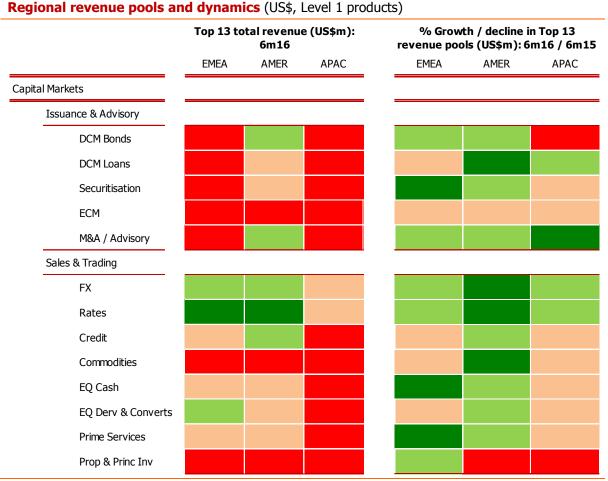


Capital Markets: Regions 6m16

This publication is supplementary to our quarterly Results Review; it shows banks' capital markets quarterly revenue and semi-annual pre-tax profit and productivity dynamics relative to their peers in major regions. The full dataset includes operating revenue, expenses and pre-tax profit at the Level 3 product detail in 7 regions, as well as normalised client segment revenue allocations, RWA and Equity. All data is reconciled against the published financial statements. Further detail is available on request. This issue features reorganised definitions for several FICC products.

Summary

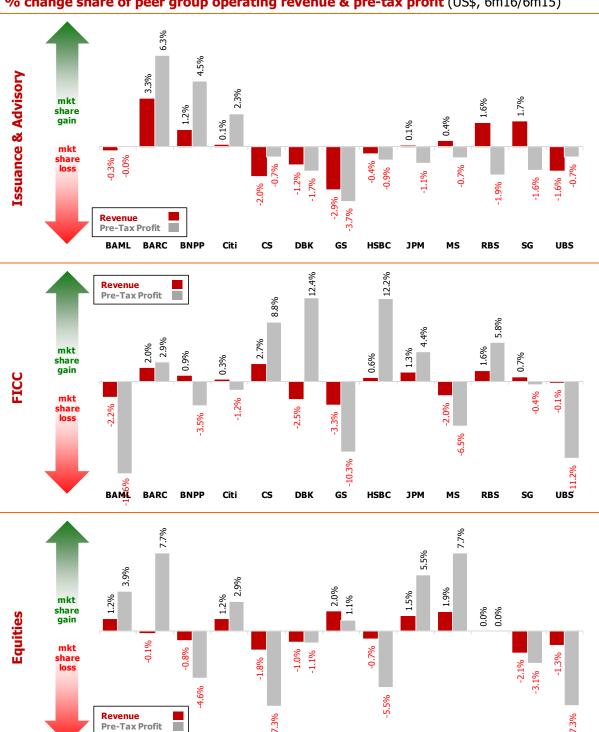


Source: Tricumen. Notes: (1) Tricumen product definitions apply throughout. (2) The size of revenue pools and growth rates is based on Top 13 banks and, relative to all product areas shown. **Dark green** = top-quartile revenue pool and y/y growth. **Light green** and **orange** = 2nd/3rd quartile revenue pool and y/y growth. **Red** = lowest revenue pool and y/y growth. (3) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs and outliers.



EMEA

% change share of peer group operating revenue & pre-tax profit (US\$, 6m16/6m15)



Source: Tricumen. Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs, dedicated proprietary trading and principal revenue. (3) Outliers are excluded.

CS

DBK

GS

HSBC

JPM

RBS

MS

BAML BARC

BNPP

Citi

UBS



EMEA (cont.)

