BGD	0.84			BGD	0.20	MYS	0.05	ETH	0.00			PAK	0.36		
95	SLE	0.66	KEN	1.14	POL	0.83			EGY	0.20	ABW	0.04	KHM	0.00			GHA	0.35		

96	FIN	0.64	EST	1.12	PNG	0.82	PHL	0.19	PER	0.04	ABW	0.00	VEN	0.35
97	ZAF	0.61	LTU	1.10	AUT	0.82	KOR	0.19	BLZ	0.04	BEN	0.00	TUN	0.33
98	GHA	0.61	AUT	1.08	LBY	0.82	FIN	0.18	CPV	0.03	NAM	0.00	KAZ	0.33
99	PRY	0.61	KGZ	1.06	DNK	0.74	SVN	0.18	CHN	0.03	CPV	0.00	LUX	0.31
100	MLI	0.57	LKA	1.04	URY	0.72	SUR	0.17	TZA	0.02	SWZ	0.00	PAN	0.30
101	YEM	0.55	USA	0.99	HTI	0.72	NZL	0.17	BLR	0.02	LBN	0.00	ZAF	0.30
102	KHM	0.51	MDA	0.99	ESP	0.68	EST	0.17	ARG	0.01			TZA	0.30
103	HRV	0.49	CAN	0.93	TUR	0.68	URY	0.16	ISL	0.00			SWZ	0.30
104	NIC	0.49	PAN	0.92	BRA	0.65	UKR	0.13	AZE	0.00			ETH	0.28
105	MEX	0.49	SWZ	0.91	HKG	0.65	HRV	0.11	NAM	0.00			ATG	0.28
106	ALB	0.48	BRA	0.89	USA	0.63	MUS	0.10					BIH	0.27
107	CRI	0.48	GUY	0.89	CHL	0.59	NGA	0.10					MLI	0.24
108	PNG	0.46	RUS	0.87	CRI	0.58	MDV	0.09					GTM	0.23
109	IND	0.46	CHE	0.87	NOR	0.56	MAC	0.09					AIA	0.21
110	AGO	0.46	SUR	0.81	THA	0.56	KAZ	0.09					GRC	0.21
111	BLZ	0.45	ROU	0.77	TWN	0.54	VUT	0.08					LCA	0.20
112	SWZ	0.44	ISL	0.74	MUS	0.54	MDA	0.08					ALB	0.20
113	BWA	0.44	TWN	0.72	GRC	0.51	IDN	0.06					VUT	0.19
114	MSR	0.43	DEU	0.69	KOR	0.43	ISR	0.05					YEM	0.19
115	CHE	0.41	MKD	0.66	ISR	0.40	CZE	0.04					UGA	0.17
116	BGD	0.40	BEL	0.65	IRL	0.39	KGZ	0.04					URY	0.16
117	NPL	0.38	SWE	0.64	ANT	0.31	RWA	0.04					BHR	0.15
118	TON	0.37	ETH	0.62	CHN	0.29	VEN	0.04					KHM	0.14
119	GTM	0.36	ISR	0.61	MAC	0.28	KHM	0.04					ARM	0.12
120	HND	0.35	HKG	0.60	ABW	0.26	ECU	0.03					DJI	0.11
121	KNA	0.35	CHL	0.59	CYP	0.23	BLR	0.03					HND	0.11
122	SYR	0.34	LVA	0.59	TUN	0.20	HUN	0.03					SYR	0.11
123	GRD	0.33	GBR	0.54	ISL	0.19	ABW	0.03					MNG	0.09
124	DMA	0.33	COG	0.53	MDG	0.18	MDG	0.02					SLV	0.08
125	BIH	0.32	IND	0.50	JPN	0.16	BLZ	0.02					BOL	0.06
126	ANT	0.31	NLD	0.48	SWZ	0.06	NAM	0.01					GEO	0.06
127	MDV	0.30	BLR	0.48	SLE	0.06	MOZ	0.00					MAC	0.06
128	VCT	0.30	KOR	0.48			BDI	0.00					AGO	0.06
129	LUX	0.27	FIN	0.48									SYC	0.06
130	NAM	0.25	DNK	0.45									TUR	0.05

131	GUY	0.23	PRY	0.44	DOM	0.05
132	BDI	0.22	TGO	0.43	CPV	0.04
133	MAC	0.21	AZE	0.42	NAM	0.02
134	WSM	0.20	NOR	0.42	JAM	0.02
135	IRL	0.20	JPN	0.42	SDN	0.00
136	LCA	0.19	SGP	0.42	LSO	0.00
137	ABW	0.18	CIV	0.37		
138	LBN	0.18	LUX	0.33		
139	DOM	0.15	IRL	0.30		
140	SDN	0.13	BGD	0.21		
141	PSE	0.11	PAK	0.18		
142	BHS	0.10	BDI	0.16		
143	UGA	0.09	KWT	0.13		
144	AIA	0.09	DJI	0.11		
145	BRB	0.08	PNG	0.04		
146	LSO	0.05	TJK	0.04		
147			NGA	0.02		

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	Transport	Travel	Communications	Construction	Insurance	Financial services	Computer and information services	Royalties and license fees	Other business services	Personal, cultural and recreational										
1	PAN	9.57	AIA	14.55	GMB	18.78	BIH	11.35	GRD	41.61	LUX	32.70	IND	16.50	PRY	8.12	LBN	6.73	TON	9.89
2	CPV	8.06	LCA	14.19	CPV	13.98	WSM	10.52	BRB	19.99	VUT	6.45	IRL	13.43	GUY	4.94	MSR	4.67	HUN	7.21
3	GRC	7.58	MAC	13.43	HND	12.04	MKD	5.60	IRL	12.86	GBR	5.52	ISR	8.75	USA	4.49	TON	4.65	MLT	5.33
4	DJI	5.82	BHS	12.69	WSM	10.30	CYP	5.35	LUX	8.27	SWZ	5.07	LUX	4.54	LSO	2.50	CYP	3.93	TUR	4.65
