## FEATURE ARTICLE

## AUSTRALIAN OUTWARD FOREIGN AFFILIATES TRADE, 2002-03, EXPERIMENTAL RESULTS

INTRODUCTION

This article presents preliminary results<sup>1</sup> from the Survey of Outward Foreign Affiliates Trade (SOFAT), which was conducted by the ABS for the first time in respect of 2002-03<sup>2</sup>. The survey collected information on the industry, sales<sup>3</sup> and employment of foreign affiliates<sup>4</sup> of Australian resident enterprises. This information has been linked back to information on the Australian parent to provide a comprehensive study of the activities of Australian multinational enterprises (MNEs). More detailed results from the survey will be released in October 2004.

BACKGROUND

The ABS is currently developing a range of statistics relating to the activities of MNEs, which includes inward and outward foreign affiliates trade in services (FATS) statistics. The concepts and definitions for FATS statistics are articulated in the Manual on Statistics of International Trade in Services (MSITS), published in 2002. Only a few countries collect these statistics at present, including the USA, Japan, Canada and a limited number of European countries.

The ABS has compiled conventional economic indicators for foreign trade and foreign direct investment for many years. While these statistics provide some structural information, the ABS has not regularly compiled statistics on the economic activity of MNEs. In recent years, the ABS has embarked on a series of case studies to test the feasibility of synthesising activity data and indicators of technology dissemination for MNEs, by combining data from a number of sources. Early studies examined new capital expenditure by foreign-owned MNEs, the economic activity of foreign-owned MNEs in the mining and information technology industries, and research and development activities of foreign-owned MNEs in Australia.

The most recent study covered the economic activities of identified majority foreign-owned businesses in the Australian economy, covering employing private sector businesses in all industries except agriculture, forestry and fishing. That study provided a range of globalisation indicators consistent with the framework in the draft Manual on Economic Globalisation Indicators (MEGI). The study also provided some of the required indicators for inward FATS, specifically: number of businesses; employment; value added; gross fixed capital formation; gross operating surplus; and total assets. However, like the previous studies, it was unable to identify Australian-owned MNEs.

SOFAT was designed to identify all Australian resident enterprise groups with affiliates abroad, regardless of ownership, and measure the economic activity of their foreign affiliates. The survey was designed to obtain the data required for the compilation of the full range of economic variables for outward FATS as defined in MSITS and the relevant

<sup>1</sup> Results should be treated as experimental only. Please refer to the Explanatory Notes for information on the methodology used to develop these estimates.

<sup>2</sup> The reference period for these data was nominally the 2002-03 financial year. Please refer to the Explanatory Notes for further details.

<sup>3</sup> Sales revenue included both revenue from sales to external customers and revenue from sales to companies within the enterprise group. At an aggregate level, inter-company sales accounted for approximately \$5.8b or 4% of total sales revenue.

<sup>4</sup> For the purpose of foreign affiliates trade statistics, foreign affiliates refers to those enterprises that are majority owned by the Australian resident enterprise group. Please refer to the Explanatory Notes for further details.

BACKGROUND continued

globalisation indicators as recommended in MEGI. In addition, the survey collected data about foreign affiliates trade in goods.

SUMMARY RESULTS

TABLE 1. SUMMARY DATA - AUSTRALIAN OUTWARD FOREIGN AFFILIATES TRADE, 2002-03

	Number of Australian enterprise groups	Employment by Australian enterprise groups	Number of foreign affiliates	Employment by foreign affiliates	Revenue from sales of goods and services by foreign affiliates
	no.	no.	no.	no.	\$m
Australian owned	401	938 481	3 450	260 104	126 073
Foreign owned	240	193 836	562	61 820	16 247
Total	641	1 132 317	4 012	321 924	142 321

For the 2002-03 financial year, 641 Australian resident enterprise groups had foreign affiliates that traded in goods and/or services. Of those Australian enterprise groups, 401 (or 63%) were Australian owned and 240 (or 37%) were foreign owned, with the number of employees in Australia at 938,481 and 193,836 respectively. These 641 Australian resident enterprise groups had 4,012 foreign affiliates, which employed 321,924 people and generated sales revenue of \$142.3b.

When Australian resident enterprise groups with a commercial presence abroad are viewed from an ownership perspective, Australian-owned enterprise groups dominated, with more than an 80% contribution to all key measures of Australian outward foreign affiliates trade activity.

