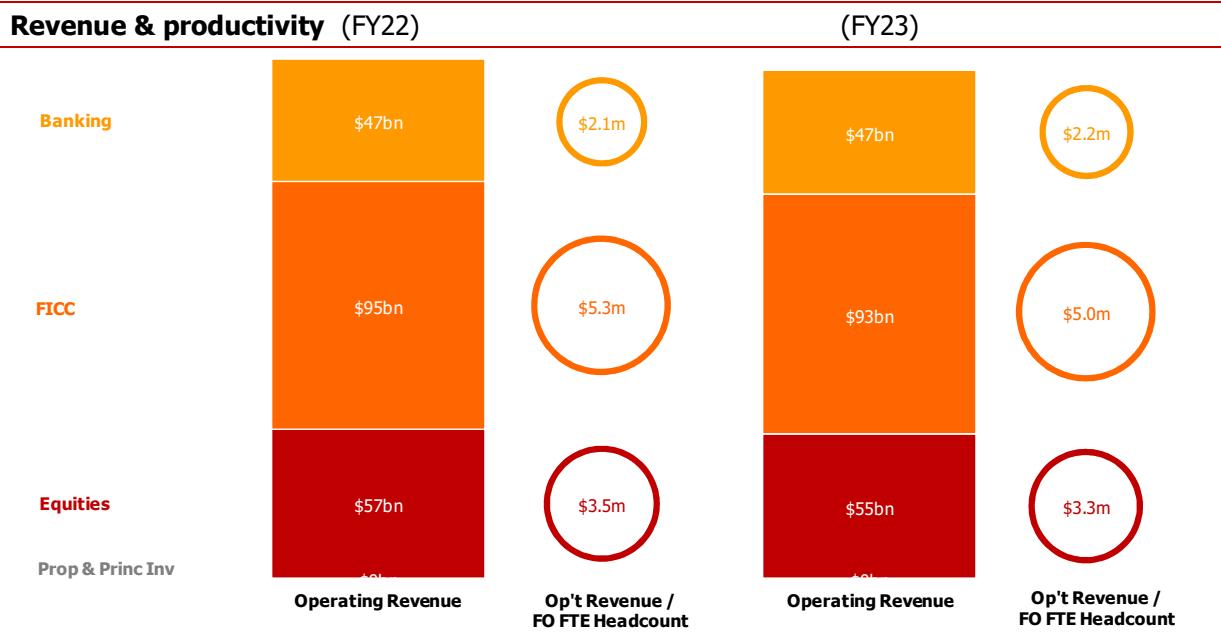


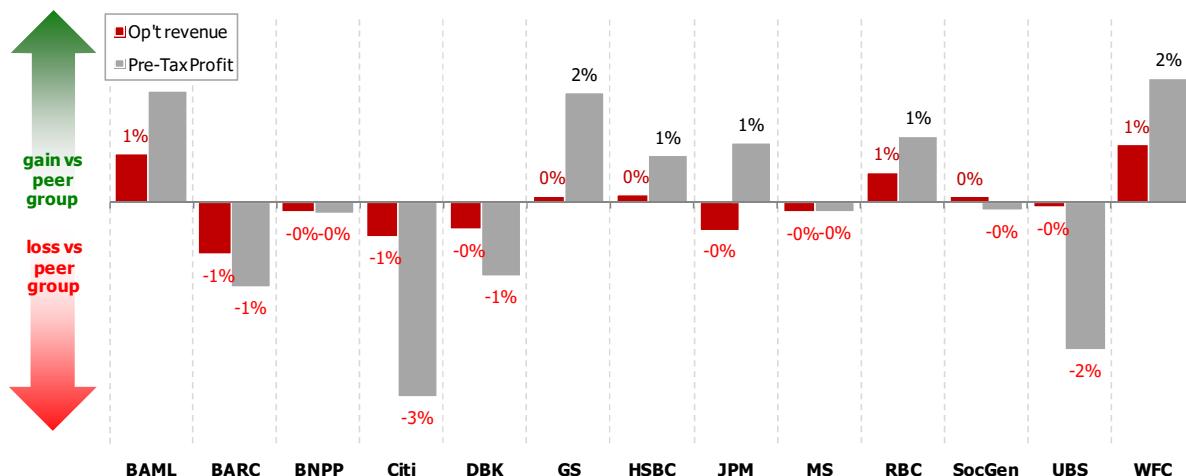
CIB Results Review 4Q23 / FY23

Capital Markets: Overview

- The banks' aggregate FY23 revenue topped \$195bn, slightly below the prior-year period, mostly due to underperformance by EMEA banks. On a full-year basis, Banking outperformed, partly due to Europeans' strong DCM fees; in Markets, credit and prime services were the only areas that achieved significant growth.
- Banks maintained a strict cost discipline, especially with regards to their year-end bonus pools, which were reserved for top performers even more than was the case in 2022. However, investment in technology – and, in most cases, geographical and/or operational expansion – continued apace, contributing to 5% y/y growth in operating costs. The combined FY23 pre-tax profit of banks in this report totaled \$65bn, 13% down y/y.