5	ETH	5.45	GMB	11.99	GUY	9.12	KGZ	5.22	MSR	8.07	BRB	4.97	CYP	3.20	JPN	2.44	VCT	3.84	ALB	4.22
6	ISL	4.89	ATG	11.77	MDA	8.73	EGY	5.06	ATG	6.64	CHE	4.63	CRI	3.07	GBR	2.27	ANT	3.77	SYR	4.17
7	DNK	4.71	WSM	11.56	ALB	8.59	EST	4.39	CHE	6.59	PAN	3.66	UGA	2.79	SWE	1.96	DMA	3.03	MYS	4.14
8	GEO	4.51	MDV	11.03	JAM	8.50	MOZ	2.70	LBN	4.02	IRL	2.74	GBR	2.20	MDV	1.51	SUR	2.91	JAM	3.29
9	CYP	4.45	MSR	10.70	BIH	7.76	JPN	2.61	BWA	3.39	CYP	2.62	FIN	2.12	FIN	1.42	WSM	2.82	KGZ	3.07
10	SYC	4.22	VCT	9.94	KEN	7.53	TUN	2.52	GTM	3.31	USA	1.85	URY	2.04	DNK	1.18	GRD	2.56	GBR	2.92
11	EGY	4.20	KNA	9.94	NPL	7.20	TUR	2.28	TZA	3.27	HKG	1.38	ARM	2.03	MLT	1.16	AUT	2.32	NZL	2.40
12	GMB	3.94	BRB	9.21	MLI	6.88	ARM	2.11	AIA	2.99	LVA	1.36	SWE	1.81	HUN	1.09	BHS	2.20	USA	2.32
13	LVA	3.77	ALB	8.74	SLV	5.89	RUS	2.09	VCT	2.96	MLT	1.25	ISL	1.60	FRA	1.04	FIN	2.06	CYP	2.24
14	ATG	3.54	GRD	8.55	KWT	5.71	POL	2.07	MLT	2.86	URY	1.07	ESP	1.46	ISR	0.93	GBR	2.04	CAN	2.14
15	VUT	3.41	VUT	8.42	NIC	5.32	DEU	1.79	DMA	2.80	ETH	1.03	BRB	1.45	NLD	0.78	IRL	1.95	WSM	1.72
16	SUR	3.34	DMA	8.23	MAR	5.25	FIN	1.75	BOL	2.73	JAM	1.01	LKA	1.22	CAN	0.67	IND	1.92	LUX	1.70
17	KEN	3.19	LBN	7.82	ARM	4.83	PRT	1.74	AUT	2.69	SGP	1.01	ROU	1.18	DEU	0.61	KNA	1.88	PRT	1.64
18	MNG	3.02	CPV	7.70	ETH	4.72	TJK	1.74	KNA	2.64	GUY	1.00	CAN	1.10	GEO	0.58	BRB	1.88	ARM	1.59
19	RWA	2.65	BLZ	7.61	ROU	4.50	ANT	1.68	GUY	2.53	GEO	1.00	JAM	1.05	KOR	0.57	SWE	1.83	ESP	1.59
20	JAM	2.64	JAM	7.53	DJI	4.41	ETH	1.68	LCA	2.51	UGA	0.95	DNK	0.96	UGA	0.53	ISR	1.79	FRA	1.57
21	NOR	2.63	HRV	7.36	VUT	4.17	IND	1.66	ARM	2.35	ESP	0.75	NLD	0.89	EGY	0.52	PRY	1.78	ARG	1.57
22	EST	2.57	DOM	6.53	LBN	4.00	MUS	1.63	LKA	2.35	IND	0.73	MLT	0.88	LUX	0.47	CHE	1.68	ECU	1.47

23	MDA	2.55	TON	5.88	BRB	3.93	BGR	1.62	PAN	2.07	AUT	0.68	LVA	0.87	IRL	0.44	SGP	1.52	ISL	1.40
24	LTU	2.39	CYP	5.56	SYC	3.90	FRA	1.58	CAN	1.96	ALB	0.68	DEU	0.86	AUS	0.39	ISL	1.46	EGY	1.39
25	UKR	2.31	TZA	5.22	LUX	3.89	SVN	1.55	HND	1.91	BEL	0.67	NOR	0.80	NOR	0.39	MUS	1.44	GRC	1.38
26	MUS	2.29	UGA	5.19	RWA	3.71	ROU	1.52	CYP	1.84	ZAF	0.66	BEL	0.79	HRV	0.38	HKG	1.40	AUS	1.36
27	URY	2.21	ANT	5.11	BLZ	3.50	ESP	1.48	SLV	1.81	SWE	0.65	GUY	0.78	BEL	0.34	TGO	1.37	MKD	1.20
28	MSR	2.00	SLE	5.06	PAN	3.45	ISR	1.47	GEO	1.78	TJK	0.61	MKD	0.77	KEN	0.33	KGZ	1.33	ROU	1.19
29	CHL	1.98	SYC	5.06	MLT	3.37	NLD	1.44	PRY	1.76	JPN	0.55	CZE	0.76	JAM	0.32	NGA	1.32	NOR	1.14
30	LKA	1.91	EGY	5.05	MKD	3.26	GRC	1.43	MEX	1.71	BIH	0.54	AUS	0.75	NZL	0.30	ESP	1.27	IRL	1.04
31	SLV	1.78	GRC	4.86	TGO	3.24	AUT	1.40	PER	1.59	TWN	0.52	NZL	0.74	IDN	0.26	MLT	1.26	BGR	1.03
32	TUN	1.76	MAR	4.61	PAK	3.16	SLV	1.34	USA	1.53	CIV	0.50	SYR	0.72	ITA	0.24	BLZ	1.26	DNK	0.92
33	MLT	1.73	MUS	4.33	EGY	3.14	MYS	1.29	IND	1.52	SLE	0.49	USA	0.67	KGZ	0.23	NLD	1.25	GEO	0.87
34	TZA	1.70	ABW	4.27	UGA	2.87	IDN	1.24	WSM	1.44	DEU	0.45	LCA	0.61	AGO	0.20	EGY	1.24	AUT	0.84
35	BGR	1.66	SYR	4.19	SYR	2.83	BEL	1.24	CPV	1.37	NOR	0.43	SVN	0.60	ESP	0.19	ITA	1.24	NLD	0.79
36	KOR	1.62	JOR	4.05	TJK	2.81	ITA	1.22	UGA	1.33	AUS	0.43	HUN	0.59	CYP	0.19	ATG	1.24	ZAF	0.77
37	ARM	1.61	KHM	3.89	HRV	2.80	PNG	1.09	GRC	1.31	EGY	0.42	ARG	0.57	SGP	0.19	MAR	1.23	COL	0.74
38	TGO	1.60	GHA	3.84	IND	2.79	MDA	1.02	SYC	1.29	PRY	0.39	HRV	0.53	ROU	0.14	PNG	1.21	ITA	0.70