Foreign affiliates of Australian-owned enterprise groups employed 260,104 people (81% of total employees of foreign affiliates) and generated sales revenue of \$126.1b (89% of total sales revenue generated by foreign affiliates), compared to 61,820 employees (19%) and sales revenue of \$16.2b (11%) for foreign affiliates of foreign-owned Australian resident enterprise groups.

TABLE 2. SUMMARY REGIONAL DATA - AUSTRALIAN OUTWARD FOREIGN AFFILIATES TRADE, 2002-03, BY REGION

	EUROPE(a)			ASIA-PACIF	FIC		AMERICAS	AMERICAS				
		1	Revenue from sales of		f	Revenue rom sales of	Revenue from sales of					
			goods and			goods and	goods and					
	Number of	Employment	services	Number of	Employment	services	Number of	Employment	services			
	foreign	by foreign	by foreign	foreign	by foreign	by foreign	foreign	by foreign	by foreign			
	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates			
	no.	no.	\$m	no.	no.	\$m	no.	no.	\$m			
Australian owned	940	63 182	30 316	1 234	131 391	42 844	1 276	65 531	52 914			
Foreign owned	36	1 746	919	474	54 848	13 111	52	5 226	2 217			
Total	976	64 928	31 234	1 708	186 239	55 955	1 328	70 757	55 131			

<sup>(</sup>a) Includes Africa. Refer to the Explanatory Notes for further details.

SUMMARY RESULTS continued

Table 2 provides a regional perspective of Australian outward foreign affiliate trade activity, i.e. the geographic region where foreign affiliates were domiciled. Australian enterprise groups had 1,708 foreign affiliates operating in the Asia-Pacific region, with 186,239 employees and sales revenue of \$56.0b. There were 1,328 foreign affiliates operating in the Americas, with 70,757 employees and sales revenue of \$55.1b. There were fewer foreign affiliates in Europe (976) with 64,928 employees and sales revenue of \$31.2b.

There was a disproportionate presence in Europe and the Americas by Australian-owned enterprise groups when compared to Australian resident foreign-owned enterprise groups, with more than a 90% contribution to all key measures of Australian outward foreign affiliates trade activity for both regions. In the Asia-Pacific region the former contributed around 70% or more.

Australian-owned enterprise groups had 940 foreign affiliates operating in Europe (96% of the total number of foreign affiliates in the region), 63,182 employees (97%) and generated sales revenue of \$30.3b (97%).

Similarly in the Americas, Australian-owned enterprise groups had 1,276 foreign affiliates (96% of the total number of foreign affiliates in the region), 65,531 employees (93%) and sales revenue of \$52.9b (96%).

In the Asia-Pacific region, Australian-owned enterprise groups had 1,234 foreign affiliates (72% of the total number of foreign affiliates in the region), 131,391 employees (71%) and sales revenue of \$42.8b (77%).

Table 3 shows the number and employment characteristics of Australian enterprise groups and their foreign affiliates, classified by the ownership and industry of the Australian enterprise group.

An industry dissection of Australian resident enterprise groups with foreign affiliates abroad, as shown in table 3, indicates manufacturing was the dominant industry with 183 Australian resident enterprise groups (29% of the total number of Australian resident enterprise groups with foreign affiliates), followed by property and business services with 128 enterprise groups (20%) and wholesale trade with 126 enterprise groups (20%). These three industries also predominated when viewed from an ownership perspective, accounting for 65% of Australian-owned enterprise groups and 74% of foreign-owned enterprise groups.

While manufacturing was the dominant industry in terms of the number of enterprise groups in Australia, retail trade had the most employees in Australia with 330,183, followed by manufacturing (207,840) and finance and insurance (151,083). These three industries accounted for 61% of total employment by Australian resident enterprise groups.

The predominance of manufacturing was also reflected in the number of foreign affiliates and employment by foreign affiliates, with manufacturing enterprise groups in Australia having 2,097 foreign affiliates (52% of the total number of foreign affiliates) employing 130,176 people (40% of total foreign affiliate employment). Manufacturing was the dominant sector for both Australian and foreign-owned Australian resident enterprises with foreign affiliate trade activity.