% change share of peer group operating revenue and pre-tax profit (FY23 / FY22)

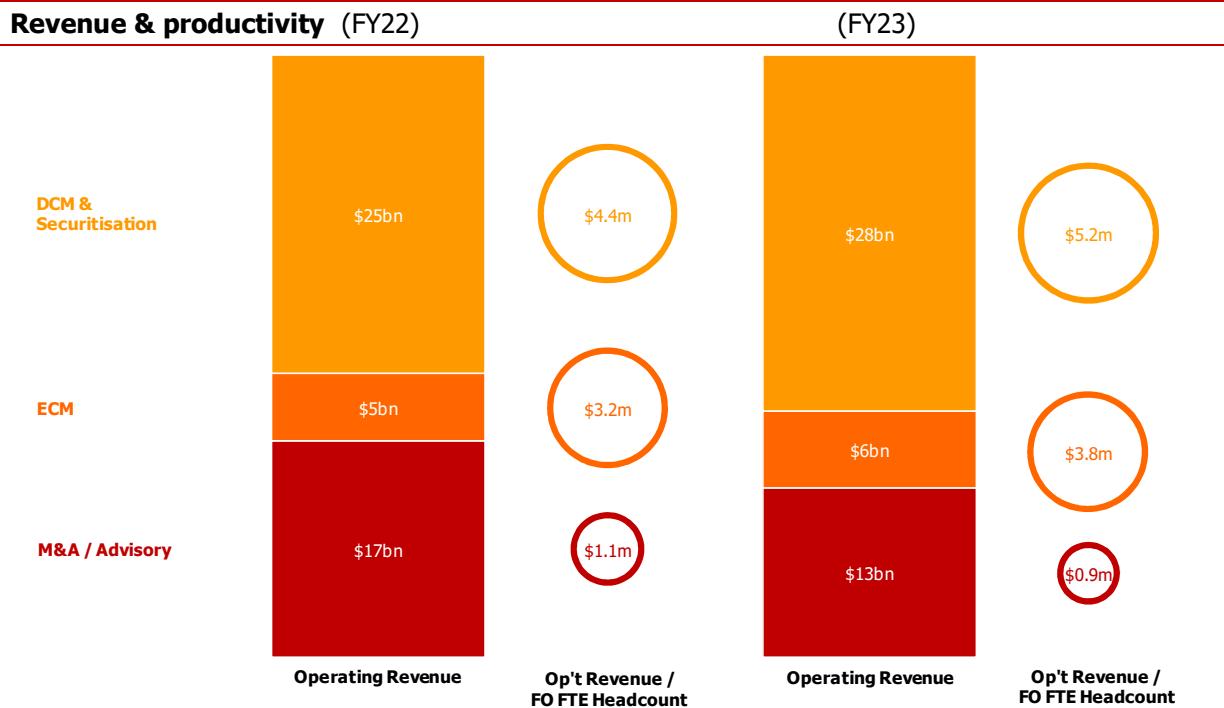


Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) Pre-tax profit excludes Prop & Principal Investments.