39	JOR	1.59	RWA	3.58	GEO	2.77	SWE	0.97	GBR	1.27	KOR	0.39	MUS	0.52	LVA	0.13	USA	1.18	MEX	0.69
40	MAR	1.56	HND	3.57	PHL	2.58	LKA	0.95	SWE	1.27	CZE	0.36	PAN	0.50	MKD	0.12	MDG	1.16	HRV	0.65
41	ALB	1.55	MLT	3.50	DOM	2.57	GTM	0.91	ANT	1.18	MUS	0.35	EST	0.47	MDG	0.12	PAN	1.15	CHL	0.61
42	BLR	1.53	PAN	3.50	GBR	2.53	BLR	0.85	GMB	1.16	LBN	0.34	GRC	0.39	GRC	0.11	TWN	1.09	BEL	0.55
43	TON	1.47	TUR	3.44	TZA	2.51	BLZ	0.81	CIV	1.02	EST	0.32	PAK	0.35	TJK	0.11	NPL	1.07	SVN	0.55
44	KGZ	1.47	HTI	3.39	BOL	2.45	CHN	0.79	SGP	1.01	KGZ	0.32	FRA	0.34	PRT	0.11	NOR	1.07	SWE	0.54
45	SGP	1.43	GTM	3.35	PRT	2.35	USA	0.76	AUS	0.98	TUN	0.31	PRT	0.33	CHL	0.11	LUX	1.06	DEU	0.44
46	ISR	1.37	NIC	3.30	KHM	2.33	BWA	0.67	MAR	0.98	PRT	0.31	MYS	0.32	MDA	0.10	DNK	1.05	CZE	0.43
47	GRD	1.37	CRI	3.23	CIV	2.27	UKR	0.67	JAM	0.94	CAN	0.30	MDA	0.28	ARG	0.10	EST	1.02	IND	0.40
48	MDG	1.36	ESP	3.10	IDN	2.21	CZE	0.65	PNG	0.92	BRA	0.29	AUT	0.27	MOZ	0.10	AZE	1.02	POL	0.38
49	PRT	1.35	NZL	3.03	MNG	2.14	LUX	0.60	ITA	0.88	BEN	0.29	CHN	0.26	TWN	0.10	HRV	1.02	KOR	0.35

50	AUT	1.33	GEO	2.88	COL	2.00	HUN	0.59	BIH	0.88	IDN	0.29	BGR	0.24	AUT	0.10	BRA	1.02	HKG	0.33
51	BLZ	1.33	BIH	2.85	NZL	2.00	HRV	0.58	SLE	0.86	TUR	0.27	PHL	0.23	RUS	0.09	JOR	1.01	LVA	0.30
52	HRV	1.31	BGR	2.79	BGR	1.98	LTU	0.58	TUR	0.83	MNG	0.26	LTU	0.22	TUN	0.09	PRT	0.94	SGP	0.30
53	BHR	1.30	TUN	2.73	LVA	1.84	CIV	0.51	CHL	0.83	ROU	0.24	POL	0.22	BRB	0.09	FRA	0.91	RUS	0.30
54	HKG	1.29	NAM	2.71	SWE	1.82	SGP	0.51	NPL	0.82	MLI	0.23	BGD	0.21	IND	0.08	AIA	0.90	LTU	0.29
55	ESP	1.26	PRT	2.68	GRC	1.70	BRB	0.50	ALB	0.79	SYR	0.22	ZAF	0.20	PAK	0.07	BEL	0.90	MUS	0.27
56	GBR	1.25	BEN	2.50	NLD	1.69	THA	0.50	ETH	0.73	MAC	0.22	ALB	0.20	BRA	0.07	HUN	0.88	AZE	0.25
57	KNA	1.24	URY	2.35	PRY	1.58	NOR	0.49	TUN	0.71	NZL	0.22	SGP	0.20	SVN	0.07	BEN	0.88	IDN	0.24
58	PAK	1.22	AUS	2.30	ECU	1.58	LVA	0.49	ESP	0.71	ITA	0.21	WSM	0.19	ZAF	0.07	LCA	0.88	MDA	0.23
59	NZL	1.22	MNG	2.23	EST	1.57	GBR	0.49	NOR	0.66	KHM	0.20	JPN	0.19	HKG	0.07	DEU	0.85	EST	0.20
60	VCT	1.20	SLV	2.22	GTM	1.56	AZE	0.48	NIC	0.61	ARM	0.19	RUS	0.18	MAR	0.07	LVA	0.81	PHL	0.19
61	MKD	1.19	ZAF	2.18	AZE	1.55	NZL	0.46	EGY	0.58	FRA	0.19	CHL	0.18	BOL	0.06	MKD	0.81	BOL	0.18
62	TJK	1.19	KEN	2.09	BEN	1.54	TGO	0.45	MLI	0.58	PAK	0.18	DOM	0.18	POL	0.06	JPN	0.79	BRA	0.18
63	SVN	1.17	ARM	2.05	NAM	1.53	DNK	0.40	THA	0.54	MDA	0.17	IDN	0.17	SLV	0.05	THA	0.78	UKR	0.16
64	POL	1.16	NPL	2.02	KGZ	1.51	KNA	0.38	BEL	0.54	HUN	0.16	BLR	0.17	UKR	0.05	BDI	0.75	KHM	0.15
65	JPN	1.14	BWA	2.00	CHE	1.47	PHL	0.38	GHA	0.53	BOL	0.16	ITA	0.16	EST	0.05	VUT	0.75	TWN	0.12
66	SWE	1.13	MLI	1.96	YEM	1.34	ALB	0.38	KEN	0.51	GRC	0.16	TUN	0.15	CZE	0.04	ETH	0.74	TUN	0.11
67	SLE	1.10	SUR	1.77	FRA	1.31	SYR	0.37	ZAF	0.50	GTM	0.16	KGZ	0.15	COL	0.04	CAN	0.71	TZA	0.10
68	DMA	1.10	MDG	1.76	DNK	1.26	MLI	0.36	MKD	0.49	POL	0.16	UKR	0.12	BGR	0.03	CRI	0.70	MLI	0.09
69	TUR	1.09	ETH	1.64	AUT	1.24	BGD	0.34	FRA	0.49	CPV	0.16	EGY	0.11	MEX	0.03	GRC	0.69	MOZ	0.08
70	FRA	1.08	EST	1.63	BEL	1.24	MDG	0.30	PRT	0.48	NLD	0.14	COL	0.10	ALB	0.03	ARG	0.67	AGO	0.08
71	USA	1.08	AUT	1.62	LKA	1.22	ARG	0.25	DEU	0.47	HRV	0.14	MOZ	0.09	CHN	0.02	ROU	0.66	BRB	0.07
72	AZE	1.07	SVN	1.53	MUS	1.16	PAK	0.23	BGR	0.47	DOM	0.14	HKG	0.09	BLR	0.02	TZA	0.65	CHN	0.07