ANALYSIS

TABLE 3. CHARACTERISTICS OF AUSTRALIAN ENTERPRISE GROUPS AND THEIR FOREIGN AFFILIATES, BY OWNERSHIP AND INDUSTRY, 2002-03

• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • •
	Number of Australian enterprise groups	Number of foreign affiliates	Employment by Australian enterprise groups	Employment by foreign affiliates	Total employment	Employment by foreign affiliates as % of total employment
Industry of Australian enterprise group	no.	no.	no.	no.	no.	%
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	AUSTRA	ALIAN OWNED	• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •
Agriculture, forestry and fishing	8	19	7 916	1 415	9 331	15
Mining	34	139	41 933	8 799	50 732	17
Manufacturing	109	1 851	145 955	105 035	250 990	42
Electricity, gas and water supply	6	20	8 476	983	9 459	10
Construction	9	103	12 558	15 854	28 412	56
Wholesale trade	52	277	23 734	33 784	57 518	59
Retail trade	13	26	322 859	4 461	327 320	1
Transport and storage	14	166	60 374	14 123	74 497	19
Finance and insurance	24	388	132 197	47 380	179 577	26
Property and business services	99	257	43 575	11 381	54 956	21
Health and community services	5	80	38 656	5 229	43 885	12
Other(a)	30	124	100 248	11 660	111 908	10
Total	401	3 450	938 481	260 104	1 198 585	22
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •		• • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • •
		FORE	IGN OWNED			
Agriculture, forestry and fishing	_	_	_	_	_	_
Mining	6	24	5 353	5 662	11 015	51
Manufacturing	74	246	61 885	25 141	87 026	29
Electricity, gas and water supply	_		_		_	_
Construction	10	54	20 190	7 745	27 935	28
Wholesale trade	74	82	33 497	8 265	41 762	20
Retail trade	6	10	7 324	946	8 270	11
Transport and storage	12	14	6 301	1 780	8 081	22
Finance and insurance	23	73	18 886	1 607	20 493	8
Property and business services	29	50	36 241	10 081	46 322	22
Health and community services	_	_	_	_	_	_
Other(a)	6	9	4 159	593	4 752	12
Total	240	562	193 836	61 820	255 656	24
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • • • • •		• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • •
			TOTAL			
Agriculture, forestry and fishing	8	19	7 916	1 415	9 331	15
Mining	40	163	47 286	14 461	61 747	23
Manufacturing	183	2 097	207 840	130 176	338 016	39
Electricity, gas and water supply	6	20	8 476	983	9 459	10
Construction	18	157	32 748	23 599	56 347	42
Wholesale trade	126	359	57 231	42 049	99 280	42
Retail trade	19	36	330 183	5 407	335 590	2
Transport and storage	26	180	66 675	15 903	82 578	19
Finance and insurance	47	461	151 083	48 987	200 070	24
Property and business services	128	307	79 816	21 462	101 278	21
Education	10	9	20 778	188	20 966	1
Health and community services	5	80	38 656	5 229	43 885	12
Cultural and recreational services	18	51	23 505	1 224	24 729	5
Other(b)	8	73	60 124	10 841	70 965	15
Total	641	4 012	1 132 317	321 924	1 454 241	22

nil or rounded to zero (including null cells)

 <sup>(</sup>a) Includes: Accommodation, cafes and restaurants; Communication services; Education; Cultural and recreational services; and Personal and other services.

 <sup>(</sup>b) Includes: Accommodation, cafes and restaurants; Communication
 services; and Personal and other services.

Manufacturing and retail trade had the most employees in terms of total employment<sup>1</sup> for a particular industry, with 338,016 and 335,590 employees respectively. A comparison of employment by foreign affiliates as a percentage of total employment for each industry, reveals that construction and wholesale trade were the most significant, with foreign affiliates accounting for 42% of total employment in both these industries, followed by manufacturing with 39%. This percentage value was significantly higher than the total all-industry percentage, where foreign affiliates accounted for 22% of total employment.

Employment by foreign affiliates of Australian-owned enterprise groups accounted for 22% of total employment by Australian-owned enterprise groups and their foreign affiliates. Wholesale trade and construction were the only industries for Australian-owned enterprise groups where employment by foreign affiliates was greater than employment by the Australian parent, with foreign affiliates accounting for 59% and 56% for their respective industries' total employment. Foreign affiliates of Australian-owned enterprise groups in the manufacturing industry had the most employees (105,035), with 42% of the total employment for this industry.