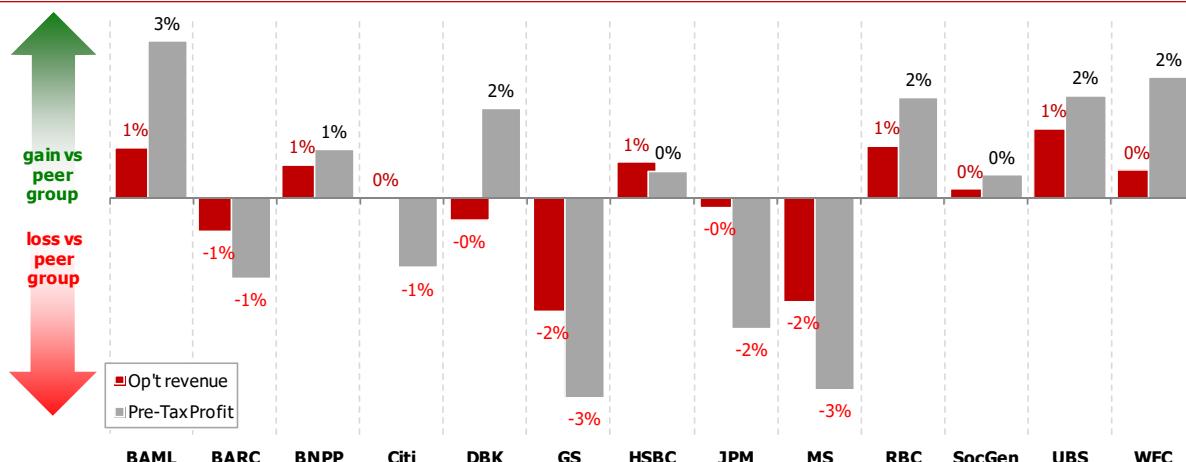


Capital Markets (cont.): Banking

- Despite the sequential decline in 4Q23, DCM bond fees ended 2023 on a strong note, largely due to the 70% jump in high yield fees, a post-2021 record. In the US, volumes hit a three-decade high in January, driven by investors' rush to buy bonds ahead of the widely expected fall in interest rates. Restructuring debt volumes in EMEA and APAC surged relative to FY22. Loan syndication fees fell 15% y/y in FY23; APAC held steady, but fees in the US and EMEA dropped 20% and 10%, respectively. Securitisation revenue advanced vs 4Q22.
- ECM fees grew 15% y/y in FY23 and 4Q23; at the global level, IPOs slumped 25%, despite strong results from US exchanges. APOs had a strong year. Fees from Japan issuers quadrupled in FY23, and EMEA fees jumped 20%; however, APAC, excluding Australia, dropped 25% vs FY22.
- M&A/Advisory fees dropped 12% y/y in 4Q23, bringing the FY23 total to 20% y/y decline. However, 2024 started strong, as January volumes doubled y/y in the Americas; APAC advanced, too, but EMEA declined.
- The outlook is positive. In US equity markets, high valuations and a drop in volatility since late 2023 bodes well for both IPO and APOs; while a widely expected fall in rates, narrow spreads and corporates' demand for refinancing should provide a strong support for debt issuance. Finally, a jump in activity in late 2023 prompted several banks to forecast a robust rebound in M&A in 2024.



% change share of peer group operating revenue and pre-tax profit (FY23 / FY22)



Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority.

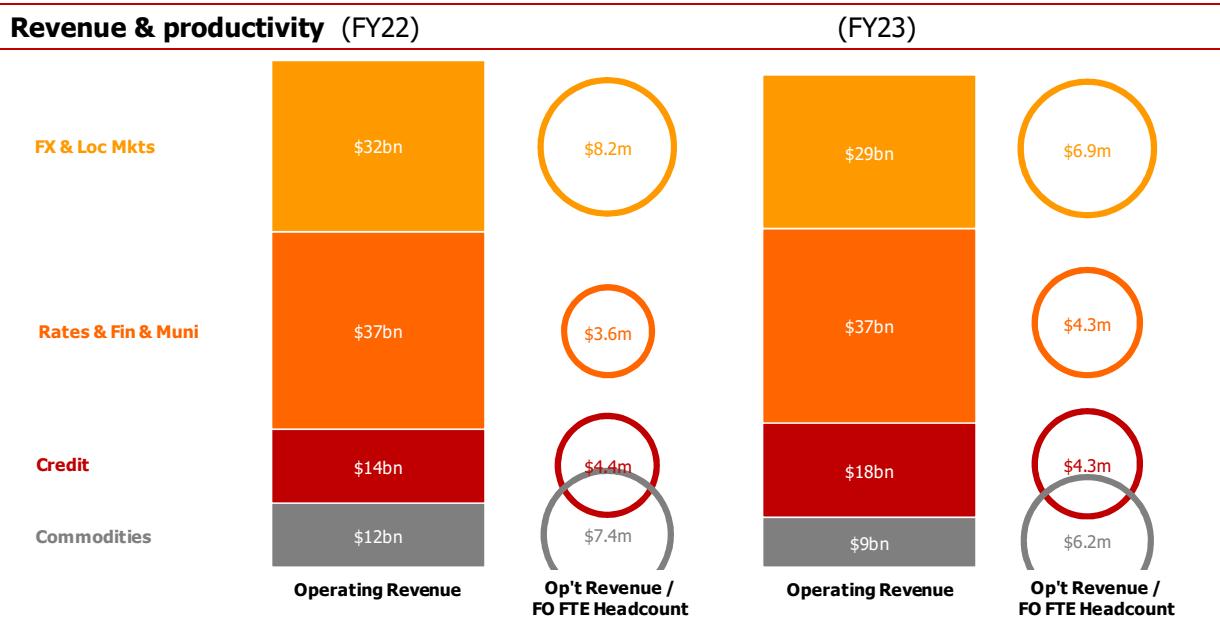


Capital Markets (cont.): FICC

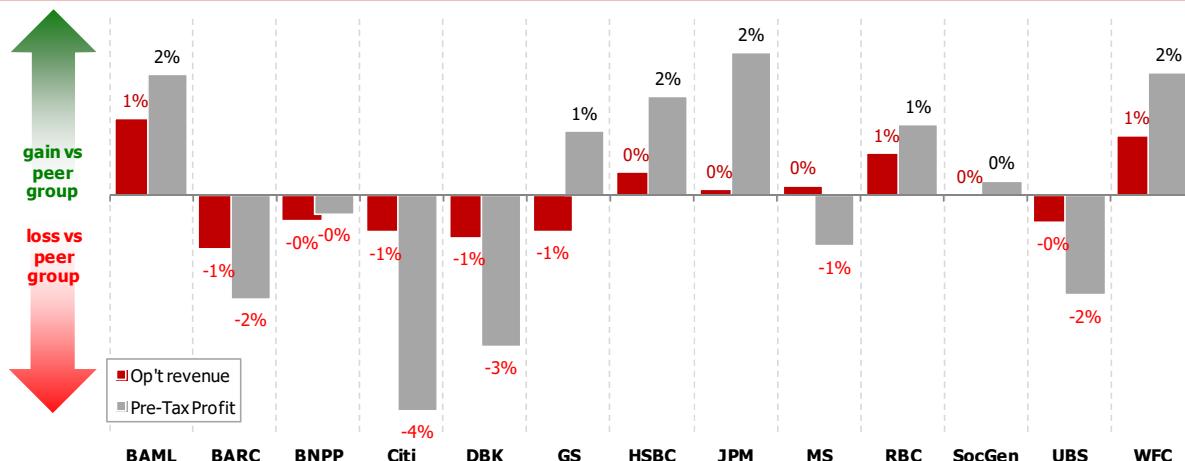
- The overall share of FICC revenue derived from corporate clients rose sharply in 2023, driven by corporates' demand for hedging in a high-rate environment. US-focused banks with a large corporate client base were the main beneficiaries.
- Weak client flows and lack of volatility depressed macro revenue; also, several banks in this report were wrongly positioned for the devaluation of Argentinean peso and took sizeable losses. US retail investors spurred a surge in trading volumes in govies to the highest level since 1980s.