73	MDV	1.02	ISL	1.53	BLR	1.15	HKG	0.23	MYS	0.44	BGD	0.13	BRA	0.08	MYS	0.02	SAU	0.65	FIN	0.06
74	AUS	1.01	USA	1.48	CAN	1.15	AUS	0.18	DNK	0.43	ANT	0.13	CIV	0.07	MLI	0.01	ALB	0.63	JPN	0.06
75	ROU	1.01	KGZ	1.47	LTU	1.13	ZAF	0.14	ISL	0.43	SLV	0.12	MNG	0.06	PHL	0.01	IDN	0.59	BLR	0.06
76	KWT	1.00	BHR	1.45	SVN	1.13	TWN	0.14	KWT	0.42	RUS	0.11	TGO	0.06	THA	0.01	KOR	0.58	PNG	0.05

77	NLD	0.99	ITA	1.42	ESP	1.13	MNG	0.14	TWN	0.41	BLZ	0.11	ANT	0.06	LTU	0.01	MOZ	0.57	BGD	0.04
78	BOL	0.98	FRA	1.41	MOZ	1.11	KHM	0.13	PAK	0.41	MKD	0.10	TWN	0.05	KHM	0.01	CHN	0.57	PAK	0.04
79	MOZ	0.96	THA	1.37	MAC	1.10	SWZ	0.12	BEN	0.39	COL	0.10	GTM	0.04	PER	0.01	CIV	0.56	VEN	0.04
80	BEN	0.95	BOL	1.36	ITA	1.04	CAN	0.11	MNG	0.39	PHL	0.09	PNG	0.03	BWA	0.01	GUY	0.56	URY	0.04
81	LUX	0.92	UKR	1.34	FIN	1.04	KOR	0.09	AZE	0.39	DNK	0.09	BWA	0.03	ANT	0.01	SVN	0.55	KEN	0.03
82	WSM	0.91	MDA	1.33	UKR	1.02	BEN	0.03	SUR	0.38	BGR	0.09	KEN	0.02	BGD	0.00	LTU	0.55	MNG	0.03
83	PRY	0.85	PER	1.29	URY	1.00	BOL	0.03	LBY	0.37	LTU	0.09	KOR	0.02	URY	0.00	NZL	0.54	GTM	0.03
84	GHA	0.85	CHE	1.19	AUS	1.00	KAZ	0.02	LVA	0.37	SVN	0.08	PRY	0.02	CRI	0.00	ABW	0.54	ANT	0.02
85	LCA	0.83	MOZ	1.16	HUN	1.00	BRA	0.02	MAC	0.34	BWA	0.08	VEN	0.02	KAZ	0.00	BGR	0.52	SWZ	0.02
86	IND	0.83	LTU	1.15	ARG	0.99	LBN	0.01	JPN	0.31	FIN	0.07	BOL	0.01	AZE	0.00	AUS	0.51	CHE	0.01
87	ANT	0.82	LUX	1.13	CYP	0.94	ISL	0.01	MDV	0.31	CRI	0.07	MDG	0.01	SWZ	0.00	POL	0.51	CRI	0.00
88	MAC	0.81	POL	1.11	USA	0.94			RUS	0.30	SDN	0.06	TZA	0.01	TGO	0.00	MDA	0.49	KAZ	0.00
89	CZE	0.80	ARG	1.09	CZE	0.93			VUT	0.30	UKR	0.06	TJK	0.01	ETH	0.00	GHA	0.49	CPV	0.00
90	THA	0.80	HUN	1.06	TUR	0.92			HKG	0.30	TGO	0.06	GEO	0.01	MUS	0.00	DJI	0.49	LBN	0.00
91	BEL	0.80	MYS	1.03	BWA	0.91			HRV	0.30	ABW	0.06	ETH	0.01			LKA	0.48		
92	KAZ	0.76	LKA	1.02	MYS	0.84			TGO	0.29	CHL	0.05	KAZ	0.00			CZE	0.48		
93	RUS	0.76	CZE	0.97	ANT	0.84			BRA	0.25	KWT	0.05	KHM	0.00			TUN	0.46		
94	DEU	0.76	GBR	0.96	ZAF	0.81			EST	0.24	PNG	0.05	ABW	0.00			COG	0.46		
95	LBN	0.74	MEX	0.96	HTI	0.80			NLD	0.24	TZA	0.05	AZE	0.00			CHL	0.45		
96	COL	0.73	COL	0.95	PER	0.80			NZL	0.23	MOZ	0.05	BEN	0.00			BGD	0.41		
97	ITA	0.72	PHL	0.95	CRI	0.79			URY	0.23	KAZ	0.05	SWZ	0.00			RUS	0.40		
98	KHM	0.71	GUY	0.94	IRL	0.70			MUS	0.22	MYS	0.03	LBN	0.00			UKR	0.40		
99	ECU	0.68	IND	0.90	DEU	0.66			ROU	0.22	PER	0.03	NAM	0.00			BIH	0.38		
100	FIN	0.66	ISR	0.88	POL	0.64			FIN	0.19	CHN	0.01	CPV	0.00			MYS	0.35		
101	CRI	0.66	LVA	0.88	NOR	0.63			CHN	0.17	BLR	0.01					PAK	0.34		
102	NIC	0.65	IDN	0.85	ISR	0.59			SVN	0.16	ISL	0.01					BWA	0.32		
103	IDN	0.64	ECU	0.82	HKG	0.59			POL	0.16	ARG	0.01					BLR	0.31		

104	ARG	0.61	LSO	0.80	RUS	0.54	UKR	0.15	AZE	0.00	UGA	0.31
105	NPL	0.60	SWE	0.79	KAZ	0.53	SWZ	0.13	NAM	0.00	GTM	0.30
106	TWN	0.59	DNK	0.76	MEX	0.52	KOR	0.13			TJK	0.29
107	HUN	0.59	CHN	0.65	BGD	0.50	BGD	0.12			ZAF	0.27
108	MYS	0.57	MKD	0.62	THA	0.43	MDA	0.10			MAC	0.24
109	SYR	0.57	CAN	0.62	CHL	0.43	RWA	0.10			PHL	0.24
110	CHE	0.57	PRY	0.61	OMN	0.41	PHL	0.10			COL	0.23
111	MLI	0.56	ROU	0.60	ISL	0.40	OMN	0.07			MLI	0.23
112	ZAF	0.55	SWZ	0.56	BRA	0.39	ISR	0.07			PER	0.23
113	HND	0.54	HKG	0.54	ABW	0.36	KGZ	0.05			URY	0.22
114	PER	0.53	BRA	0.54	PNG	0.35	BLZ	0.05			KHM	0.20