Foreign affiliates of foreign-owned Australian resident enterprise groups accounted for 24% of total employment by foreign-owned Australian resident enterprise groups and their foreign affiliates. Mining was the only industry for foreign-owned Australian resident enterprise groups where employment by foreign affiliates was greater than employment by the parent Australian enterprises, with foreign affiliates contributing 51% of total employment for this industry.

Table 4 cross-classifies the industry of the foreign affiliate by the industry of the Australian resident enterprise group. There appears to be a reasonable correlation between the industry of the parent Australian resident enterprise group and the industry of its foreign affiliates. By looking at the diagonal (top left to bottom right of table 4) it is possible to observe the relationship between the industry of the foreign affiliate and the industry of the Australian enterprise group. More than half of the foreign affiliates were in the same industry as their Australian parent, except for construction and transport and storage. Relationships were also evident between certain industries, for example, manufacturing parents with wholesale trade foreign affiliates, and construction parents and property and business services foreign affiliates.

<sup>1</sup> Employment by the Australian enterprise groups and employment by their foreign affiliates.

## TABLE 4. NUMBER OF FOREIGN AFFILIATES, BY INDUSTRY, 2002-03

	Number			FOREIGN													
Industry of Australian enterprise	affiliates	Α	В	С	D	Ε	F	G	Н	I	J	К	L	N	0	Р	Q
group(a)	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.	no.
Α	19	10	_	5	_	_	_	_	_	_	_	_	4	_	_	_	_
В	163	_	115	8	_	_	14	_	_	_	2	11	13	_	_	_	_
С	2 097	_	4	1 134	1	2	228	19	30	5	4	4	27	_	2	635	2
D	20	_	_	_	14	_	_	3	_	3	_	_	_	_	_	_	_
E	157	_	9	1	_	71	2	_	_	_	_	1	73	_	_	_	_
F	359	1	_	81	_	2	195	57	_	7	1	3	11	_	_	_	1
G	36	_	_	_	_	_	1	27	4	_	_	_	4	_	_	_	_
I	180	_	_	14	_	_	10	_	_	83	_	2	63	_	_	_	8
K	461	_	_	5	_	_	1	_	_	_	_	427	27	_	_	1	_
L	307	_	2	16	_	1	22	13	1	4	3	10	235	_	_	_	_
N	9	_	_	_	_	_	_	_	_	_	_	_	2	7	_	_	_
0	80	_	_	1	_	_	29	_	_	_	_	4	_	_	46	_	_
Р	51	_	_	14	_	_	_	_	_	_	_	_	4	_	_	33	_
Other(b)	73	_	_	2	_	_	18	_	8	_	34	1	3	_	_	_	7
Total	4 012	11	130	1 281	15	76	520	119	43	102	44	463	466	7	48	669	18

## TABLE 4A. REFERENCE TABLE

ANZSIC Industry division code	Industry
A	Agriculture, forestry and fishing
В	Mining
С	Manufacturing
D	Electricity, gas and water supply
E	Construction
F	Wholesale trade
G	Retail trade
Н	Accommodation, cafes and restaurants
1	Transport and storage
J	Communication services
K	Finance and insurance
L	Property and business services
N	Education
0	Health and community services
Р	Cultural and recreational services
Q	Personal and other services

Table 4A for more details.

nil or rounded to zero (including null cells)

(b) Includes: Accommodation, cafes and restaurants (H); Communication services (J); and Personal and other services (Q).