Operating revenue dynamics (US\$, Level 1 products, 6m16/6m15)

	BAML	BARC	BNPP	Citi	CS	DBK	GS	HSBC	JPM	MS	RBS	SG	UBS	Top 25%	Bottom 25%
Capital Markets	1	1	\Rightarrow	\Rightarrow	\Rightarrow	Ŷ	Ŷ	1	⇧	1	Û	\Rightarrow	1	-10%	-23%
Issuance & Advisory	1	1	\Rightarrow	\Rightarrow	Ŷ	Ŷ	<u></u>	1	\Rightarrow	\Rightarrow	•	1	1	-7%	-30%
DCM Bonds	\Rightarrow	1	\Rightarrow	\Rightarrow	<u></u>	<u></u>	\Rightarrow	1	<u></u>	1	•	1	1	15%	-39%
DCM Loans	1	\Rightarrow	\Rightarrow	\Rightarrow	Φ	Φ	Φ	1	Φ	1	•	\Rightarrow	1	-12%	-47%
Securitisation	1	\Rightarrow	N/M	Φ	N/M	\Rightarrow	\Rightarrow	N/M	Φ	N/M	1	1	•	10%	-11%
ECM	1	•	\Rightarrow	Φ	\Rightarrow	$\hat{\mathbf{T}}$	Φ	N/M	•	1	N/M	1	\Rightarrow	-19%	-53%
M&A / Advisory	\Rightarrow	•	\Rightarrow	Φ	Φ	$\hat{\mathbf{T}}$	Φ	N/M	•	•	N/M	\Rightarrow	1	25%	-27%
Sales & Trading	1	1	\Rightarrow	\Rightarrow	1	Ŷ	⊕	1	\Rightarrow	1	•	\Rightarrow	1	-3%	-21%
FX	1	1	\Rightarrow	\Rightarrow	₽	₽	\Rightarrow	\Rightarrow	₽	1	•	1	Ŷ	-4%	-31%
Rates	₽	\Rightarrow	\Rightarrow	1	₽	₽	₽	\Rightarrow	1	₽	1	\Rightarrow	Ţ.	-3%	-27%
Credit	\Rightarrow	•	1	Û	1	₽	Ŷ	₽	\Rightarrow	\Rightarrow	₽	Ŷ	\Rightarrow	-27%	-60%
Commodities	\Rightarrow	1	₽	\Rightarrow	₽	Ŷ	₽	Î	\Rightarrow	Ţ	N/M	1	1	-29%	-63%
EQ Cash	1	₽	1	1	₽	①	\Rightarrow	4	\Rightarrow	\Rightarrow	N/M	Ŷ	Ŷ	46%	-5%
EQ Derv & Converts	\Rightarrow	\Rightarrow	Ŷ	1	Ŷ	Ŷ	1	4	\Rightarrow	•	N/M	Ŷ	<u></u>	1%	-30%
Prime Services	1		Ŷ	Û	Ŷ	\Rightarrow	Ŷ	\Rightarrow	\Rightarrow	Û	N/M	1	<u></u>	21%	0%
Prop & Princ Inv	N/M	\Rightarrow	\Rightarrow	N/M	Û	Û	₽	₽	⇧	N/M	N/M	N/M	N/M	-19%	-61%

Source: Tricumen. Notes: (1) Tricumen product definitions apply throughout. (2) Arrows show % change in revenue vs peers. Up-/down-arrows: top-/bottom-quartile. (3) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs and outliers.

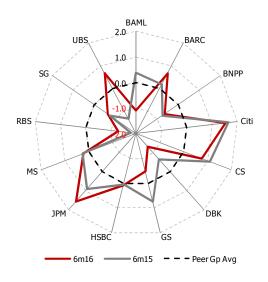


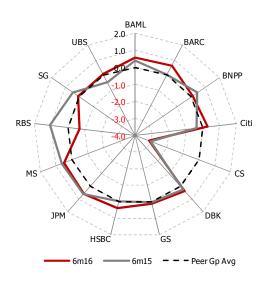
EMEA (cont.)