115	BRA	0.53	IRL	0.53	VEN	0.32	KHM	0.05			CPV	0.19
116	CAN	0.52	YEM	0.50	TWN	0.31	NGA	0.04			SWZ	0.18
117	CIV	0.51	FIN	0.49	KOR	0.29	IDN	0.04			SYR	0.18
118	PHL	0.49	DEU	0.48	TUN	0.28	ABW	0.04			HND	0.17
119	GTM	0.47	TGO	0.48	MDG	0.24	KAZ	0.03			ARM	0.15
120	BIH	0.46	NOR	0.47	SDN	0.17	CZE	0.03			SYC	0.15
121	BDI	0.42	BEL	0.47	CHN	0.13	MDG	0.03			GEO	0.14
122	CHN	0.41	OMN	0.46	AGO	0.13	HUN	0.03			MNG	0.13
123	BHS	0.41	DJI	0.46	JPN	0.12	BLR	0.02			KAZ	0.12
124	AIA	0.39	KAZ	0.43	SLE	0.09	ECU	0.02			BHR	0.10
125	BWA	0.36	CHL	0.43	LBY	0.07	NAM	0.01			SLV	0.09
126	IRL	0.35	TWN	0.42	SWZ	0.04	VEN	0.00			DOM	0.09
127	OMN	0.34	RUS	0.41			MOZ	0.00			TUR	0.07
128	COG	0.34	NLD	0.40			BDI	0.00			YEM	0.05
129	BRB	0.31	SGP	0.38							JAM	0.05
130	NGA	0.31	SDN	0.34							BOL	0.05

131	DOM	0.29	JPN	0.33	VEN	0.04
132	SWZ	0.27	KOR	0.33	NAM	0.02
133	ABW	0.25	BDI	0.30	AGO	0.00
134	GUY	0.24	AZE	0.29	SDN	0.00
135	BGD	0.24	BLR	0.26	LSO	0.00
136	NAM	0.22	VEN	0.21		
137	PNG	0.20	CIV	0.19		
138	UGA	0.18	PAK	0.17		
139	MEX	0.17	LBY	0.16		
140	VEN	0.16	COG	0.12		
141	YEM	0.15	BGD	0.12		
142	LBY	0.09	AGO	0.07		
143	LSO	0.02	KWT	0.06		
144	AGO	0.02	TJK	0.03		
145	SDN	0.02	PNG	0.02		
146			NGA	0.01		

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	Transport	Travel	Communications	Construction	Insurance	Financial services	Computer and information	Royalties and license fees	Other services	business	Personal, cultural and recreation services									
1	SYC	15.16	MAC	46.99	GUY	28.30	BIH	13.89	GRD	58.79	LUX	195.39	IRL	41.65	GUY	15.32	ANT	15.05	MYS	18.59
2	SGP	12.60	AIA	34.97	LUX	23.26	EST	12.70	LUX	49.42	SWZ	15.64	LUX	27.10	PRY	9.38	LBN	14.91	HUN	17.94
3	PAN	9.42	ABW	33.16	MDA	15.97	WSM	11.40	BRB	43.42	VUT	11.47	ISR	14.87	LSO	4.44	SGP	13.38	MLT	13.98
4	HKG	9.38	LCA	26.75	CPV	15.36	CYP	8.99	IRL	39.86	BRB	10.79	IND	11.59	MDV	3.57	HKG	10.19	LUX	10.18
5	CPV	8.86	MDV	26.07	SYC	14.00	MKD	8.87	ATG	14.50	HKG	10.03	CRI	5.44	SWE	3.48	CYP	6.62	TON	7.96
6	DJI	8.72	ATG	25.70	GMB	13.07	KGZ	7.20	CHE	11.31	SGP	8.93	CYP	5.39	MLT	3.05	VCT	6.40	SYR	5.30
7	DNK	8.60	BHS	24.12	KWT	12.87	ANT	6.69	MSR	10.54	IRL	8.49	FIN	3.29	LUX	2.80	LUX	6.36	JAM	4.74
8	MNG	7.92	ANT	20.39	HND	12.76	MYS	5.78	SGP	8.92	CHE	7.95	SWE	3.21	HUN	2.70	MSR	6.10	TUR	4.63
9	ATG	7.72	BRB	20.01	JAM	12.27	BEL	4.79	LBN	8.91	GBR	5.39	BRB	3.15	GBR	2.22	IRL	6.03	KGZ	4.24
10	CYP	7.48	SYC	18.15	WSM	11.17	TUN	4.65	GUY	7.86	CYP	4.40	BEL	3.04	FIN	2.20	AUT	4.99	CYP	3.77
11	EST	7.44	LBN	17.33	BIH	9.50	EGY	4.62	MLT	7.49	PAN	3.60	NLD	2.52	NLD	2.20	DMA	4.69	ALB	3.32
12	LVA	6.25	KNA	17.09	LBN	8.86	SGP	4.52	BWA	7.30	MLT	3.28	GUY	2.43	DNK	2.16	BHS	4.19	IRL	3.21
13	VUT	6.06	VCT	16.57	MLT	8.84	PSE	4.17	AIA	7.18	GUY	3.11	MLT	2.30	USA	1.70	ABW	4.17	CAN	2.87
14	ISL	5.55	VUT	14.96	BRB	8.53	NLD	4.08	AUT	5.78	BEL	2.58	GBR	2.15	SGP	1.67	BRB	4.07	GBR	2.85
15	LUX	5.52	MSR	13.97	KEN	7.62	SVN	3.61	VCT	4.94	LVA	2.26	URY	2.12	ISR	1.58	TON	3.74	SGP	2.62
16	LTU	5.08	HRV	13.08	VUT	7.41	LUX	3.60	LCA	4.73	AUT	1.47	CZE	2.02	JPN	1.38	GRD	3.61	NZL	2.41
17	MUS	5.02	DMA	12.73	ALB	6.76	BGR	3.60	ANT	4.72	JAM	1.46	ARM	1.95	IRL	1.38	NLD	3.55	HKG	2.37
18	GRC	5.00	BLZ	12.56	DJI	6.61	MUS	3.56	SYC	4.62	TWN	1.24	ISL	1.82	BEL	1.30	BEL	3.49	BGR	2.30