In Jan-24, SEC approved 11 spot ETFs which invest directly in bitcoin. This is an important milestone for crypto - and the investment industry: within days, several wealth/private banking leaders announced their intention to offer bitcoin ETFs to high-end clients. Presenting 4Q23 results, Blackrock's Larry Fink outlined his vision of the future: ETFs across active, passive, digital products; and tokenisation enabling instant settlements and customised investment strategies.

- The FY23 credit revenue jumped 26% y/y (and much more at EMEA majors), driven in particular by distressed products. Despite the real prospects of central banks cutting rates, inflows in US and European high grade credit funds remained strong in 1Q24. Hiring by banks is lively, especially in distressed credit, asset-backed securities and CLOs.
- Commodities revenue declined sharply in FY23, with only one major player among the banks in this report registering a double-digit growth. The 4Q23 started strong but, as the quarter wore off, the volatility subsided. Several banks are building/strengthening their carbon trading and financing desks; and also trading in uranium, both physical and options.



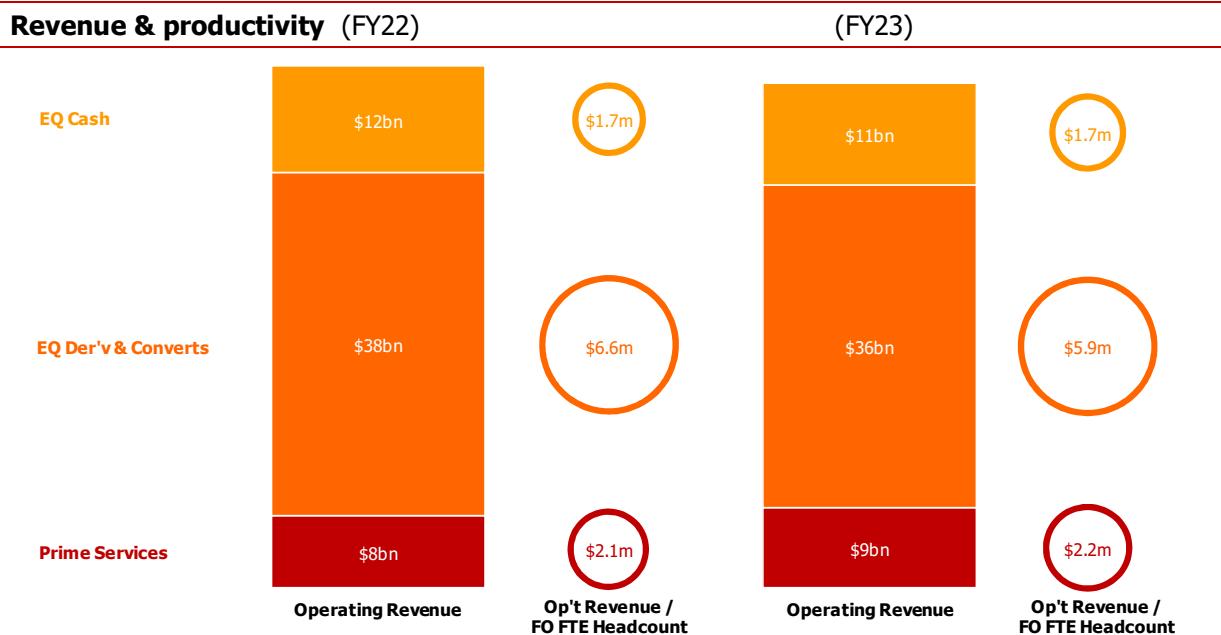
% change share of peer group operating revenue and pre-tax profit: (FY23 / FY22)