Operating cost / income (US\$, Level 1 products, 6m15 vs 6m16)

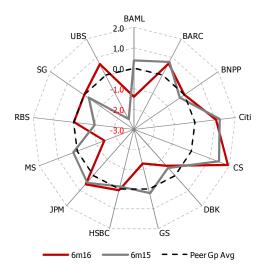
Capital Markets

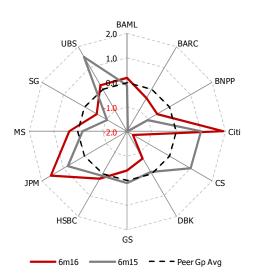
Banking





FICC Equities





Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) Operating expenses exclude one-off non-operational items, insurance-related benefits & claims, and credit expense/recovery/NPL provisions. Capital expenditure is included as accrued. Litigation expense is allocated to front-line units. (3) positive values indicate outperformance; missing fields indicate that data is not meaningful, or available; (4) outliers are excluded. (5) RBS does not compete in Equities markets.

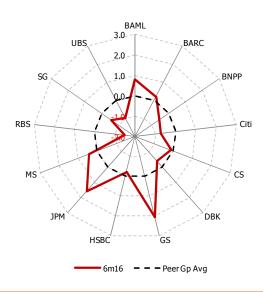


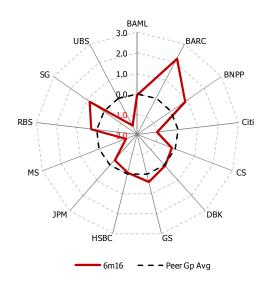
EMEA (cont.)

Operating revenue / Front Office headcount (FTE, US\$, Level 1 products, 6m16)

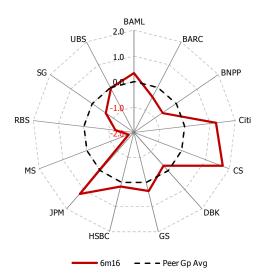
Capital Markets

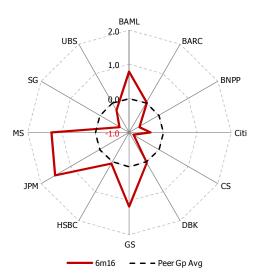
Banking





FICC Equities



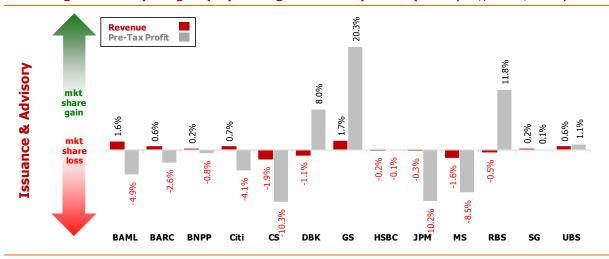


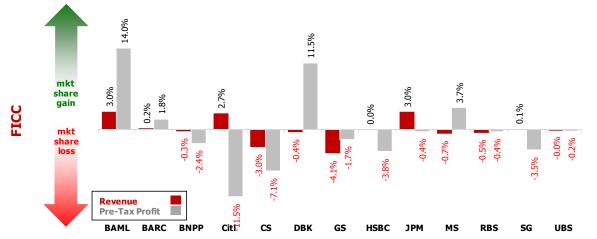
Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) positive values indicate outperformance; missing fields indicate that data is not meaningful, or available; (3) outliers are excluded. (4) RBS does not compete in Equities markets.

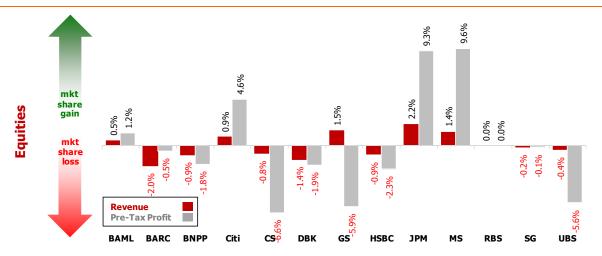


Americas

% change share of peer group operating revenue & pre-tax profit (US\$, 6m16/6m15)







Source: Tricumen. Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs, dedicated proprietary trading and principal revenue. (3) Outliers are excluded.