TABLE 5. CHARACTERISTICS OF FOREIGN AFFILIATES, BY OWNERSHIP AND INDUSTRY, 2002-03

	Number of foreign affiliates	Employment by foreign affiliates	Revenue from sales of good and services by foreign affiliate
Industry of foreign affiliate	no.	no.	\$r
			• • • • • • • • • • • • • • • • • •
	AUSTRALIAN	OWNED	
Mining	112	7 346	3 47
Manufacturing	1 116	96 209	32 94
Construction	26	3 321	53
Wholesale trade	386	15 275	17 21
Retail trade	92	19 481	8 92
ransport and storage	87	6 421	1 13
inance and insurance	381	49 548	23 96
roperty and business services	409	30 351	13 74
lealth and community services	48	4 683	32
Other(a)(b)	793	27 469	23 81
otal	3 450	260 104	126 07
• • • • • • • • • • • • • • • • • • • •	FOREIGN C		• • • • • • • • • • • • • • • •
Mining	18	5 684	1 69
Manufacturing	165	24 159	3 75
Construction	50	7 681	1 69
Vholesale trade	134	8 311	4 97
Retail trade	27	2 740	78
ransport and storage	15	1 060	21
inance and insurance	82	1 859	2 28
roperty and business services	57	9 927	64
lealth and community services	_	_	-
Other(a)(b)	14	399	20
otal	562	61 820	16 24
• • • • • • • • • • • • • • • • • • • •	ТОТАІ		• • • • • • • • • • • • • • • •
grigulture forestry and fishing			20
griculture, forestry and fishing	11 130	688 13 030	30. 5 17
Aining Aanufacturing	1 281	120 368	36 69
Electricity, gas and water supply	1 281	528	36 69
Construction	76	11 002	2 23
Vholesale trade	520	23 586	22 18
Molesale trade Retail trade	520 119	23 586	22 18 9 70
accommodation, cafes and restaurants	43	1 607	9 70
•	102	7 481	1 34
ransport and storage	44		1 34
communication services inance and insurance		2 501	
	463 466	51 407 40 278	26 25 14 28
roperty and business services ducation		40 278	14 38
	7	178	1
lealth and community services	48	4 683	32
fultural and represtings conjugat	669	20 506	20 65
	18	1 860	16
Cultural and recreational services Personal and other services  Total	18 <b>4 012</b>	1 860 <b>321 924</b>	16 <b>142 32</b>

water supply; Accommodation, cafes and restaurants; Communication services; Education; Cultural and recreational services; and Personal and other services.

nil or rounded to zero (including null cells)
 (a) Includes: Agriculture, forestry and fishing; Electricity, gas and
 Naturalian Assembled Assembled Septembers
 Naturalian Services industry is not available separately. recreational services industry is not available separately.

Table 5 shows the number of foreign affiliates, employment and revenue from the sale of goods and services by foreign affiliates, classified by ownership and the industry of the foreign affiliate.

Foreign affiliates in the manufacturing industry generated the most revenue, with sales of \$36.7b, followed by finance and insurance (\$26.3b), wholesale trade (\$22.2b) and cultural and recreational services (\$20.7b). Collectively these four industries accounted for 74% of total revenue. Manufacturing and finance and insurance were also the top two employing industries, with 120,368 and 51,407 employees respectively, followed by property and business services; and wholesale trade, with 40,278 and 23,586 employees respectively.

Foreign affiliates of Australian-owned enterprise groups generated nearly 8 times the revenue of foreign affiliates of foreign-owned Australian resident enterprise groups, so it was not unexpected that the same industries that drove total revenue also drove revenue for foreign affiliates of Australian-owned enterprise groups. Again, manufacturing (\$32.9b) and finance and insurance (\$24.0b) were the top contributors, followed by wholesale trade (\$17.2b) and property and business services (\$13.7b). Similarly, manufacturing and finance and insurance were the largest employing industries, with 96,209 and 49,548 employees respectively.

Only five industries in which foreign affiliates of foreign-owned Australian resident enterprise groups operated generated more than one billion dollars in sales revenue, compared to seven industries for foreign affiliates of Australian-owned enterprise groups. Of these five industries, wholesale trade was the major contributor with \$5.0b, followed by manufacturing (\$3.8b), finance and insurance (\$2.3b), mining (\$1.7b) and construction (\$1.7b). Those five industries accounted for 89% of sales revenue generated by foreign affiliates of foreign-owned Australian resident enterprise groups; however, this was only 10% of total sales revenue of all foreign affiliates. Manufacturing was by far the largest employing industry, with 24,159 employees.

Table 6 shows the number of foreign affiliates, employment and revenue from the sale of goods and services by foreign affiliates; classified by the geographic region of operation, ownership and industry of the foreign affiliate.

The Asia-Pacific region and the Americas generated the most revenue from the sale of goods and services by foreign affiliates of Australian resident enterprise groups (39% each), followed by Europe with 22%.