19	MDA	4.66	WSM	12.53	MLI	6.47	MOZ	3.11	KNA	4.54	SWE	1.16	DNK	1.76	FRA	1.04	MLT	3.31	NLD	2.23
20	MLT	4.55	GRD	12.07	MAR	6.08	AUT	3.01	DMA	4.33	URY	1.12	SGP	1.74	CAN	0.90	SWE	3.25	BEL	2.13
21	NOR	4.28	JAM	10.87	SLV	5.81	TJK	2.90	BOL	3.48	TJK	1.01	UGA	1.52	DEU	0.90	SUR	3.24	MKD	1.90
22	UKR	4.27	MUS	9.46	BLZ	5.78	FIN	2.73	CYP	3.09	CZE	0.97	JAM	1.51	KOR	0.87	KNA	3.23	WSM	1.87

23	BHR	4.19	CYP	9.35	MNG	5.60	RUS	2.69	LKA	2.83	EST	0.94	HUN	1.48	HRV	0.68	FIN	3.21	NOR	1.85
24	GEO	4.04	KHM	9.26	KHM	5.54	DEU	2.66	TZA	2.73	CIV	0.90	CAN	1.48	NOR	0.63	MUS	3.14	PSE	1.83
25	EGY	3.84	MLT	9.18	ROU	5.49	POL	2.64	CAN	2.63	GEO	0.89	LKA	1.47	AGO	0.54	WSM	3.06	AUT	1.81
26	JAM	3.81	CPV	8.46	MKD	5.15	PNG	2.53	ARM	2.25	MAC	0.78	LVA	1.44	GEO	0.52	ISR	3.04	PRT	1.74
27	SUR	3.73	GMB	8.34	HRV	4.97	ISR	2.50	SWE	2.25	MUS	0.77	ROU	1.44	HKG	0.49	EST	2.96	DNK	1.68
28	BGR	3.68	DOM	8.26	NLD	4.81	TUR	2.27	HKG	2.16	LBN	0.75	MYS	1.42	EGY	0.48	CHE	2.89	ECU	1.64
29	ETH	3.37	JOR	7.74	PSE	4.81	ARM	2.02	PNG	2.14	ESP	0.70	SVN	1.39	JAM	0.47	PNG	2.81	ISL	1.59
30	BLR	3.33	ALB	6.87	BEL	4.77	MDA	1.87	GTM	2.09	USA	0.70	ESP	1.36	IDN	0.33	ATG	2.71	FRA	1.58
31	ANT	3.25	LUX	6.75	TJK	4.69	BLR	1.85	BEL	2.07	NOR	0.70	EST	1.36	KEN	0.33	TWN	2.57	ARM	1.52
32	TUN	3.24	BGR	6.18	NIC	4.63	PRT	1.85	PAN	2.04	MNG	0.68	NOR	1.30	KGZ	0.32	NGA	2.24	ESP	1.48
33	KEN	3.23	MNG	5.85	ARM	4.62	ROU	1.85	PRY	2.04	BIH	0.67	DEU	1.27	CYP	0.32	HUN	2.20	ARG	1.47
34	BEL	3.07	CRI	5.71	EST	4.56	CZE	1.73	HND	2.03	DEU	0.66	MKD	1.22	NZL	0.30	AIA	2.17	ROU	1.46
35	JOR	3.03	MAR	5.34	TGO	4.46	SWE	1.73	MYS	1.97	ETH	0.64	LCA	1.16	UGA	0.29	THA	2.11	SVN	1.29
36	CHL	2.95	SYR	5.33	BGR	4.39	HKG	1.64	MEX	1.87	ZAF	0.62	MUS	1.15	AUS	0.27	BLZ	2.07	EGY	1.27
37	AUT	2.87	GHA	5.08	NPL	4.27	IDN	1.60	CIV	1.83	KOR	0.59	HRV	0.94	TWN	0.24	PRY	2.05	HRV	1.16
38	MAC	2.82	TUN	5.05	PHL	4.26	FRA	1.59	SLV	1.78	TUN	0.57	SYR	0.92	ITA	0.23	GBR	1.99	CZE	1.13
39	NLD	2.80	TON	4.73	HKG	4.26	JPN	1.48	GEO	1.59	ALB	0.53	NZL	0.74	LVA	0.22	JOR	1.93	SWE	0.97
40	GMB	2.74	EST	4.71	CIV	4.07	HUN	1.46	WSM	1.56	UGA	0.52	HKG	0.63	AUT	0.21	DNK	1.92	AUS	0.92
41	SVN	2.74	BHR	4.70	MAC	3.86	BWA	1.45	CPV	1.51	IND	0.51	AUT	0.58	BRB	0.20	TGO	1.88	GRC	0.91
42	MSR	2.61	MYS	4.62	MYS	3.78	ESP	1.38	THA	1.47	ANT	0.50	ARG	0.54	MDA	0.19	KGZ	1.83	CHL	0.91
43	MYS	2.55	EGY	4.62	SYR	3.60	THA	1.35	PER	1.38	KHM	0.48	BGR	0.52	MKD	0.19	HRV	1.81	USA	0.88
44	KOR	2.49	TZA	4.35	PAN	3.40	BLZ	1.34	JAM	1.36	ABW	0.45	MDA	0.51	TJK	0.19	NOR	1.74	GEO	0.78
45	MDV	2.41	BWA	4.30	ANT	3.33	SLV	1.32	TUN	1.32	PRY	0.45	AUS	0.51	ESP	0.18	GUY	1.72	MEX	0.76
46	ISR	2.33	HKG	3.96	DOM	3.25	UKR	1.24	GBR	1.24	KGZ	0.44	PAN	0.49	ROU	0.17	ISL	1.66	ZAF	0.73
47	HRV	2.33	NAM	3.89	SWE	3.24	LTU	1.24	CHL	1.23	HUN	0.41	LTU	0.47	TUN	0.17	LCA	1.66	ITA	0.67
48	LKA	2.31	HND	3.78	BOL	3.12	ITA	1.17	MAC	1.18	NLD	0.41	PHL	0.39	SVN	0.17	MYS	1.58	DEU	0.65
49	URY	2.30	THA	3.71	LVA	3.06	IND	1.16	MAR	1.13	CAN	0.40	BLR	0.37	CHL	0.16	MDG	1.57	LTU	0.62

50	KWT	2.25	SVN	3.57	ETH	2.91	LKA	1.14	BIH	1.07	EGY	0.38	PRT	0.35	MDG	0.16	COG	1.45	MUS	0.59
51	TGO	2.21	AUT	3.49	EGY	2.87	BRB	1.10	NOR	1.07	IDN	0.37	CHN	0.34	EST	0.14	MAR	1.43	EST	0.59
52	BLZ	2.19	BIH	3.49	IDN	2.85	CHN	1.06	IND	1.07	PRT	0.32	FRA	0.34	RUS	0.12	SAU	1.42	KOR	0.53
