

CIB Results Review 4Q22 / FY22

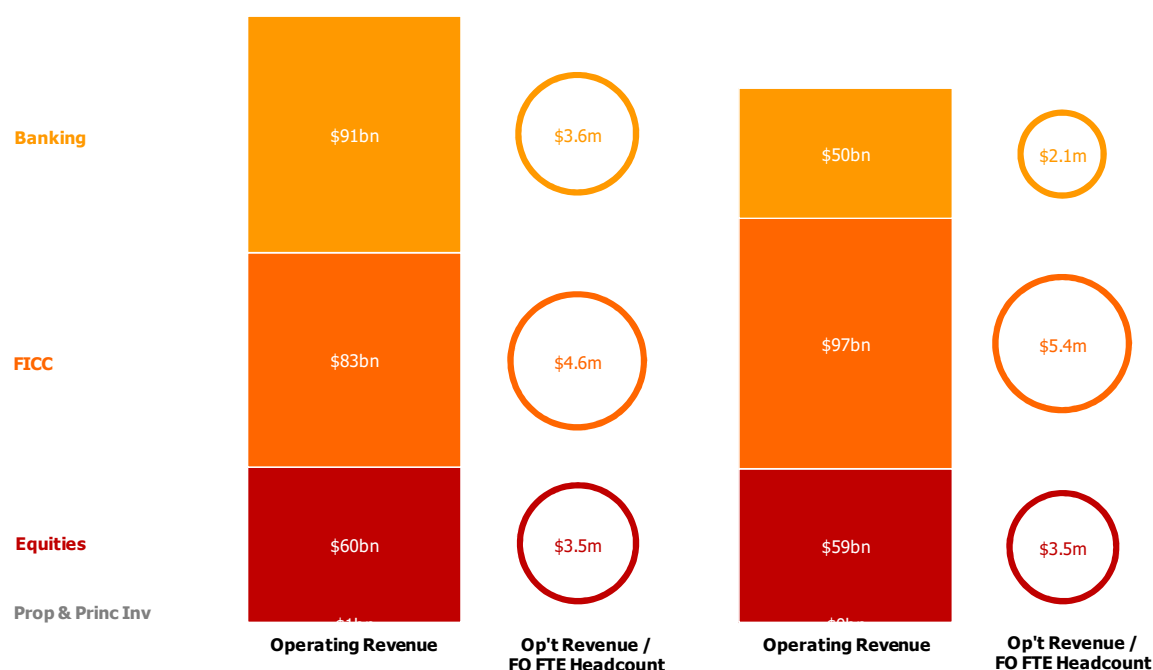
Capital Markets: Overview

- Operating revenue of banks in this note reached \$206bn, 12% below FY21. Banking revenue halved on weak ECM and DCM, but Markets advanced 9% y/y, driven by strong macro and, to a lesser extent, commodities and equity derivatives.
- In view of the uncertain outlook, banks cut overall costs by 4% vs FY21; not surprisingly, Banking bore the brunt of cost reductions. Low expectations for bonuses were, generally, met. Donuts were not as common as feared, but in underperforming areas – Banking and, within it, ECM and leveraged finance in particular – bonuses halved vs 2021. Macro, however, did a lot better, with several banks in this note sharply increasing the payouts. Across the board, and more than was the case in previous years, banks directed bonuses towards strong performers - in both the front office and technology – and senior ranks.

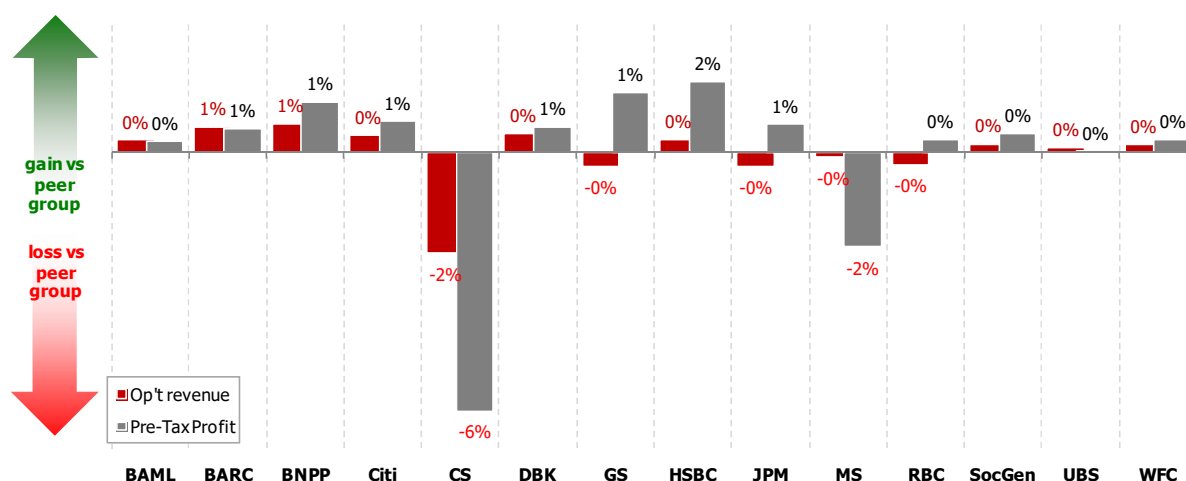
Meanwhile, a recent study of 45 SIFIs by Halle Institute for Economic Research (IWH) showed that the EU's politically-driven cap on senior bankers' bonuses was not only ineffective – in many cases, it actually increased the appetite for risk-taking.