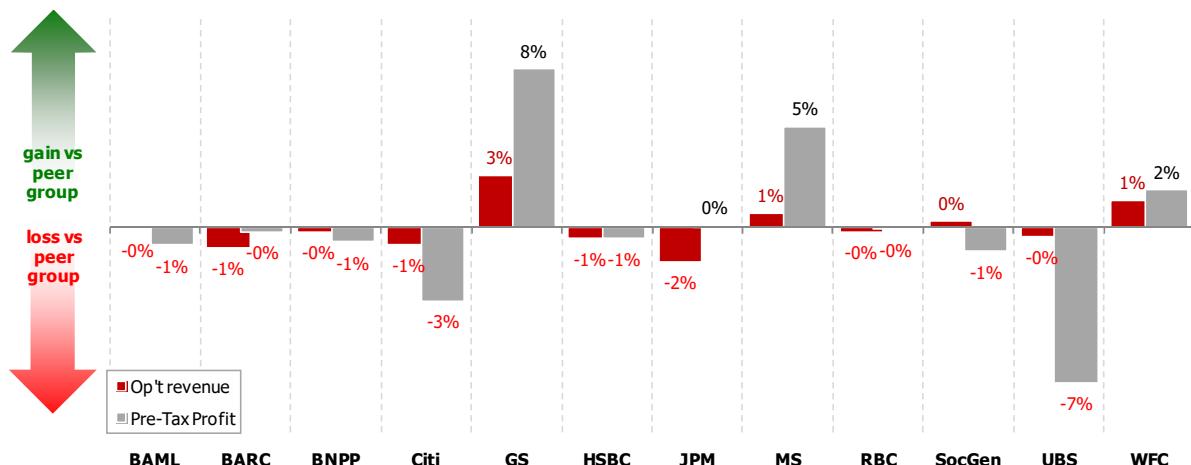
Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) Pre-tax profit excludes Prop & Principal Investments.

Capital Markets (cont.): Equities

- Despite the uptick in 4Q23 – primarily by EMEA banks - cash equity revenue ended 2023 slightly below FY22. Several banks are thinning their analyst ranks, especially in APAC.
- In equity derivatives, a very strong 4Q23 - driven by elevated client flows - reversed some of the weakness seen earlier in the year. Anticipating a surge in volumes in 2024 and beyond, several banks are hiring across flow, exotics and converts.
- Prime services revenue advanced steadily throughout 2023, lifting the aggregate FY23 revenue by 10%. EMEA-domiciled banks outperformed their US peers in 4Q23 but lagged on FY basis. Global hedge fund AuM broke through the \$5tn mark - 7% up y/y – but this growth was heavily skewed towards the leaders as investors shunned new hedge funds. Firms' margins are also under pressure: clients are pushing for more favourable pricing terms even from well-established funds.



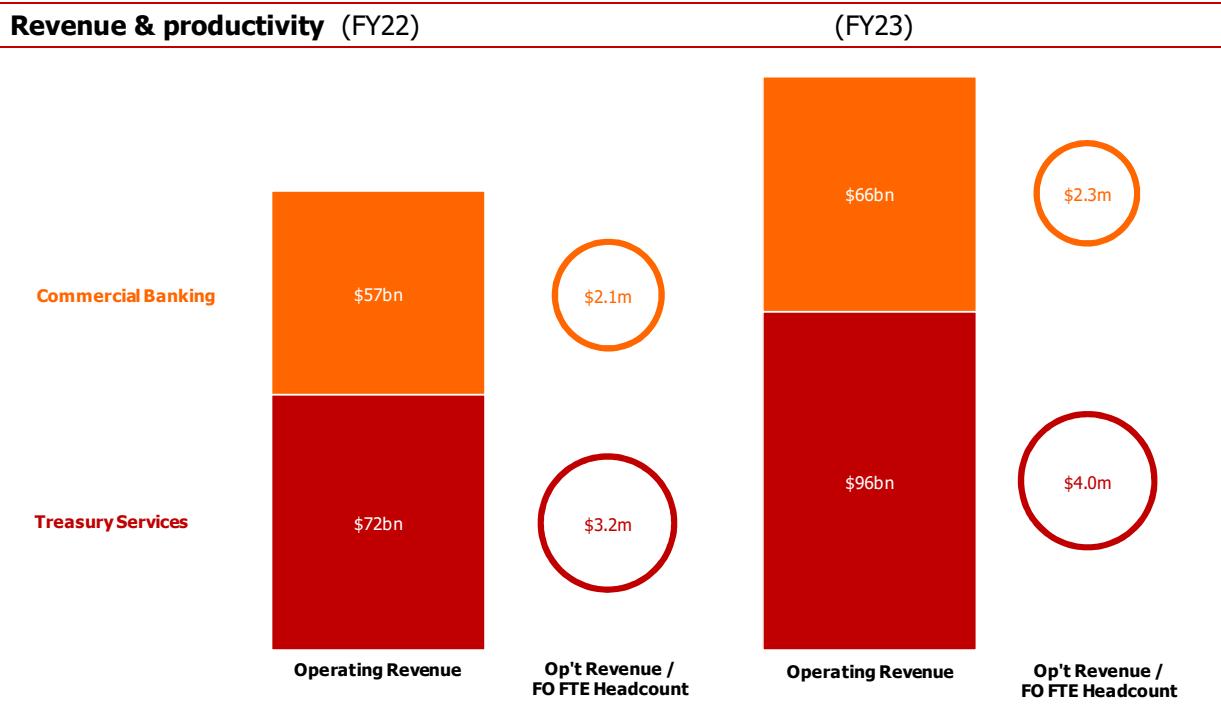
% change share of peer group operating revenue and pre-tax profit (FY23 / FY22)