Foreign-owned Australian resident enterprise groups had a much greater focus in the Asia-Pacific region compared to Europe or the Americas where they had only limited presence. Foreign affiliates of foreign-owned Australian resident enterprise groups generated 81% of their sales revenue in Asia-Pacific (\$13.1b), 14% in the Americas (\$2.2b) and only 6% in Europe (\$0.9b). By contrast, sales revenue of foreign affiliates of Australian-owned enterprise groups was more evenly spread across the regions, with 42% of their sales revenue generated in the Americas (\$52.9b), 34% in Asia-Pacific (\$42.8b) and 24% in Europe (\$30.3b). This suggests that a proportion of foreign-owned Australian resident enterprise groups have been established as regional headquarters for the Asia-Pacific region and the conduit for trade activity in Asia-Pacific.

TABLE 6. CHARACTERISTICS OF FOREIGN AFFILIATES, BY REGION, OWNERSHIP AND INDUSTRY, 2002-03

• • • • • • • • • • • • • • • • •	• • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •
	EUROPE(a	)		ASIA-PACII	FIC		AMERICAS	;	
	***************************************		••••••	••••••	•••••	•••••••••••••••••••••••••••••••••••••••	***************************************	••••••	•••••••
			Revenue			Revenue		F	Revenue from
			from sales of			from sales of			sales of
			goods and			goods and			goods and
	Number	Employment	services	Number	Employment	services	Number	Employment	services
	of foreign	by foreign	by foreign	of foreign	by foreign	by foreign	of foreign	by foreign	by foreign
	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates	affiliates
Industry of foreign			¢			¢			¢
affiliate	no.	no.	\$m	no.	no.	\$m	no.	no.	\$m
• • • • • • • • • • • • • • •	• • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • •
			AUS	TRALIAN	OWNED				
Total	940	63 182	30 316	1 234	131 391	42 844	1 276	65 531	52 914
		• • • • • • • • •	FC	REIGN O	WNED	•••••	• • • • • • • • •	•••••	• • • • • • • •
Total	36	1 746	919	474	54 848	13 111	52	5 226	2 217
				TOTAL					
Mining	33	444	521	42	6 891	1 529	55	5 695	3 120
Manufacturing	459	26 343	11 448	395	64 827	10 042	427	29 198	15 203
Wholesale trade	124	4 677	3 811	301	13 687	14 685	95	5 222	3 692
Retail trade	9	764	1 079	102	20 671	8 010	8	786	617
Finance and insurance	105	20 814	9 880	291	27 855	12 490	67	2 738	3 879
Property and business									
services	138	8 005	2 872	238	23 713	3 422	90	8 560	8 094
Cultural and									
recreational services	39	1 052	643	83	2 940	637	547	16 514	19 375
Other(b)	69	2 829	979	256	25 655	5 139	39	2 044	1 151
Total	976	64 928	31 234	1 708	186 239	55 955	1 328	70 757	55 131

<sup>(</sup>a) Includes Africa. Refer to the Explanatory Notes for further details.

On an industry by region basis, cultural and recreational services in the Americas generated the highest revenue, with sales of services of \$19.4b. This was followed by manufacturing in the Americas (\$15.2b), wholesale trade in Asia-Pacific (\$14.7b), finance and insurance in Asia-Pacific (\$12.5b), manufacturing in Europe (\$11.4b) and manufacturing in Asia-Pacific (\$10.0b). However, in terms of employment by foreign affiliates, manufacturing in Asia-Pacific was the most significant (64,827), followed by manufacturing in the Americas (29,198), finance and insurance in Asia-Pacific (27,855), manufacturing in Europe (26,343), property and business services in Asia-Pacific (23,713) and finance and insurance in Europe (20,814).

Overall, manufacturing was the dominant industry, accounting for 37% of total foreign affiliate employment, followed by finance and insurance (16%) and property and business services (13%). The majority of employment in manufacturing was in the Asia-Pacific region (54%), followed by the Americas with 24% and Europe 22%. Employment in finance and insurance was more concentrated in the Asia-Pacific region (54%) and Europe (40%), compared to the Americas (5%). The Asia-Pacific region accounted for the majority of employment in property and business services (59%), with the Americas and Europe contributing 21% and 20% respectively.

<sup>(</sup>b) Includes: Agriculture, forestry and fishing; Electricity, gas and water supply; Construction; Accommodation, cafes and restaurants; Transport and storage; Communication services; Education; Health and community services; and Personal and other services.