Revenue & productivity (FY21)

(FY22)



% change share of peer group operating revenue and pre-tax profit (FY22 / FY21)



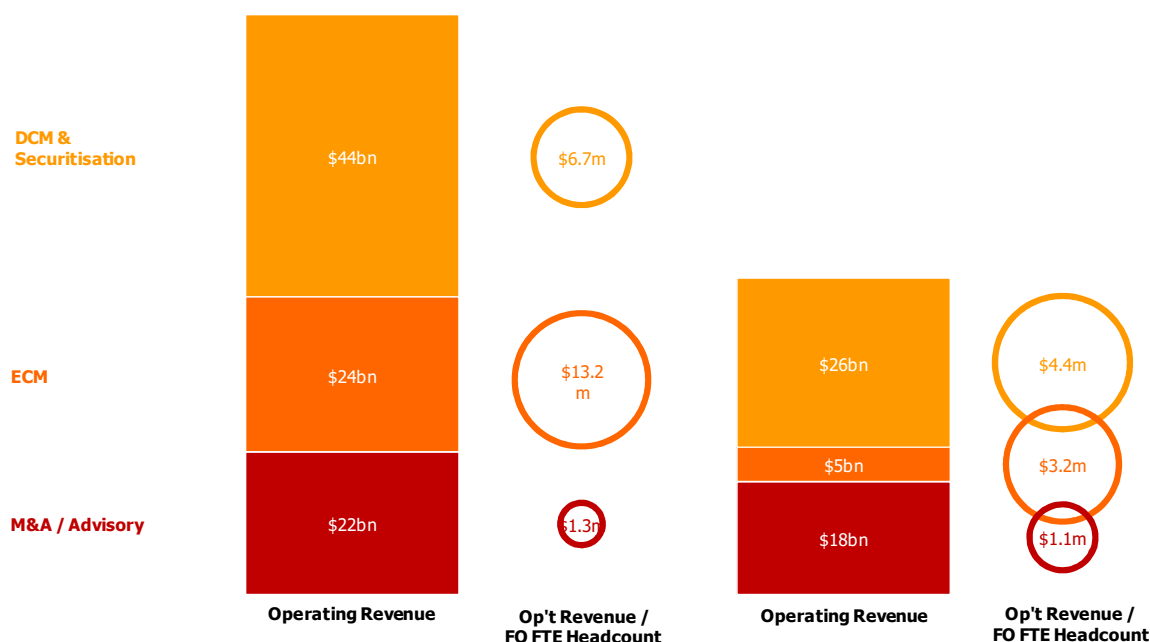
Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) Pre-tax profit excludes Prop & Principal Investments.

Capital Markets (cont.): Banking

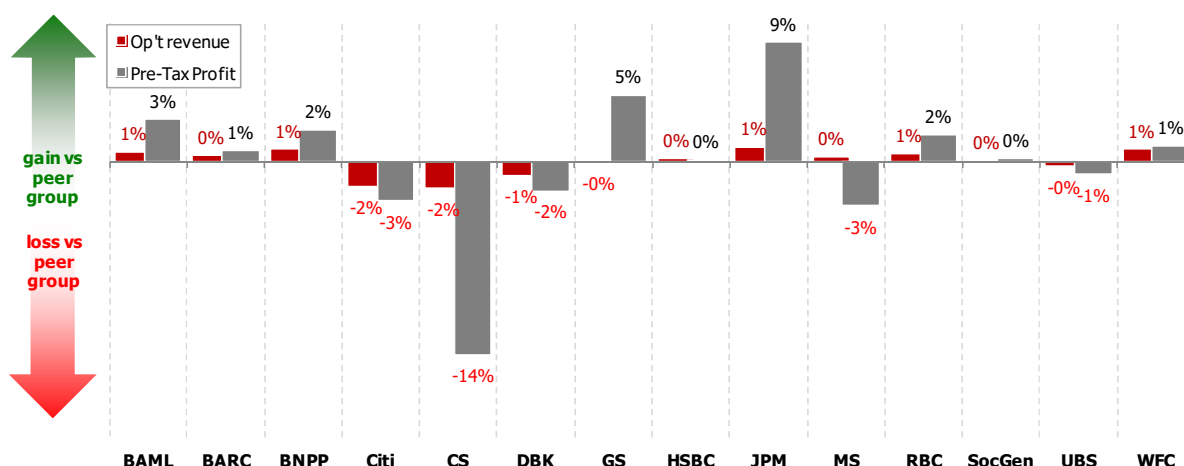
- Spurred on by the expectations that the Fed will not increase rates (much) further, in the US, DCM bonds had a strong start to 2023 - \$64bn issues in the first week, only 5-12% below comparable periods in 2020/21 – and maintained the momentum into February. In Europe, debt sales (including corporate and govie issuance) were just shy of \$600bn, well above the five-year average. Also, while the majority of new volume was high grade (FT: \$246bn by late February, an 11-year record), high yield markets may be picking up the momentum: in Europe, companies raised \$1.5bn in January alone – well below the prior-year period, but a positive sign nonetheless. Developing countries also notched up record volumes of sovereign issues: \$39bn in the first half of January, demolishing the previous record, from 2018, of \$26bn. All issues were at least 3x oversubscribed.
- In securitisation, SEC in January (re-)proposed to ban banks which sell ABS to investors from betting against such assets. As before, the rule would exempt hedging for risk mitigation, market-making and other legitimate activities; but it seems that the prohibition still isn't clearly defined.
- Globally, ECM volumes *and* fees dropped 65% y/y/ in 4Q22 and FY22. The weakness extended into 2023: in Europe, January was the slowest month since 2019, with IPO proceeds below \$1.5bn, down 80% y/y. The US also struggles, although there were signs of thaw in IPOs in February.
- M&A/Advisory also had a weak start to 2023 – global volumes fell to a 20-year low in January.