Americas (cont.)

Operating revenue dynamics (US\$, Level 1 products, 6m16/6m15)

	BAML	BARC	BNPP	Citi	CS	DBK	GS	HSBC	JPM	MS	RBS	SG	UBS	Top 25%	Bottom 25%
apital Markets	1	\Rightarrow	Ŷ	Û	Ţ	Ŷ	Ţ	\Rightarrow	\Rightarrow	Ŷ	1	Û	\Rightarrow	3%	-18%
Issuance & Advisory	\Rightarrow	¬	Û	\Rightarrow	₽	Ŷ	\Rightarrow	1	<u></u>	<u></u>	1	Û	1	-7%	-31%
DCM Bonds	\Rightarrow	\$	1	1	\Rightarrow	₽	\Rightarrow	₽	҈Ф	1	₽	1	1	8%	-19%
DCM Loans	\Rightarrow	\Rightarrow	Φ	•	1	\Rightarrow	\Rightarrow	1	Φ	1	1	1	1	29%	-33%
Securitisation	\Rightarrow	1	Φ	1	1	\Rightarrow	1	N/M	\Rightarrow	1	N/M	Φ	1	-10%	-47%
ECM	1	\Rightarrow	N/M	Φ	\Rightarrow	Φ	1	N/M	\Rightarrow	1	N/M	N/M	1	-33%	-54%
M&A / Advisory	1	1	Φ	Φ	1	1	\Rightarrow	N/M	1	1	N/M	N/M	1	-1%	-18%
Sales & Trading	1	₽	1	1	₽	\Rightarrow	1	\Rightarrow	1	\Rightarrow	₽	\Rightarrow	1	4%	-24%
FX	\Rightarrow	₽	₽	\Rightarrow	\Rightarrow	\Rightarrow	₽	₽	1	1	₽	1	1	28%	-0%
Rates	1	4	\Rightarrow	1	4	4	1	\Rightarrow	1	\Rightarrow	4	4	\Rightarrow	27%	7%
Credit	\Rightarrow	1	₽	1	N/M	₽	Ŷ	\Rightarrow	₽	₽	Ţ.	⇧	\Rightarrow	63%	-15%
Commodities	Ŷ	Ŷ	\Rightarrow	1	N/M	1	\Rightarrow	Ţ	\Rightarrow	₽	N/M	N/M	N/M	20%	-5%
EQ Cash	4	₽	1	\Rightarrow	4	4	\Rightarrow	₽	1	\Rightarrow	N/M	N/M	1	-6%	-27%
EQ Derv & Converts	\Rightarrow	1	₽	⇧	₽	Ŷ	⇨	1	⇧	1	N/M	\Rightarrow	1	-3%	-37%
Prime Services	\Rightarrow	Ŷ	1	1	1	Ŷ	1	₽	\Rightarrow	\Rightarrow	N/M	N/M	₽	4%	-17%
Prop & Princ Inv	N/M	N/M	N/M	N/M	N/M	N/M	. ↑	N/M	\Rightarrow	î	N/M	N/M	N/M	-31%	-65%

Source: Tricumen. Notes: (1) Tricumen product definitions apply throughout. (2) Arrows show % change in revenue vs peers. Up-/down-arrows: top-/bottom-quartile. (3) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs and outliers.

