

THE REGIONAL DIMENSION OF UK MULTINATIONALS

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Abstract

Within the literature of international business there is a well-established branch that examines the relationship between the multinationality and performance of multinational enterprises (MNEs). It has been found that as firms expand internationally (for example, as the ratio of foreign-to-total sales increases) there is a positive effect on firm performance (usually measured by return on total assets, ROTA). We advance this literature in three ways: (i) we focus on the recent performance of UK MNEs, in terms of ROTA, but also in terms of their return on foreign assets (ROFA); (ii) we examine the ratio of European (E) to total (T) sales of these UK MNEs. This introduces intra-regional sales (E/T) as an explanatory variable affecting performance for the first time; (iii) we test the relationship between (E/T) and both ROFA and ROTA, and find a significant non-linear fit which we discuss. We conclude that the UK MNEs operate on a regional basis, rather than a global one.

Keywords: intra-regional sales; multinational enterprises; regional strategy; globalization

Table 1
The World's Largest 500 Firms by Country

Country	No. of Firms	Average Revenues (USD\$bn)	Average intra-regional sales (%)*
United States	169	30.3	77.3
Japan	66	28.9	74.7
Germany	29	37.3	68.1
France	27	27.2	64.8
Britain	27	25.3	64.5
Canada	16	13.5	74.1
Switzerland	8	34.7	49.6
Italy	5	38.7	83.4
Australia	5	13.6	71.4
Sweden	5	16.4	54.3
Netherlands	5	42.1	39.1
European bi-national (*)	3	73.9	47.9
Norway	2	21.6	83.0
South Korea	2	26.3	71.2
Belgium	2	18.8	58.4
Finland	2	20.0	55.1
Spain	2	29.1	50.3
Taiwan	1	11.6	100.0
Luxembourg	1	13.0	95.0
Denmark	1	10.9	94.3
Brazil	1	24.5	88.0
Singapore	1	13.1	22.4
TOTAL	380	29.2	71.9

Data are for 2001.

Numbers might not add up due to rounding.

Average intra-regional sales are by the firm's size according to weighted revenues.

There are 120 firms in the world's largest 500 which report no data in regional sales

For further information on the data and definitions used please see the Chapter 2 in Alan M. Rugman's *The Regional Multinationals* (Cambridge University Press 2005).

Table 2
The Regional Nature of UK Multinational Enterprises

500 Rank	Company	Revenues in bn US\$	North America % of total	Europe % of total	Asia Pacific % of total
<u>Bi-Regional</u>					
4	BP	174.2	48.1	36.3	na
140	GlaxoSmithKline	29.5	49.2	28.6	na
262	Diageo	18.6	49.9	31.8	7.7
390	BAE Systems	13.0	32.3	38.1	2.7
<u>Host-Region Oriented</u>					
301	AstraZeneca	16.5	52.8	32.0	5.2
487	Wolseley	10.4	66.3	28.7	na
<u>Home-Region Oriented</u>					
114	Tesco	33.9	-	93.6	6.4
115	Royal Bank of Scotland	33.8	12.0	81.0	na
123	Vodafone	32.7	0.1	93.1	4.8
139	BT (q)	30.0	8.3	87.0	4.7
150	HBOS	27.8	na	92.1	na
154	Barclays	27.6	6.0	88.0	na
184	J. Sainsbury	24.6	16.7	83.3	-
206	Lloyds TSB Group	22.8	na	81.2	na
222	Royal & Sun Alliance	21.5	27.1	64.8	na
270	Centrica	18.2	6.2	93.8	na
280	Abbey National	17.8	0.5	99.5	-
314	Kingfisher (q)	16.1	0.8	98.3	0.6
409	Compass Group	12.6	32.4	67.6	-
418	Safeway	12.3	na	100.0	na
428	British Airways	11.9	18.6	64.8	na
439	Marks & Spencer	11.6	na	85.1	na
452	Corus Group	11.1	11.5	82.7	5.8
453	Old Mutual (q)	11.1	na	na	na
478	Alliance Unichem	10.5	-	100.0	-
<u>Insufficient Information</u>					
271	British American Tobacco (q)	18.1	na	31.3	9.9
341	Anglo American	14.8	18.9	46.1	17.8
Weighted Average		25.3			

Data are for 2001.

For further information on the data and definitions used please see the Appendix and company notes in Alan M. Rugman's *The Regional Multinationals* (Cambridge University Press 2005).

Table 3
The Regional Nature of British, European, and World Firms

Industry	Britain		Europe		World	
	No. of Firms	Average intra-regional Sales	No. of Firms	Average intra-regional Sales	No. of Firms	Average intra-regional Sales
<u>Manufacturing</u>						
Aerospace and Defense	1	38.1	2	42.7	11	66.3
Chemicals and Pharmaceuticals	2	29.8	7	37.6	18	56.5
Computer, Office & Electronics	0	na	6	49.4	36	56.2
Construction, Building Materials and Glass	0	na	5	60.6	11	73.5
Energy, Petroleum & Refining	1	36.3	7	53.8	31	66.0
Food, Drug and Tobacco	2	31.6	5	36.4	14	55.0
Motor Vehicle and Parts	0	na	8	54.4	29	60.6
Natural Resource Manufacturing	2	61.8	6	71.8	17	77.6
Other Manufacturing	0	na	5	54.0	13	57.8
<u>Services</u>						
Banks	5	87.4	23	75.4	40	78.3
Entertainment, Printing & Publishing	0	na	3	67.2	9	73.1
Merchandisers	6	92.4	15	75.5	63	87.9
Telecommunications & Utilities	3	91.0	11	82.8	27	87.6
Transportation Services	1	64.8	4	73.9	13	83.7
Other Financial Services	2	74.5	8	62.9	27	71.9
Other Services	2	50.0	4	51.5	21	75.8
Total	27	64.5	119	62.8	380	71.9

Data are for 2001.