Revenue & productivity (FY21)

(FY22)



% change share of peer group operating revenue and pre-tax profit (FY22 / FY21)



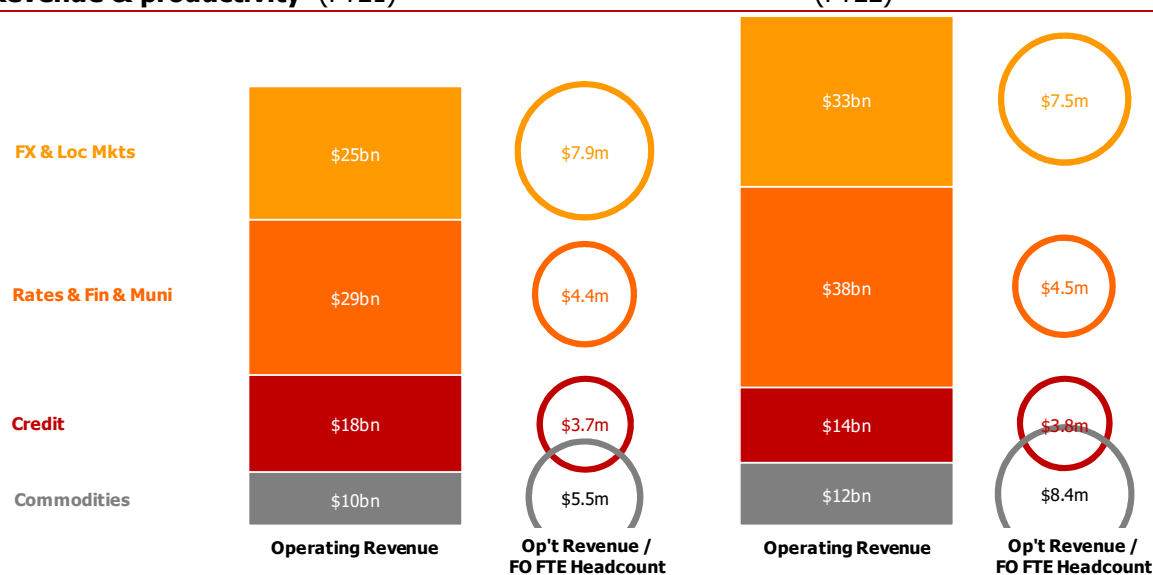
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Capital Markets (cont.): FICC