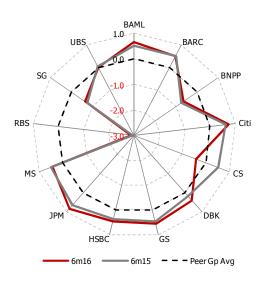


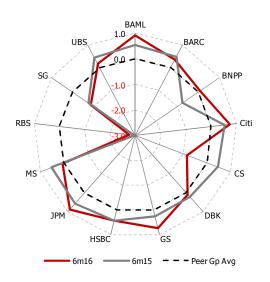
Americas (cont.)

Operating cost / income (US\$, Level 1 products, 6m15 vs 6m16)

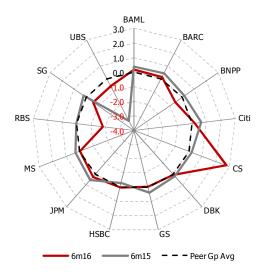
Capital Markets

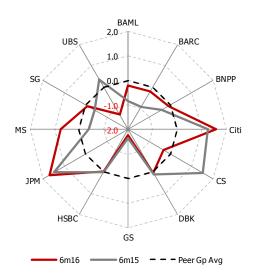
Banking





FICC Equities





Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) Operating expenses exclude one-off non-operational items, insurance-related benefits & claims, and credit expense/recovery/NPL provisions. Capital expenditure is included as accrued. Litigation expense is allocated to front-line units. (3) positive values indicate outperformance; missing fields indicate that data is not meaningful, or available; (4) outliers are excluded. (5) RBS does not compete in Equities markets.

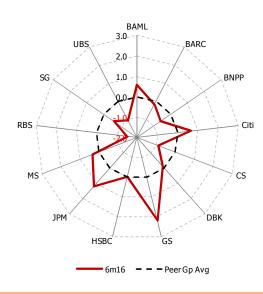


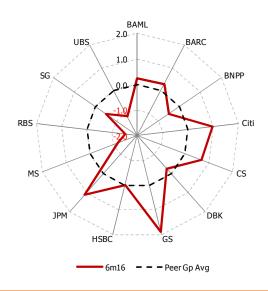
Americas (cont.)

Operating revenue / Front Office headcount (FTE, US\$, Level 1 products, 6m16)

Capital Markets

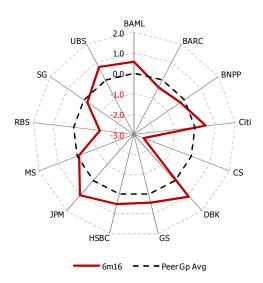
Banking

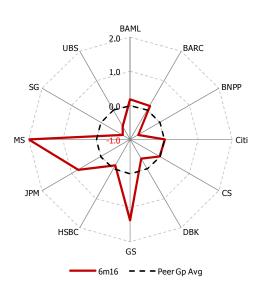




Equities

FICC



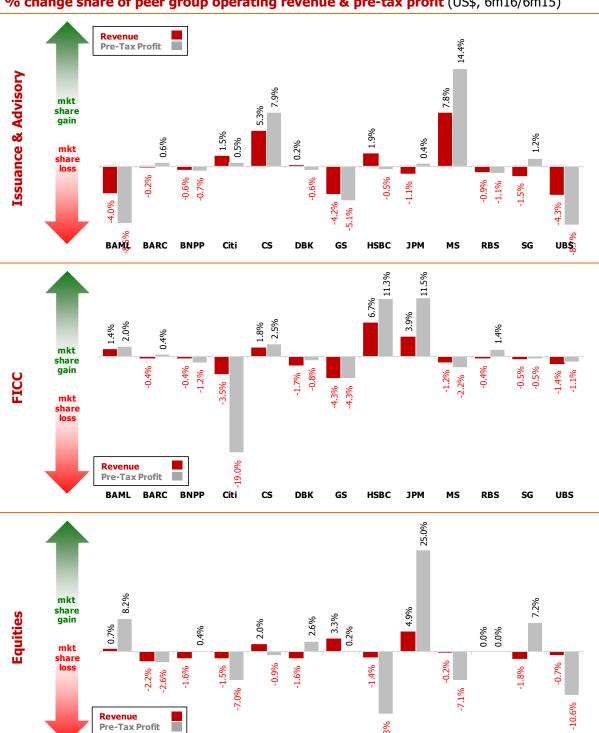


Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) positive values indicate outperformance; missing fields indicate that data is not meaningful, or available; (3) outliers are excluded. (4) RBS does not compete in Equities markets.