Manufacturing was also the dominant industry in terms of revenue from sales, accounting for 26% of total sales revenue by foreign affiliates, followed by finance and insurance (18%) and wholesale trade (16%). In contrast to employment, manufacturing sales were more evenly dispersed, with the Americas contributing 41%, Europe 31% and Asia-Pacific 27%. For finance and insurance the distribution was similar to employment, with the Asia-Pacific region contributing 48% of revenue from sales, followed by Europe (38%) and the Americas (15%). For wholesale trade sales revenue, Asia-Pacific contributed 66%, Europe 17% and the Americas 17%.

EXPLANATORY NOTES

SCOPE AND COVERAGE

The aim of SOFAT was to measure the economic activity of foreign affiliates of Australian resident enterprises. For the purpose of foreign affiliates trade statistics, foreign affiliates refers to those enterprises that are majority owned by the Australian resident enterprise group (more than 50% of the ordinary shares or voting stock), i.e. offshore subsidiaries, branches and majority-owned foreign joint ventures.

The scope of the survey was foreign affiliates of Australian resident enterprises that traded in goods and/or services. The reporting unit was the Australian parent enterprise in the Australian enterprise group on behalf of all their foreign affiliates that traded in goods and/or services.

The SOFAT survey frame was obtained by combining the survey frames from two other related ABS surveys, the Survey of International Investment and the Survey of International Trade in Services, supplemented by additional units that were considered to be in scope. A census of all reporting units on the frame was conducted, as it was difficult to determine if reporting units were in scope of the survey from information available in the public domain. The frame consisted of 4,856 reporting units. 4,036 completed or part completed forms were received or clerically estimated (see subsequent text on clerical estimates). Overall, an 83% response rate was achieved. A total of 565 reporting units were in scope.

REFERENCE PERIOD

Reporting units were asked to report for their most recent financial year for which financial accounts were available. The nominal reference period was the 2002-03 financial year, as the reference period for most respondents was 1 July 2002 to 30 June 2003. No adjustment was made for estimates to account for differing financial year reference periods; however, a pro-rata adjustment was made for non-twelve month periods where applicable. For example, consider two in-scope Australian enterprise groups A and B, both with a 30 June 2003 financial year end, where enterprise group A acquired enterprise group B on 1 January 2003. To avoid double counting, no pro-rata adjustment was made to data for either enterprise group A or enterprise group B. On the other hand, where an in-scope enterprise group reported data for a 6 month period due to a change in its financial year end (previously had a 30 June year end and changed this to a 31 December calendar year end), then a pro-rata adjustment to data was made to adjust to a 12 month period.

CLASSIFICATIONS Industry This article presents industry statistics classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993, ABS cat. no. 1292.0. Each business unit was classified to a single industry division based on the primary activity of the business unit, irrespective of any secondary activity. Industry data must be considered as indicative only and should be treated with some caution. The industry of the Australian enterprise group was sourced from the ABS Business Register (ABSBR). On the ABSBR, the industry allocated to the enterprise group is that industry in which the enterprise group has most employees. On the other hand, the industry of the foreign affiliate was classified according to the activity from which the foreign affiliate derived its main income. This classification anomaly should be considered when interpreting these data.

Geographic region

Geographic regions have been aligned with the following Standard Australian Classification of Countries (SACC), ABS cat. no. 1269.0 groupings:

TABLE 7. GEOGRAPHIC REGION

SOFAT SACC Grouping region 2 Europe North - West Europe 3 Southern and Eastern Europe 4 North Africa and Middle Fast 9 Sub Saharan Africa 1 Asia-Pacific Oceania and Antarctica 5 South - East Asia 6 North - East Asia 7 Southern and Central Asia 8 Americas Americas

Africa was included with Europe due to the small number of foreign affiliates operating in Africa. If Africa had been included as a stand alone geographic region, then all data would have been suppressed due to the ABS confidentiality policy which does not permit the ABS to publish any confidential data which allows the identification of any reporting unit. Also, many corporations included Africa with Europe in their geographical segment reporting (see subsequent text on segment reporting).

In some instances where company annual reports and financial statements have been used for data modelling, information on countries included in regions for geographic segment reporting could not be identified. The impact on estimates resulting from this missing information is marginal.

TREATMENT FOR

NON-RESPONSE OR

PARTIAL RESPONSE

To account for non-response, a sample of 100 reporting units was randomly selected from the non-responding portion of the population and intensively followed up to determine an in-scope rate. An implicit imputation strategy was used, such that, based on the responses of in-scope reporting units in this sample, the initial responding portion of the population was weighted up to reflect the contribution of the non-responding population. Reporting units that required a partial impute for a particular variable received an overall trimmed mean for that variable, obtained by using the lower 90 percent (in value terms) of responses for that variable from the responding population.