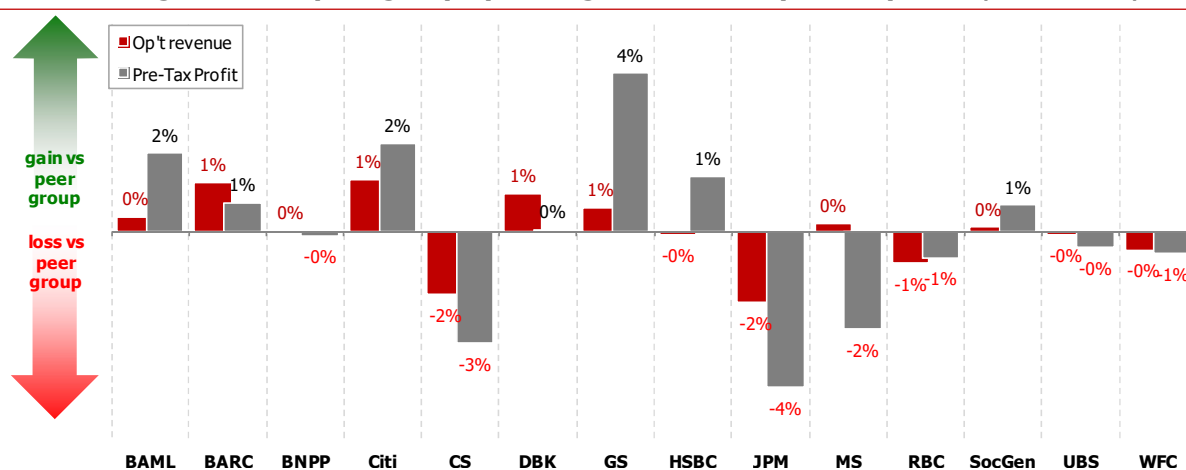
- The FTX.com collapse dealt a blow to cryptos being in big institutions' portfolios (boutiques don't participate). In fact, it raised doubts about the viability of crypto ecosystem, and other fails are attracting scrutiny. UK regulators are looking to regulate, including the 'world's first' regime for crypto lending; SEC has stablecoin in its crosshairs; EU regulators may force banks to hold capital equal to 100% of cryptoassets they hold; AFME stated that the new law, in its draft form, does not define 'crypto assets', and could be (mis)applied to tokenised securities, too. Still, institutions are looking to (selectively) expand their crypto offerings. In November, HSBC and Wells Fargo added offshore yuan to their blockchain-based solution, the fifth such currency (others are USD, CAD, GBP and EUR). Goldman Sachs, J.P.Morgan and a slew of asset managers are also expanding.
- After years of fast growth, muni issuance fell 20% y/y in FY22, the slowest FY since 2018 and not far ahead of the lean FY13/14. January volumes were slightly ahead y/y, driven by 1-year swaps.
- Spreads stayed weak as investors chose defensive and high grade credit. The Fed's CMDI suggests strains in market functioning in high grade; the 0.38 level in Dec-22 was the highest since 2016. In high yield, US leveraged loan and CLO spreads suggest that investors remain wary of lending to troubled companies – which, in turn, suggests they view the hard lending and a surge in defaults as a real possibility. Meanwhile, in January, US electronic volumes jumped 30% y/y; and the demand for emerging market bonds in 4Q22 reached levels not seen since 2006/07. In Europe, ECB is considering higher capital requirements for banks operating in leverage finance markets.
- Investors upped holdings of petroleum futures and options at the fastest rate since 2021 as macro concerns eased and China reopened. Low inventories of most raw materials bode well for 2023. After the surge in volatility in 1H22, oil, gas and precious metals calmed in 2H22/early 2023.

Revenue & productivity (FY21)

(FY22)



% change share of peer group operating revenue and pre-tax profit: (FY22 / FY21)



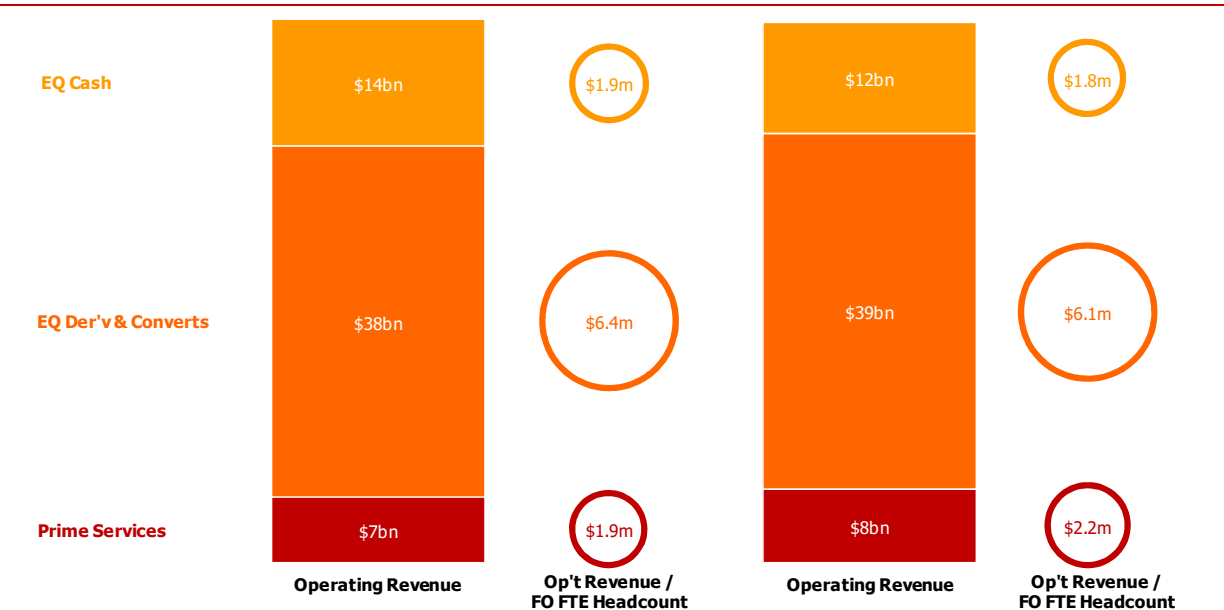
Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) Pre-tax profit excludes Prop & Principal Investments.