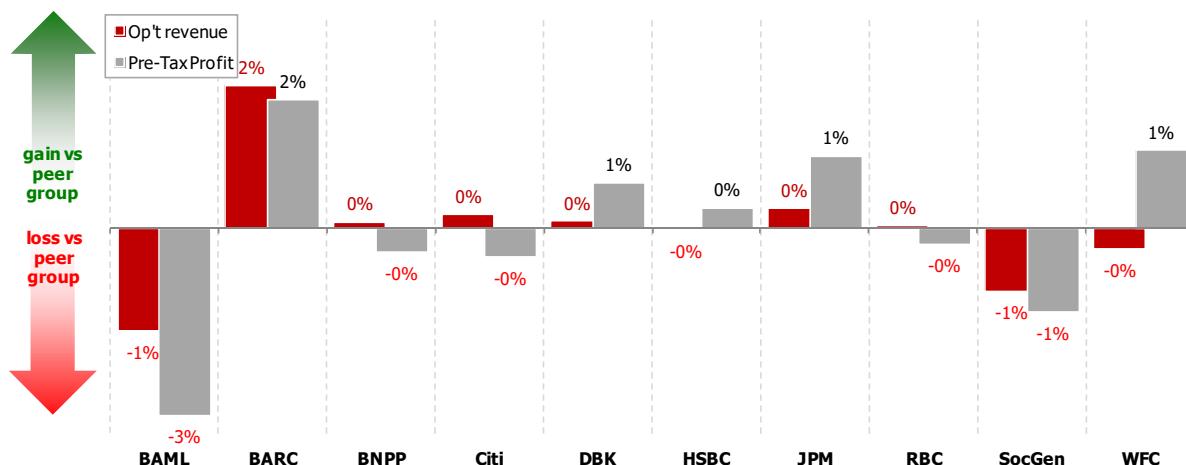
Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) Pre-tax profit excludes Prop & Principal Investments.

Commercial Banking & Treasury Services

- The 10% growth in 4Q23 corporate banking revenue capped a strong 2023. Net interest income was the main driver of revenue; also, several banks benefited from lower hedging costs and lower fair value losses on leveraged finance lending. Operating costs also rose, but at a slightly slower rate, leading to 15% y/y growth in FY23 profits. Several banks are hiring in the Middle East. The non-performing loans are not a major concern - yet.
- Treasury services revenue reached \$26bn in 4Q23; higher deposit margins in the high-rate environment were a major driver of revenue. FY23 revenue totaled \$96bn, 33% ahead of FY22. Building on the success in middle markets in their home territory, US majors are planning to expand in Europe.



% change share of peer group operating revenue and pre-tax profit (FY23 / FY22)



Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) In-scope: Large Cap/MNC and Mid-Cap/SMEs.



Revenue dynamics

FY23/FY22 (Operating revenue, % change, US\$)