Asia Pacific

% change share of peer group operating revenue & pre-tax profit (US\$, 6m16/6m15)



Source: Tricumen. Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs, dedicated proprietary trading and principal revenue. (3) Outliers are excluded.

CS

DBK

GS

BAML BARC

BNPP

Citi

HSB€

JPM

MS

RBS

UBS



Asia Pacific (cont.)

Operating revenue dynamics (US\$, Level 1 products, 6m16/6m15)

	BAML	BARC	BNPP	Citi	CS	DBK	GS	HSBC	JPM	MS	RBS	SG	UBS	Top 25%	Bottom 25%
apital Markets	\Rightarrow	Ŷ	Ŷ	\Rightarrow	1	\Rightarrow	Ŷ	Û	Ŷ	\Rightarrow	Ŷ	Ŷ	Ŷ	-18%	-47%
Issuance & Advisory	Ŷ	¬	<u></u>	\Rightarrow	1	\Rightarrow	Ŷ	1	4	1	N/M	Ŷ	Ŷ	-3%	-44%
DCM Bonds	₽	\$	₽	҈Ф	N/M	\Rightarrow	1	₽	\Rightarrow	1	N/M	<u></u>	1	20%	-28%
DCM Loans	Φ	1	\Rightarrow	1	1	Φ	Φ	\Rightarrow	Φ	1	N/M	\Rightarrow	N/M	18%	-14%
Securitisation	Φ	1	N/M	1	\Rightarrow	Φ	Φ	1	\Rightarrow	\Rightarrow	N/M	N/M	N/M	-7%	-25%
ECM	Φ	1	N/M	1	\Rightarrow	1	Φ	N/M	\Rightarrow	\Rightarrow	N/M	N/M	Φ	-24%	-81%
M&A / Advisory	1	1	1	\Rightarrow	1	1	1	1	\Rightarrow	N/M	N/M	N/M	1	1%	-25%
Sales & Trading	1	₽	1	\Rightarrow	\Rightarrow	<u></u>	1	1	•	\Rightarrow	\Rightarrow	<u> </u>	4	-19%	-45%
FX	1	₽	₽	\Rightarrow	1	\Rightarrow	\Rightarrow	\$	1	1	Ŷ	Ŷ	Ŷ	3%	-63%
Rates	\Rightarrow	\Rightarrow	<u></u>	<u></u>	1	<u></u>	<u></u>	1	1	\Rightarrow	\Rightarrow	4	<u></u>	14%	-38%
Credit	⇧	\Rightarrow	\Rightarrow	₽	Ţ.	<u></u>	₽	\Rightarrow	1	Ţ.	N/M	\Rightarrow	1	15%	-25%
Commodities	1	N/M	N/M	\Rightarrow	\Rightarrow	N/M	①	1	Ŷ	Û	N/M	N/M	N/M	-1%	-53%
EQ Cash	\Rightarrow	₽	1	₽	1	4	1	\Rightarrow	1	1	N/M	\Rightarrow	4	-35%	-54%
EQ Derv & Converts	⇒	1	₽	⇒	1	₽	⇧	1	⇧	\Rightarrow	N/M	₽	Ŷ	-39%	-65%
Prime Services	⇨	Ŷ	<u></u>	Ŷ	₽	Ŷ	Ŷ	⇧	1	\Rightarrow	N/M	\Rightarrow	1	-6%	-39%
Prop & Princ Inv	N/M	N/M	N/M	N/M	N/M	N/M	₽	\Rightarrow	N/M	⇧	N/M	N/M	N/M	-28%	-86%

Source: Tricumen. Notes: (1) Tricumen product definitions apply throughout. (2) Arrows show % change in revenue vs peers. Up-/down-arrows: top-/bottom-quartile. (3) Revenue is post-writedowns, excludes DVA/FVA/equivalent, one-offs and outliers.