Capital Markets (cont.): Equities

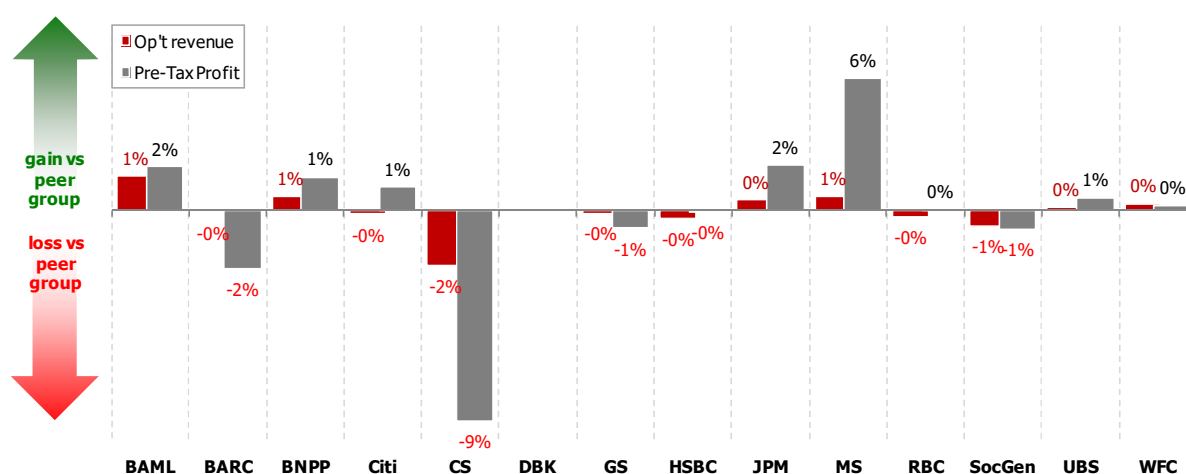
- Cash revenue declined in 4Q22, mostly due to weaker institutional volumes, margin compression and weak primary activity. Relative to 3Q22, AMER stabilised but EMEA and APAC weakened.
- Volatility in equity derivatives jumped in October but declined in November; institutional investors cut their exposure further. The volume of trades in risky very short-term index options – 0DTEs – almost doubled vs 4Q21. Research suggests that this was not driven by retail investors, but by fintech-powered institutions breaking down large orders into smaller orders, typically to cloak their strategies. Corporate derivatives were also weak, owing to low primary activity.
- In prime services, impacted by volatile fixed and equity markets, investors previously overallocated to hedge funds and alternatives. The latter remain popular, but hedge funds are now suffering redemptions: September and October saw record withdrawals, especially in long-short equity, macro, and credit strategies. Volatility specialists, however, reported strong gains – unusually, both in long- and short- strategies, driven by the turmoil in FX and credit and calmer equity markets, respectively. At the end of 2022, hedge funds' AuM totalled \$4.9tn, a shade below FY21.

Revenue & productivity (FY21)

(FY22)



% change share of peer group operating revenue and pre-tax profit (FY22 / FY21)



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

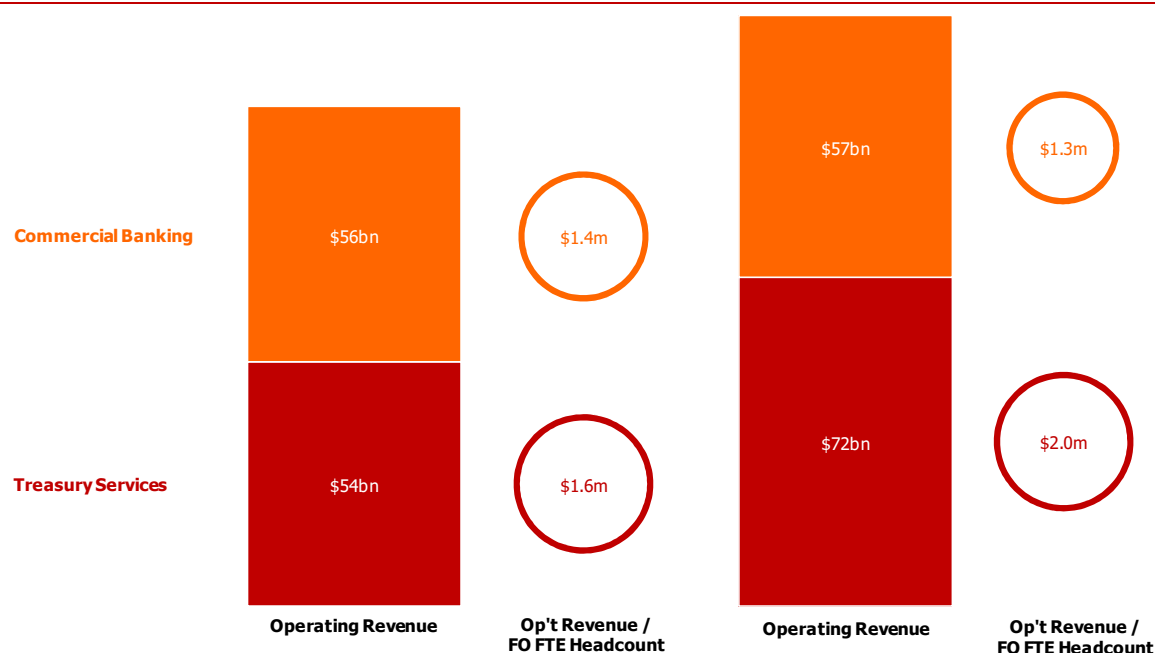
- ECB's recent data showed that Eurozone's largest banks managed to reduce the amount of bad debts on their books in 3Q/4Q22. However, the ECB is – in our view, justifiably – concerned that banks are underestimating the risk arising from an economic downturn and are not setting aside enough provisions. ECB data also showed that corporate lending in the Eurozone grew by 6.3% y/y in December. This is well below the 8.3% only a month earlier, and suggests that ECB's sharp increases in base rates having the intended effect. Further rate raises by ECB are expected – the current consensus is for 3% in 1Q23 and 3.5% in 2Q23 – which suggests that the volume of corporate loans may stagnate (or worse) in the current year.