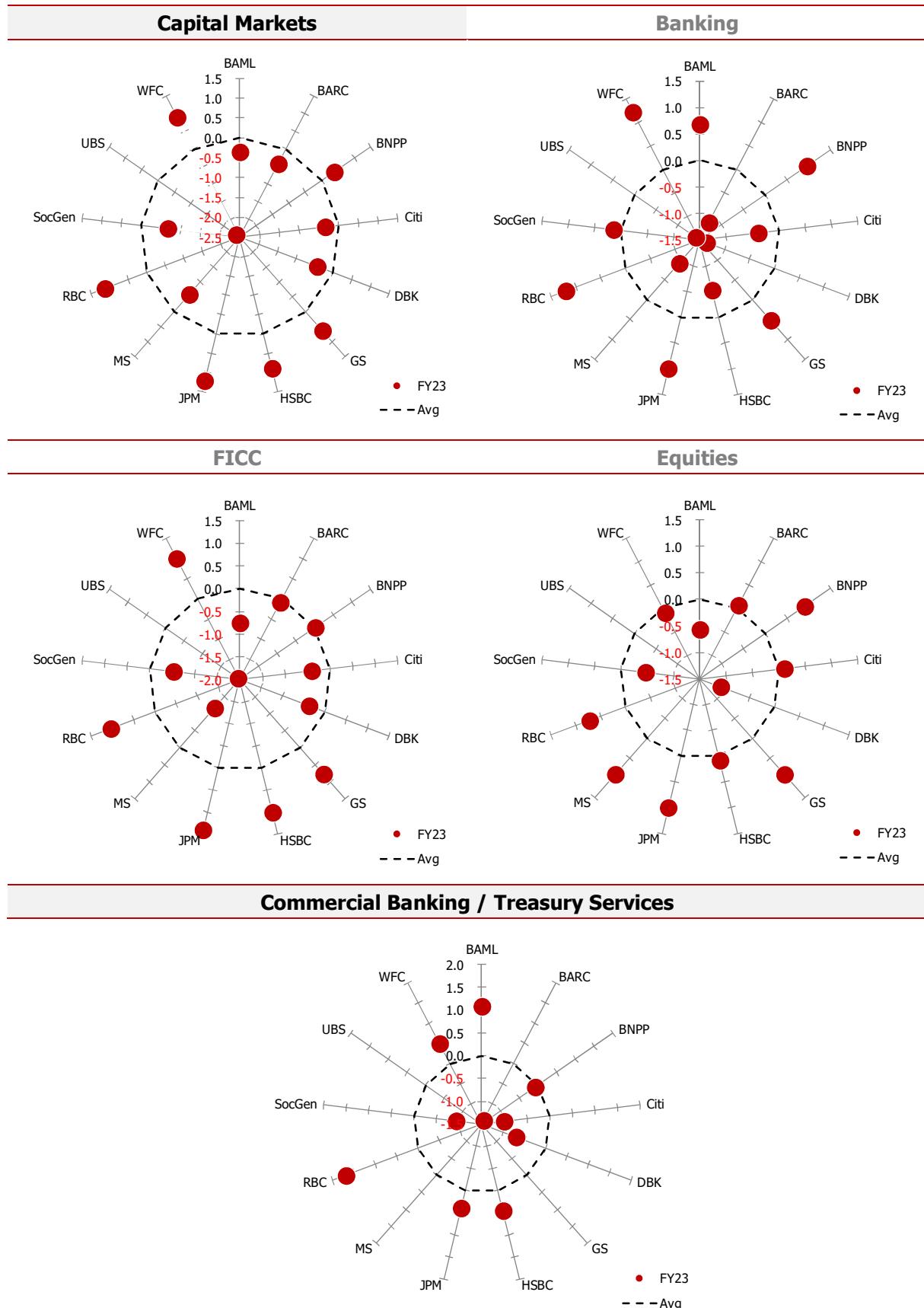
	BAML	BARC	BNPP	Citi	DBK	GS	HSBC	JPM	MS	RBC	SocGen	UBS	WFC
Capital Markets	↑	↓	↓	↓	↓	↑	↑	↓	↓	↑	↑	↑	↑
Banking	↑	↓	↑	↓	↓	↓	↑	↓	↓	↑	↑	↑	↑
DCM Bonds	↑	↓	↑	↑	↑	↓	↑	↓	↓	↑	↑	↑	↑
DCM Loans	↓	↓	↓	↑	↑	↓	↑	↓	↓	↑	↑	↑	↑
Securitisation	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
ECM	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
M&A / Advis	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Markets	↑	↓	↓	↓	↓	↑	↑	↓	↑	↑	↑	↓	↑
FICC	↑	↓	↓	↑	↑	↑	↑	↑	↑	↑	↑	↓	↑
FX & Loc Mkts	↑	↓	↑	↑	↑	↓	↑	↑	↑	↑	↑	↓	↑
Rates & Fin & Muni	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Credit	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Commodities	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Equities	↑	↓	↓	↓	↓	↑	↑	↓	↓	↑	↑	↓	↑
EQ Cash	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
EQ Der'v & Conv't	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Prime Services	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Prop & PI	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Comm Bank / Treasury Services	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Comm Bank	↑	↑	↑	↓	↑	↓	↑	↑	↑	↑	↑	↑	↑
Treasury Services	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

4Q23/4Q22 (Operating revenue, % change, US\$)

	BAML	BARC	BNPP	Citi	DBK	GS	HSBC	JPM	MS	RBC	SocGen	UBS	WFC
Capital Markets	↑	↑	↑	↓	↑	↓	↑	↑	↑	↑	↑	↑	↑
Banking	↓	↓	↓	↑	↑	↓	↑	↓	↓	↓	↓	↓	↓
DCM Bonds	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
DCM Loans	↑	↑	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑
Securitisation	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
ECM	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
M&A / Advis	↓	↓	↓	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓
Markets	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
FICC	↑	↓	↑	↑	↑	↓	↑	↑	↑	↑	↑	↓	↑
FX & Loc Mkts	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Rates & Fin & Muni	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↑
Credit	↓	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓
Commodities	↓	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓
Equities	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
EQ Cash	↓	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
EQ Der'v & Conv't	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Prime Services	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Prop & PI	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Comm Bank / Treasury Services	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Comm Bank	↑	↑	↑	↓	↑	↓	↑	↑	↑	↑	↑	↑	↑
Treasury Services	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

Source: Tricumen. Notes: (1) Tricumen product definitions throughout. (2) Arrows show % change in revenue vs peers. Up-/down-arrows: top-/bottom-quartile. (3) Operating revenue is post-writedowns, excludes DVA/equivalent and one-offs. (4) Commercial/Transaction Banking includes Large Cap/MNC and Mid-Cap/SMEs.