There were a small number of non-responding or partially responding in-scope reporting units that were excluded from this imputation process because they were deemed to be significant in terms of their overall contribution to the estimates. The primary reason for non-response or partial response for these key reporting units was that their established internal statutory and management reporting did not include some of the specific detail requested in the SOFAT survey form. To complete the form they would have needed to obtain the detail from their foreign affiliates directly and the reporting units indicated that at best this would be very onerous (the logistics of requesting and consolidating the data from foreign affiliates where, for example, they may have hundreds of foreign affiliates) and at worst highly improbable (although the reporting unit is the parent enterprise, many foreign affiliates operate autonomously and only report very high level key data to the Australian parent). Consequently, these reporting units were researched on a case by case basis and subsequent modelled estimates were based on information contained in their annual reports, financial statements or their own or related websites. Sales data, for example, were sourced from segment reporting notes contained in the accompanying notes to the financial statements. Statutory reporting requires corporations to provide information about business and geographical segments to be reported in their financial statements (AASB 1005). This standard allows geographical segments to be based on either: (a) the location of an entity's production or service facilities and other assets; or (b) the location of its markets and customers. For some reporting units it was difficult to distinguish between (a) and (b). In these cases, sales revenue was attributed to sales by foreign affiliates domiciled in these geographic segments, consequently estimates for revenue from sales of goods and services by foreign affiliates may differ from the true value.

**EMPLOYMENT ESTIMATES** 

Employment data for both the Australian enterprise group and foreign affiliates at industry level are indicative only and should be treated with some caution. Employment for the Australian enterprise group was sourced from the ABSBR. Details on many businesses on the register are sourced from Australian Taxation Office (ATO) administrative data. These businesses are listed individually on the register, therefore enterprise groups, i.e. the Australian parent company and its Australian subsidiaries and branches, are not consolidated; consequently, enterprise group employment may be understated. A number of reporting units were able to supply employment data for foreign affiliates at an aggregate level only; in these cases, employment estimates at industry and regional levels were modelled.

ROUNDING

Where figures have been rounded, discrepancies may occur between the sum of component items and the total.

ABS CONFIDENTIALITY
RESTRICTIONS

The ABS is not permitted to publish any data which allows the identification of any reporting unit. For this reason, it was necessary to collapse certain industry divisions into a residual industry category (other) in the published tables. For tables 3 and 5 there is a difference in the number of industries in the Australian owned/Foreign owned wafers when compared to the Total wafer. The Total wafer has more industries open. This was to allow the maximum amount of data to be published without compromising confidentiality restrictions.

FURTHER RESULTS

More detailed information on Australian Outward Foreign Affiliates Trade will be presented in a new publication (cat. no. 5495.0.55.001) scheduled for release in October 2004.

**FUTURE STUDIES** 

An evaluation of all aspects of the survey design and survey results will commence later this year. Lessons learned from this initial survey will feed into future iterations of SOFAT. It is anticipated the survey will be conducted every 4 years.

OTHER RELATED PUBLICATIONS

Globalisation and Foreign Investment special article in Australian Mining Industry, 1998-99 (cat. no. 8414.0)

Economic Activity of Foreign Owned Businesses in Australia, 2000-01 (cat. no. 5494.0)

Foreign Ownership Characteristics of Businesses Undertaking Capital Expenditure in Australia, 1998-1999, published in Australian Economic Indicators, July 2001 (cat. no. 1350.0)

Foreign Ownership Characteristics of Information Technology Businesses, published in Australian Economic Indicators, March 2002 and March 2003 (cat. no. 1350.0)

Foreign Ownership Characteristics of Businesses Undertaking Research and Experimental Development Activity in Australia, 1999-2000, published in Australian Economic Indicators, August 2002 (cat. no. 1350.0)

Foreign Ownership Characteristics of Importers and Exporters, Australia, 2002-03 (cat. no. 5496.0.55.001)

Manual on Economic Globalisation Indicators, OECD, Paris, scheduled for publication in 2004

Manual on Statistics of International Trade in Services, UN/OECD/IMF/UNCTAD/WTO, 2002

FURTHER INFORMATION

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