53	THA	2.16	PAN	3.44	ABW	2.81	HRV	1.04	BGR	1.04	JPN	0.31	TUN	0.29	MOZ	0.12	AZE	1.42	COL	0.52
54	KNA	2.12	TUR	3.42	AUT	2.66	ETH	1.03	MNG	1.03	MDA	0.30	POL	0.28	PRT	0.12	LVA	1.35	LVA	0.50
55	CZE	2.12	SGP	3.36	SVN	2.63	GRC	0.94	LBY	1.03	ROU	0.30	CHL	0.27	CZE	0.11	IND	1.35	POL	0.48
56	KGZ	2.02	GRC	3.21	MUS	2.54	CIV	0.92	TWN	0.98	AUS	0.29	GRC	0.26	ARG	0.10	VUT	1.33	MDA	0.42
57	SWE	2.00	NZL	3.03	CHE	2.51	LVA	0.81	KWT	0.96	SYR	0.28	USA	0.26	UKR	0.09	SVN	1.28	RUS	0.38
58	VCT	2.00	GUY	2.90	PRT	2.50	NOR	0.80	GRC	0.86	SLE	0.28	RUS	0.24	MAR	0.08	MKD	1.28	AZE	0.35
59	TJK	1.99	ESP	2.90	BLR	2.50	DNK	0.73	ITA	0.85	TUR	0.27	ANT	0.23	GRC	0.08	DEU	1.27	KHM	0.35
60	GRD	1.93	SLE	2.87	HUN	2.48	AZE	0.66	TUR	0.83	HRV	0.25	DOM	0.23	MYS	0.07	CZE	1.26	PHL	0.32
61	ABW	1.91	NIC	2.87	GEO	2.48	KNA	0.65	GMB	0.80	NZL	0.22	IDN	0.22	POL	0.07	CRI	1.24	IDN	0.32
62	MKD	1.89	PRT	2.85	GBR	2.48	PHL	0.63	DNK	0.79	MLI	0.22	UKR	0.22	BOL	0.07	ITA	1.19	UKR	0.29
63	MDG	1.84	UGA	2.83	CZE	2.47	TGO	0.62	MKD	0.78	BOL	0.21	KGZ	0.21	BGR	0.07	ESP	1.18	IND	0.28
64	MAR	1.81	HUN	2.65	LTU	2.40	GTM	0.58	MDV	0.74	POL	0.20	WSM	0.20	ZAF	0.07	LTU	1.16	TWN	0.27
65	SLV	1.76	GEO	2.57	DNK	2.31	GBR	0.48	UGA	0.73	ITA	0.20	PAK	0.19	IND	0.06	BGR	1.14	BOL	0.23
66	DMA	1.70	CZE	2.57	NAM	2.20	SYR	0.47	DEU	0.70	BGR	0.19	ZAF	0.19	SLV	0.05	EGY	1.14	AGO	0.22
67	KHM	1.68	UKR	2.48	AZE	2.16	NZL	0.46	GHA	0.70	FRA	0.19	MNG	0.17	BRA	0.05	PAN	1.14	TUN	0.21
68	LBN	1.65	LTU	2.45	IRL	2.16	MDG	0.41	EST	0.70	BEN	0.19	ALB	0.16	PAK	0.04	PSE	1.08	BRB	0.15
69	LCA	1.56	URY	2.44	YEM	2.09	SWZ	0.38	NLD	0.67	ARM	0.18	ITA	0.15	BLR	0.04	CIV	1.01	BLR	0.12
70	ARM	1.54	MDA	2.44	TZA	2.09	MNG	0.36	AUS	0.67	SVN	0.18	TWN	0.13	THA	0.03	PRT	1.00	PNG	0.11
71	AZE	1.48	MDG	2.37	KGZ	2.09	MLI	0.34	ESP	0.66	LTU	0.18	BGD	0.12	ANT	0.03	CAN	0.95	BRA	0.11
72	POL	1.48	SLV	2.19	NZL	2.00	TWN	0.33	ALB	0.62	BRA	0.18	CIV	0.12	MEX	0.03	FRA	0.91	FIN	0.10
73	HUN	1.47	GTM	2.12	BWA	1.96	KHM	0.30	LVA	0.61	DOM	0.18	JPN	0.11	COL	0.03	MDA	0.90	ANT	0.10
74	KAZ	1.47	KEN	2.11	IND	1.96	ALB	0.30	USA	0.58	BLZ	0.18	EGY	0.10	LTU	0.03	KOR	0.89	MOZ	0.09
75	PRT	1.43	ZAF	2.07	UKR	1.89	USA	0.29	AZE	0.55	CPV	0.17	MOZ	0.10	CHN	0.02	MAC	0.85	CHN	0.09
76	TZA	1.41	CHE	2.05	PRY	1.83	ARG	0.23	MLI	0.54	MKD	0.16	TGO	0.08	KHM	0.02	TUN	0.84	MLI	0.09

77	TWN	1.40	KGZ	2.03	ECU	1.76	BGD	0.20	VUT	0.53	BWA	0.16	COL	0.07	PHL	0.02	ROU	0.80	TZA	0.08
78	BOL	1.25	SUR	1.97	PAK	1.76	CAN	0.15	EGY	0.53	DNK	0.16	PNG	0.07	ALB	0.02	IDN	0.76	MNG	0.08
79	ROU	1.23	PSE	1.97	RWA	1.66	ZAF	0.13	NIC	0.53	PHL	0.15	BWA	0.06	BWA	0.02	CHN	0.76	SWZ	0.06
80	NZL	1.22	ARM	1.96	FIN	1.61	KOR	0.13	HRV	0.53	RUS	0.14	BRA	0.05	MLI	0.01	UKR	0.73	VEN	0.05
81	ALB	1.22	HTI	1.88	CYP	1.58	PAK	0.13	KEN	0.52	MYS	0.13	PSE	0.04	PER	0.01	DJI	0.73	URY	0.04
82	GBR	1.22	MLI	1.85	UGA	1.56	AUS	0.12	PRT	0.51	CRI	0.13	KOR	0.03	URY	0.00	BWA	0.70	KEN	0.03
83	RWA	1.19	BEL	1.81	CAN	1.54	BOL	0.04	FRA	0.49	PNG	0.13	GTM	0.03	CRI	0.00	BLR	0.68	JPN	0.03
84	TON	1.18	SWZ	1.74	LKA	1.47	KAZ	0.03	SLE	0.49	KWT	0.12	KEN	0.03	BGD	0.00	CHL	0.66	BGD	0.03
85	ESP	1.18	ISL	1.74	COL	1.42	BEN	0.02	MUS	0.49	SLV	0.12	VEN	0.02	KAZ	0.00	MOZ	0.66	PAK	0.02
86	CRI	1.16	BOL	1.73	CRI	1.40	LBN	0.01	ISL	0.48	UKR	0.12	PRY	0.02	PSE	0.00	POL	0.65	CHE	0.02