Project finance volumes loans reached record volumes in 2022 driven by Americas and, to a much lesser extent, Asia; EMEA declined 10% y/y.

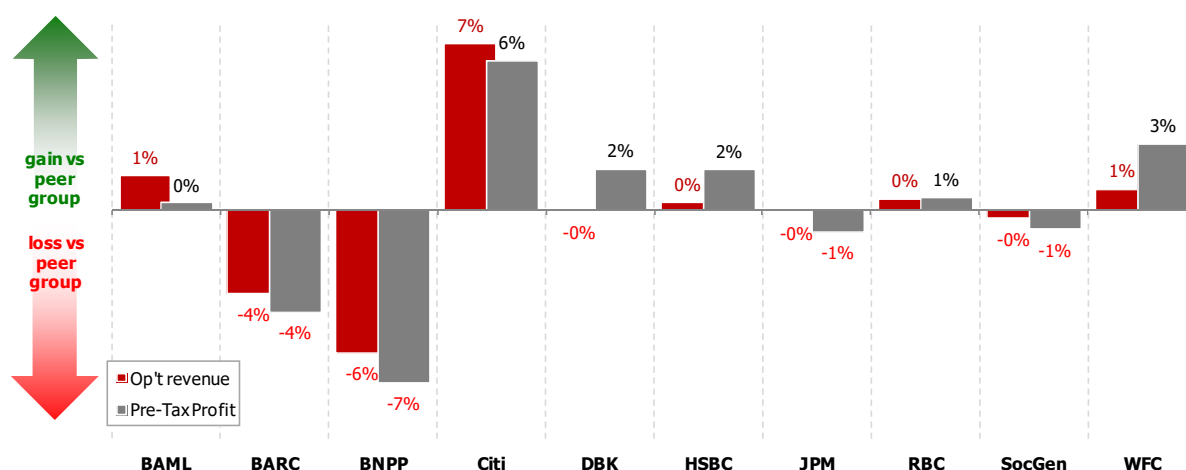
- Transaction banking – and cash management in particular - recorded strong growth. Higher rates and spreads and, in many cases, repricing of deposits, drove the revenue; this was partially offset by higher deposit fees and lower investment banking fees.

Revenue & productivity (FY21)

(FY22)



% change share of peer group operating revenue and pre-tax profit (FY22 / FY21)



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

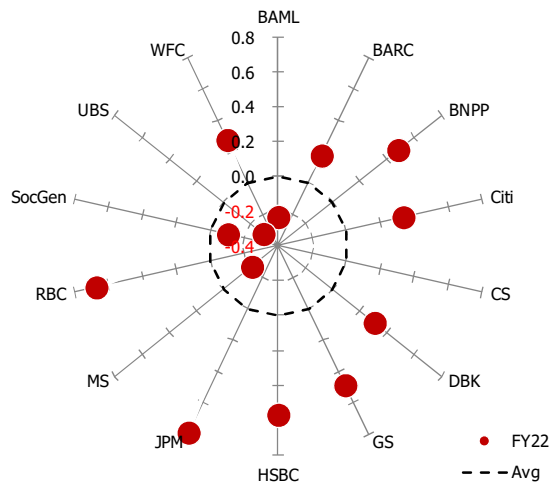
FY22/FY21 (Operating revenue, % change, US\$, Global Level 1)