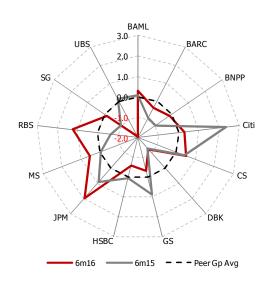


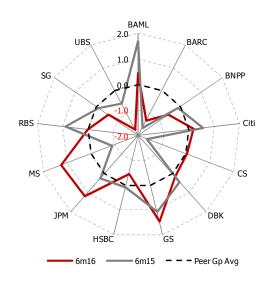
Asia Pacific (cont.)

Operating cost / income (US\$, Level 1 products, 6m15 vs 6m16)

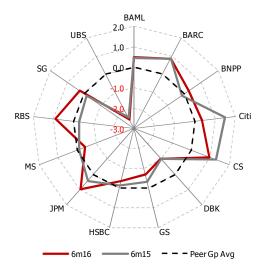
Capital Markets

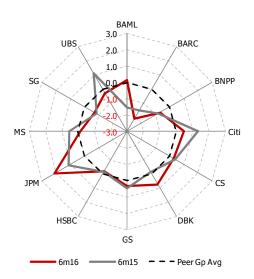
Banking





FICC Equities





Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) Operating expenses exclude one-off non-operational items, insurance-related benefits & claims, and credit expense/recovery/NPL provisions. Capital expenditure is included as accrued. Litigation expense is allocated to front-line units. (3) positive values indicate outperformance; missing fields indicate that data is not meaningful, or available; (4) outliers are excluded. (5) RBS does not compete in Equities markets.

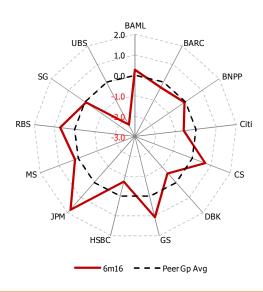


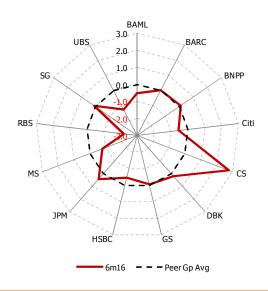
Asia Pacific (cont.)

Operating revenue / Front Office headcount (FTE, US\$, Level 1 products, 6m16)

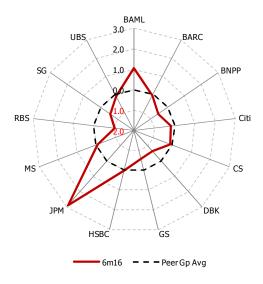
Capital Markets

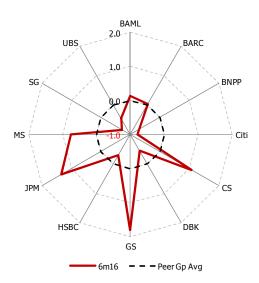
Banking





FICC Equities





Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) positive values indicate outperformance; missing fields indicate that data is not meaningful, or available; (3) outliers are excluded. (4) RBS does not compete in Equities markets.



About Tricumen

Tricumen was founded in 2008. It quickly became a strong provider of diversified market intelligence across the capital markets and has since expanded into transaction and corporate banking coverage. Tricumen's data has been used by many of the world's leading investment banks as well as strategy consulting firms, investment managers and 'blue chip' corporations.

Situated near Cambridge in the UK, Tricumen is almost exclusively staffed with senior individuals with an extensive track record of either working for or analysing banks; and boasts what we believe is the largest capital markets-focused research network of its peer group.

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