87	DEU	1.13	IRL	1.63	FRA	1.31	BRA	0.01	NPL	0.48	FIN	0.12	ABW	0.02	SWZ	0.00	GHA	0.65	GTM	0.02
88	GHA	1.12	BEN	1.62	MOZ	1.28	ISL	0.01	ZAF	0.48	GRC	0.11	TJK	0.02	ETH	0.00	NPL	0.64	CRI	0.01
89	MOZ	1.10	RWA	1.60	THA	1.18			ETH	0.45	PAK	0.10	BOL	0.02	MUS	0.00	BRA	0.63	KAZ	0.01
90	FRA	1.09	PHL	1.57	GRC	1.12			SUR	0.42	GTM	0.10	MDG	0.02	TGO	0.00	ARG	0.63	LBN	0.00
91	TUR	1.09	AUS	1.56	ESP	1.05			SWZ	0.41	KAZ	0.09	TZA	0.01	AZE	0.00	LKA	0.58	CPV	0.00
92	COG	1.09	ISR	1.50	URY	1.04			TGO	0.40	CHL	0.08	KAZ	0.01			BEN	0.57		
93	IRL	1.08	LVA	1.45	KAZ	1.03			RUS	0.39	TGO	0.08	KHM	0.01			SWZ	0.57		
94	FIN	1.02	LSO	1.42	NOR	1.03			SVN	0.38	BGD	0.08	GEO	0.01			TZA	0.54		
95	PRY	0.99	POL	1.42	ITA	1.00			FIN	0.29	COL	0.07	ETH	0.00			NZL	0.54		
96	WSM	0.98	SWE	1.41	ISR	1.00			ABW	0.29	MOZ	0.06	AZE	0.00			SYC	0.54		
97	RUS	0.98	FRA	1.41	BEN	1.00			UKR	0.27	SDN	0.05	CPV	0.00			RUS	0.52		
98	CHE	0.97	DNK	1.40	DEU	0.98			ROU	0.26	TZA	0.04	SWZ	0.00			ALB	0.50		
99	AIA	0.93	ITA	1.37	GTM	0.98			BEN	0.26	BLR	0.03	NAM	0.00			TJK	0.48		
100	CIV	0.91	MOZ	1.33	OMN	0.95			URY	0.23	PER	0.02	BEN	0.00			KHM	0.47		
101	SWZ	0.85	LKA	1.22	ARG	0.92			NZL	0.23	CHN	0.02	LBN	0.00			BIH	0.47		
102	IDN	0.83	NPL	1.20	TUR	0.91			PAK	0.23	ISL	0.01					ETH	0.46		
103	PHL	0.80	NLD	1.13	POL	0.82			CHN	0.22	ARG	0.01					GRC	0.46		

104	OMN	0.80	PER	1.13	PNG	0.81	POL	0.20	AZE	0.00	USA	0.45
105	BWA	0.78	IDN	1.10	ZAF	0.77	KOR	0.20	NAM	0.00	JPN	0.45
106	BHS	0.78	OMN	1.07	TWN	0.74	MDA	0.19			PHL	0.40
107	GUY	0.76	MEX	1.05	PER	0.70	JPN	0.18			MNG	0.35
108	ECU	0.75	ARG	1.02	RUS	0.69	PHL	0.16			AUS	0.35
109	SYR	0.72	ETH	1.01	AUS	0.68	OMN	0.16			BHR	0.33
110	CAN	0.70	MKD	0.99	CHL	0.64	BRA	0.16			BDI	0.32
111	ITA	0.69	TWN	0.98	MEX	0.57	KHM	0.12			ZAF	0.26
112	AUS	0.69	GBR	0.94	TUN	0.52	ISR	0.11			BGD	0.24
113	PAK	0.68	ECU	0.91	VEN	0.47	BLZ	0.08			KAZ	0.23
114	BRB	0.68	CHN	0.88	KOR	0.45	CZE	0.08			URY	0.23
115	JPN	0.64	KAZ	0.84	ISL	0.45	KGZ	0.08			SYR	0.23
116	SLE	0.63	CAN	0.83	HTI	0.44	BGD	0.07			MLI	0.22
117	BEN	0.62	YEM	0.78	USA	0.36	NGA	0.07			CPV	0.20
118	IND	0.58	NOR	0.77	AGO	0.34	HUN	0.06			PER	0.20
119	HND	0.57	FIN	0.76	MDG	0.32	KAZ	0.06			GTM	0.19
120	ARG	0.57	ROU	0.73	BGD	0.30	IDN	0.05			PAK	0.19
121	BIH	0.57	DEU	0.71	BRA	0.24	RWA	0.04			HND	0.18
122	NIC	0.56	PRY	0.71	LBY	0.21	BLR	0.04			UGA	0.17
123	CHN	0.56	DJI	0.69	CHN	0.17	MDG	0.04			COL	0.16
124	NGA	0.53	COL	0.68	SDN	0.12	ECU	0.02			ARM	0.14
125	MLI	0.53	TGO	0.66	SWZ	0.12	NAM	0.02			GEO	0.13
126	ZAF	0.52	CHL	0.64	JPN	0.07	VEN	0.01			DOM	0.11
127	COL	0.52	IND	0.63	SLE	0.05	BDI	0.00			SLV	0.09
128	PER	0.46	BLR	0.57			MOZ	0.00			YEM	0.08
129	PNG	0.45	USA	0.56							JAM	0.07
130	USA	0.41	RUS	0.52							TUR	0.07

131	DOM	0.36	KOR	0.50		VEN	0.06
132	NPL	0.36	LBY	0.44		BOL	0.06
133	BRA	0.33	AZE	0.40		NAM	0.03
134	NAM	0.31	COG	0.40		AGO	0.01
135	GTM	0.30	CIV	0.34		SDN	0.00
136	LBY	0.25	BRA	0.33		LSO	0.00
137	YEM	0.24	VEN	0.31			
138	VEN	0.23	SDN	0.24			
139	MEX	0.19	JPN	0.19			
140	BDI	0.18	AGO	0.18			
141	BGD	0.14	KWT	0.14			
142	PSE	0.13	BDI	0.13			
143	UGA	0.10	PAK	0.10			
144	AGO	0.05	BGD	0.07			
145	LSO	0.03	TJK	0.05			
146	SDN	0.01	PNG	0.04			
147			NGA	0.01			