	BAML	BARC	BNPP	Citi	CS	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 & Mur	↑	↑	↔	↔	↓	↔	↔	↔	↔	↑	↓	↑	↔	↔
Credit	↑	↑	↑	↑	↓	↔	↑	↔	↑	↑	↔	↑	↔	↔
Commodities	↓	↔	↔	↑	↓	↓	↔	↔	↔	↓	↔	↓	↔	↔
Equities	↑	↔	↑	↔	↓	↓	↔	↔	↔	↑	↔	↔	↔	↑
EQ Cash	↔	↔	↑	↔	↓	↔	↔	↔	↔	↔	↔	↔	↔	↔
EQ Der'v & Conv't	↔	↔	↔	↔	↓	↔	↔	↔	↔	↔	↔	↔	↔	↑
Prime Services	↓	↔	↔	↓	↑	↔	↔	↓	↓	↓	↓	↓	↔	↓
Prop & PI	↑	↑	↑	↑	↑	↑	↑	↓	↑	↑	↑	↑	↑	↑
Comm Bank / Treas Serv	↑	↓	↓	↑	↑	↔	↑	↑	↔	↑	↑	↑	↑	↑
Comm Bank	↑	↓	↓	↔	↑	↔	↑	↔	↔	↑	↑	↑	↑	↑
Treas Serv	↔	↔	↓	↔	↑	↔	↑	↑	↑	↑	↑	↑	↑	↑

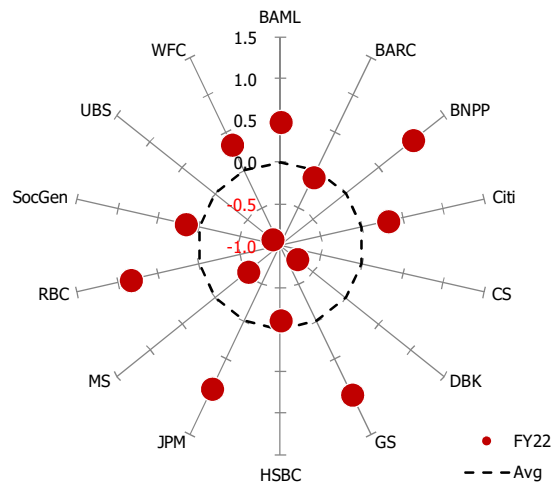
Source: Tricumen. Notes: (1) Tricumen product definitions throughout. (2) Arrows show % change in revenue vs peers. Up-/down-arrows: top-/bottom-quartile. (3) Operating revenue is post-writedowns, excludes DVA/equivalent and one-offs. (4) Commercial/Transaction Banking includes Large Cap/MNC and Mid-Cap/SMEs.

Pre-tax profit margin (US\$)