Numbers might not add up due to rounding.

Average intra-regional sales are by the firm's size according to weighted revenues.

For further information on the data and definitions used please see the Appendix and company notes in Alan M. Rugman's *The Regional Multinationals* (Cambridge University Press 2005).

Table 4
Regional Sales and the Performance of British Companies

<i>Dependent Variable</i>	<i>Return on Foreign Assets (ROFA)</i>			<i>Return on Total Assets (ROTA)</i>		
<i>Independent Variables</i>	S1	S2	S3	S4	S5	S6
<i>European/Total Sales</i>	-0.03*** (0.000)	0.095*** (0.000)	0.113 (0.134)	0.012*** (0.000)	0.028*** (0.000)	-0.147*** (0.000)
<i>European/Total Sales²</i>		-0.001*** (0.000)	-0.001 (0.361)		0.0003*** (0.000)	0.003*** (0.000)
<i>European/Total Sales³</i>			-0.000002 (0.834)			-0.00002*** (0.000)
<i>Total Revenues (log)</i>	0.682*** (0.000)	0.560*** (0.000)	0.491*** (0.000)	0.716*** (0.000)	0.729*** (0.000)	0.633*** (0.000)
<i>Industry Return on Total Assets (World)</i>	0.332*** (0.000)	0.326*** (0.000)	0.288*** (0.000)	0.320*** (0.000)	0.347*** (0.000)	0.302*** (0.000)
<i>Time Trend</i>	-1.293*** (0.000)	-1.149*** (0.000)	-1.124*** (0.000)	-0.950*** (0.000)	-1.058*** (0.000)	-0.929*** (0.000)
<i>Constant Term</i>	20.126*** (0.000)	17.002*** (0.000)	16.193*** (0.000)	3.804*** (0.000)	4.785*** (0.000)	15.607*** (0.000)
<i>Adjusted R-Squared</i>	0.682	0.689	0.643	0.995	0.926	0.754
<i>F-Statistics</i>	264***	5333***	147***	23061***	1247***	249***
<i>Number of observations</i>	495	495	495	495	495	495

* p-values in parentheses

Figure 1: Foreign Performance and Foreign Presence

		Foreign Performance (ROFA)	
		Low	High
International Presence (F/T)	High	1 Aviva Royal Sun Alliance BAE HSBC Corus Prudential BP Kingfisher Shell Vodafone Old Mutual	3 Unilever BAT Alliance Unichem Compass Group Diageo GlaxoSmithKline AstraZeneca
	Low	2 Abbey National HBOS Lloyds TSB BT Hilton Tesco Barclay's Royal Bank of Scotland Anglo American Sainsbury's National Grid	4 Marks & Spencer Centrica GUS

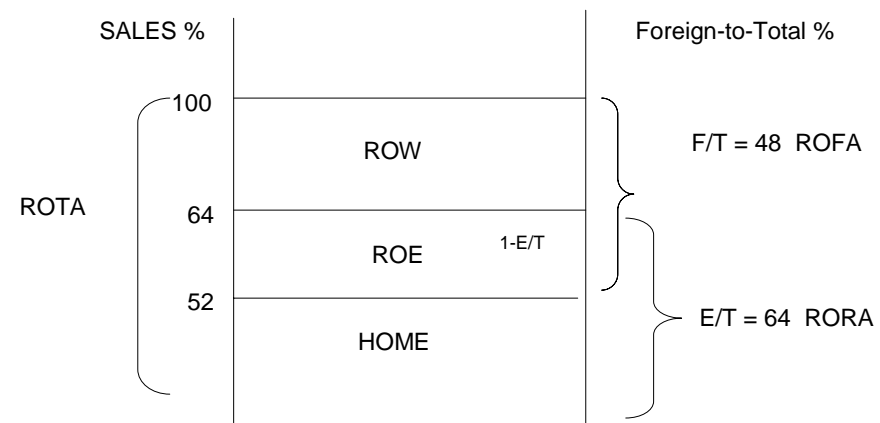
Note: Several firms are excluded, due to unavailability of data, see notes to Tables 1 and 2

High and Low Foreign Performance differentiated by 2003 ROFA average of 16.11 for UK F500

High and Low International Presence differentiated by 50% F/T Revenues.

Figure A

The Distinction Between (F/T), (E/T) and Home Sales



Note: For the UK firms, their mean home sales = 52%; their mean (F/T) = 48%; their mean (E/T) = 64%

ROE means "rest of Europe": ROW means "rest of world"

TABLE 5
Description of Variables

Coding	Variable Description
ROFA	Return on Foreign Assets, %
ROTA	Return on Total Assets, %
ET	Average (E/T), %
TR	Total Revenues, USD bn
ROTAW	Average Return on Total Assets, World, %
Y	Time Trend

TABLE 6
Descriptive Statistics

	<i>ROFA, %</i>	<i>ROTA, %</i>	<i>ET, %</i>	<i>TR, USD bn</i>	<i>Log(TR)</i>	<i>ROTAW,%</i>
<i>Mean</i>	18.81	3.41	63.55	4.19	0.31	1.49
<i>Median</i>	14.49	4.61	65.87	1.77	0.57	1.85
<i>Maximum</i>	147.46	32.18	100.00	61.69	4.12	15.71
<i>Minimum</i>	-95.71	-76.99	0.00	0.00	-8.00	-33.65
<i>Std. Dev.</i>	29.87	10.04	28.11	7.25	1.78	4.57
<i>Observations</i>	495	495	495	495	495	495
<i>Cross sections</i>	210	210	210	210	210	210