Pre-tax profit margin (US\$)

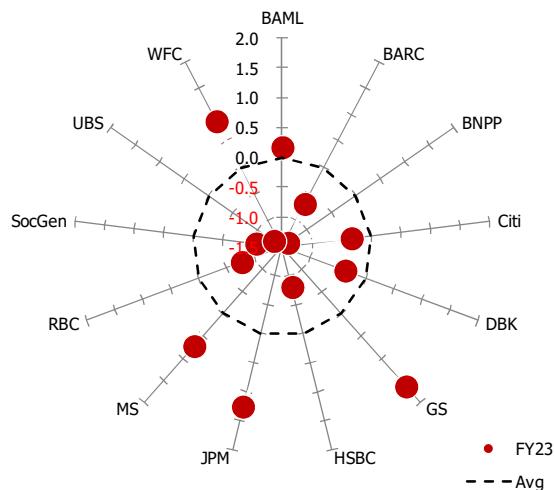


Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) Operating expenses exclude one-off non-operational items, insurance-related benefits & claims, and credit expense/recovery/NPL provisions. Capital expenditure is included as accrued. Litigation expense is allocated to front-line units. (3) positive values = outperformance; negative values = underperformance, relative to the peer group featured in this report; (4) missing values = N/M; no Tricumen coverage; or a bank is not a significant competitor.; (5) outliers are excluded.

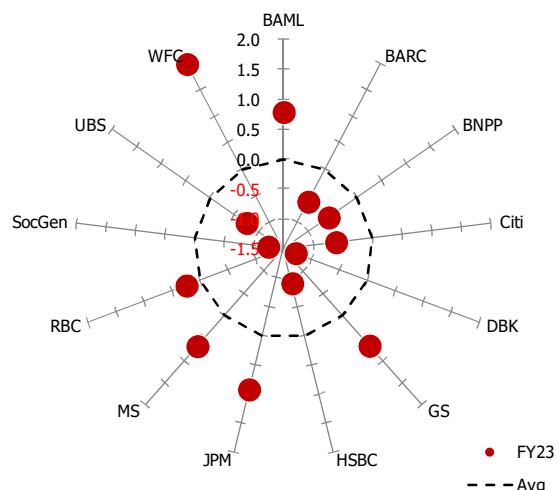


Operating Revenue / Front Office FTE (US\$)

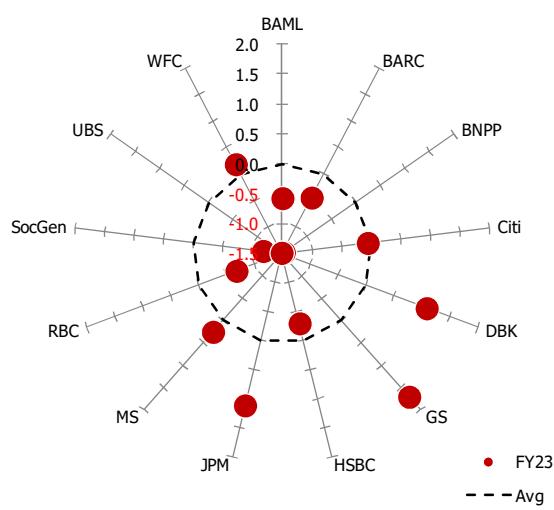
Capital Markets



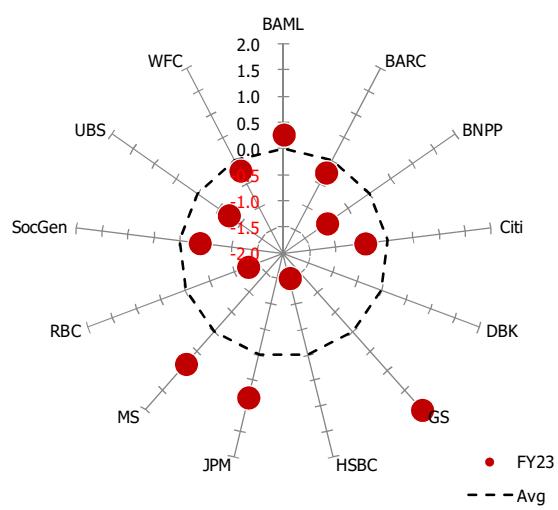
Banking



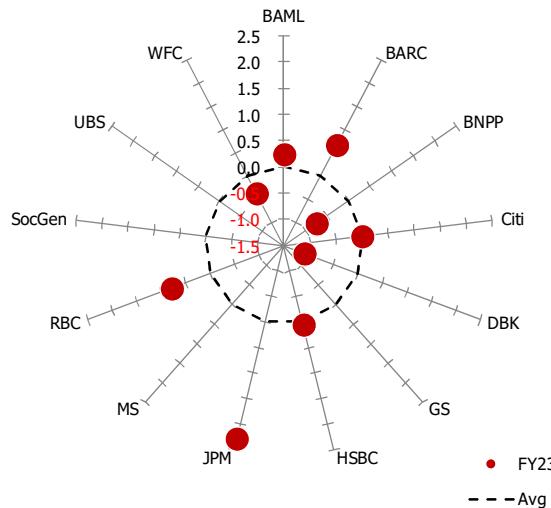
FICC



Equities



Commercial Banking / Treasury Services



Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) positive values = outperformance; negative values = underperformance, relative to the peer group featured in this report; (3) missing values = N/M; no Tricumen coverage; or a bank is not a significant competitor; (4) outliers are excluded.

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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, asset servicing, and asset and wealth management. 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 financial markets-focused research network of its peer group.

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