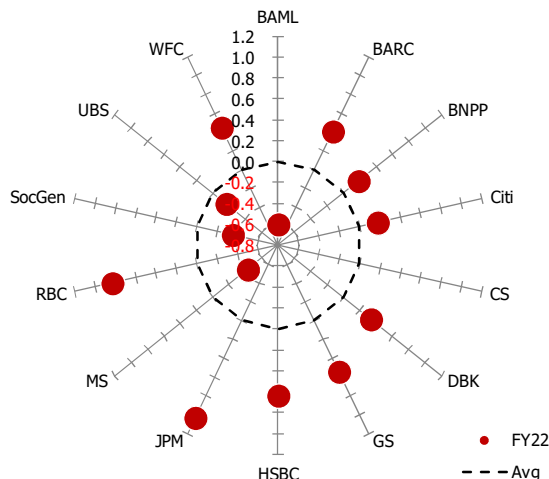
Capital Markets



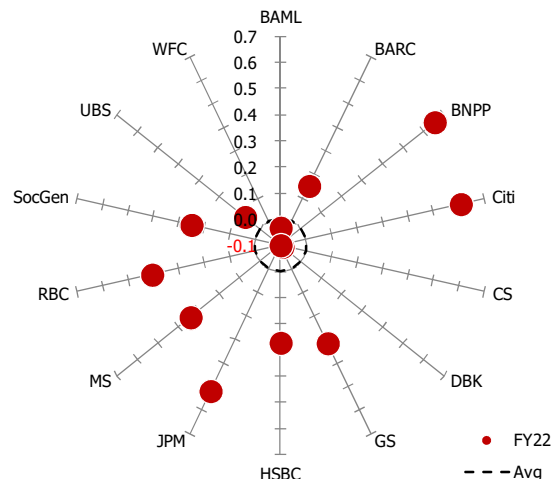
Banking



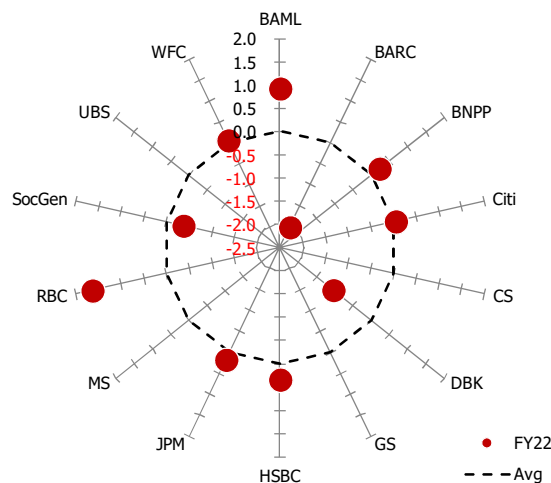
FICC



Equities



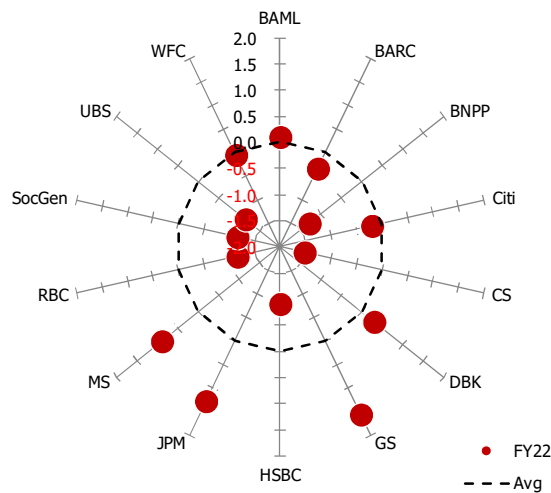
Commercial Banking / Treasury Services



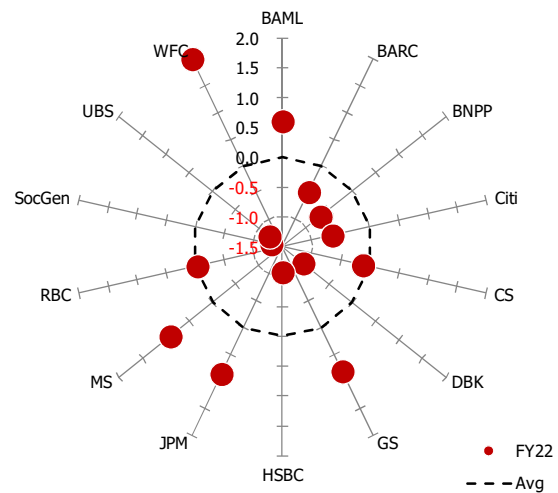
Source: Tricumen. Notes: (1) TRIC product definitions, standard deviation, product Level 1; (2) Operating expenses exclude one-off non-operational items, insurance-related benefits & claims, and credit expense/recovery/NPL provisions. Capital expenditure is included as accrued. Litigation expense is 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\$)

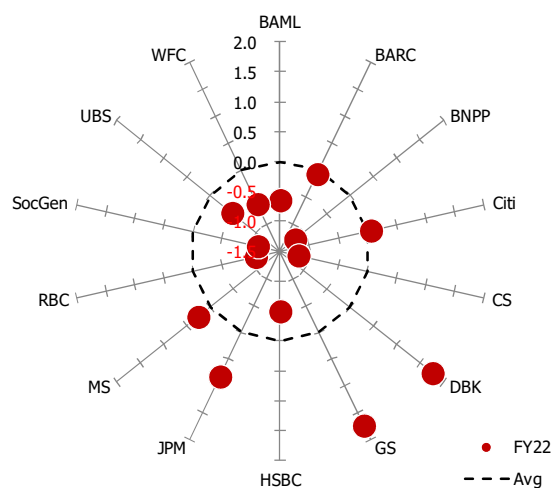
Capital Markets



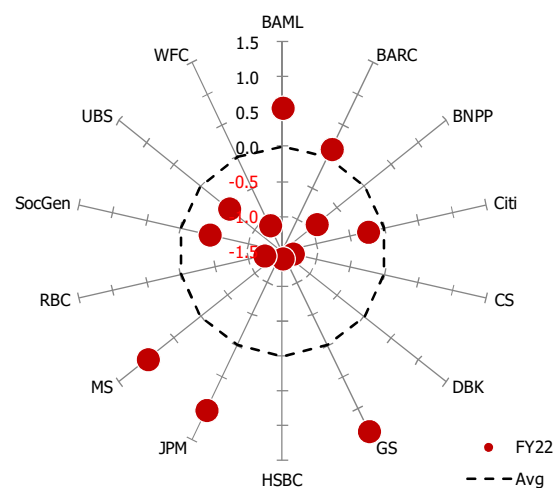
Banking



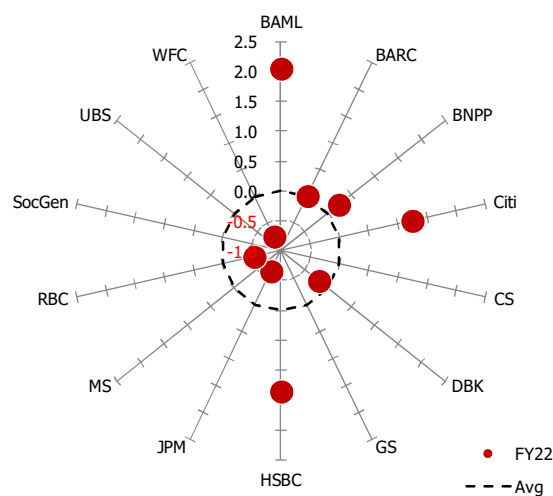
FICC



Equities



Commercial Banking / Treasury Services



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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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