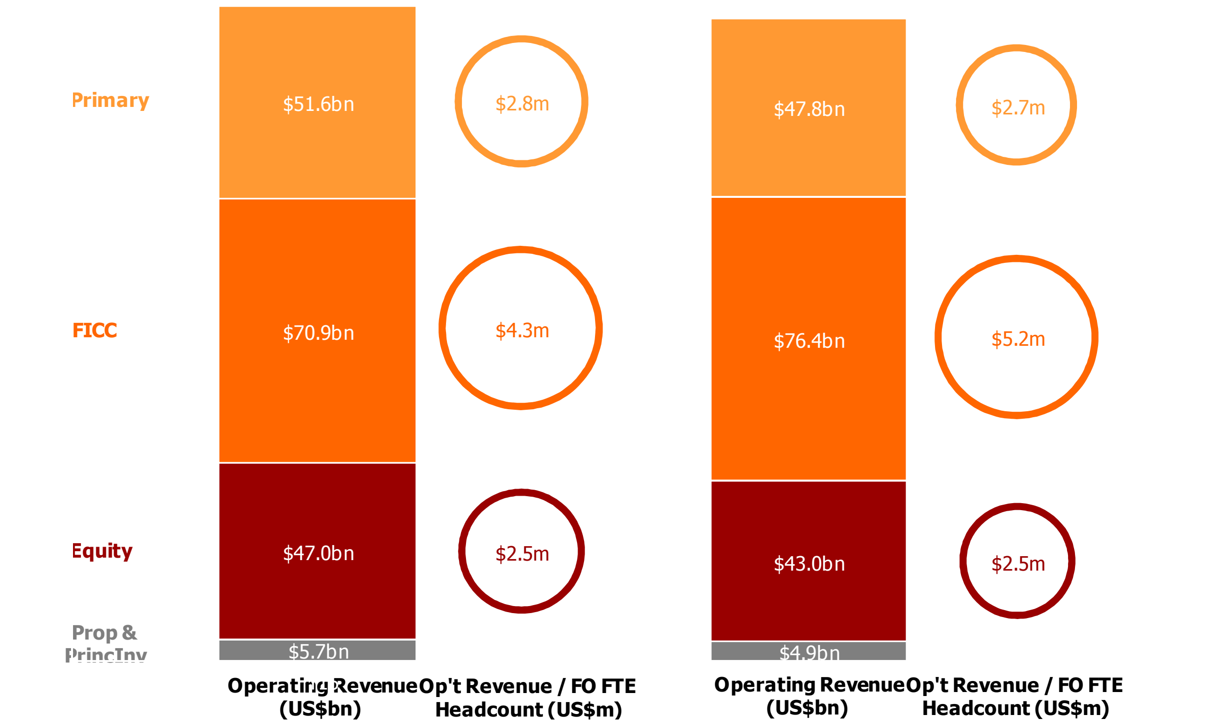
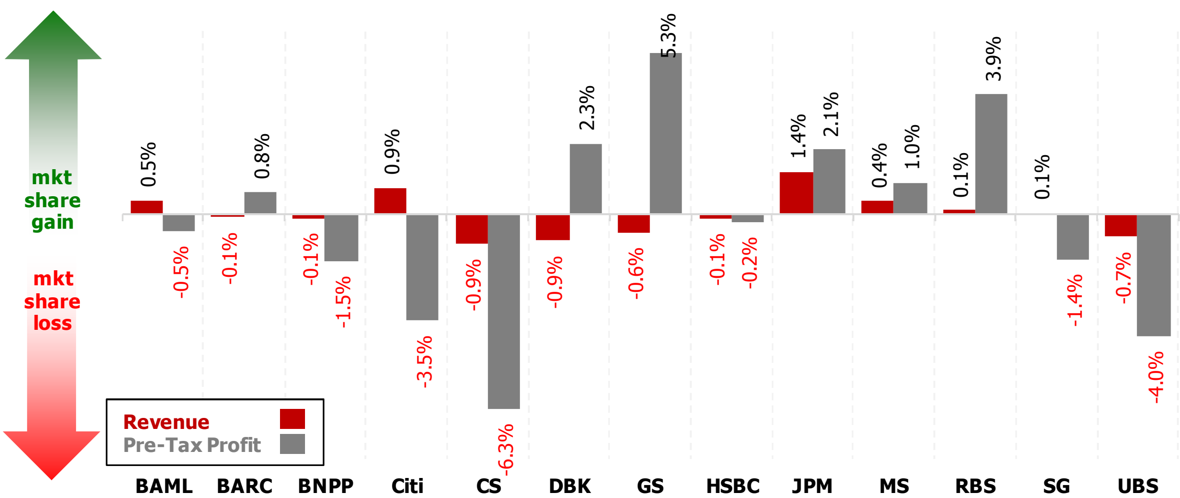
Results Review FY16
Capital Markets: Overview

- The FY16 revenue of Top 13 investment banks reached $172bn, -2% vs FY15. European banks continue to lose ground: while the US banks grew revenue 2% (4Q16: 17%), EMEA banks' fell 8%. The US banks' lead is even more stark in terms of profitability: their FY16 pre-tax profits surged 44% (and more than doubled in FICC), while Europeans' profits were unchanged as the plunge in FICC profits (partly due to litigation hits) more than offset healthy profits in Banking and Equities.
- Global banks reacted quickly to British Prime Minister's announcement that the UK will be leaving the EU single market. Goldman Sachs will shift personnel to Frankfurt, Poland, France and Spain; UBS already started moving staff, 300 of which may go to Spain and many more elsewhere; Citi chose Dublin (900 staff) and Frankfurt, as did Morgan Stanley (300); HSBC may move staff who generate 20% of capital markets revenue to Paris; Lloyds Banking Group picked Frankfurt for its EU hub; the list goes on. Support roles are most at risk, followed by the front-line equity and rates derivatives. However, top executives reportedly mentioned that Euro swaps clearing business may stay in London, as imposing controls on the currency may damage its reserve status.

Operating Revenue (FY15) (FY16)



% change share of peer group operating revenue and pre-tax profit (FY16 / FY15)

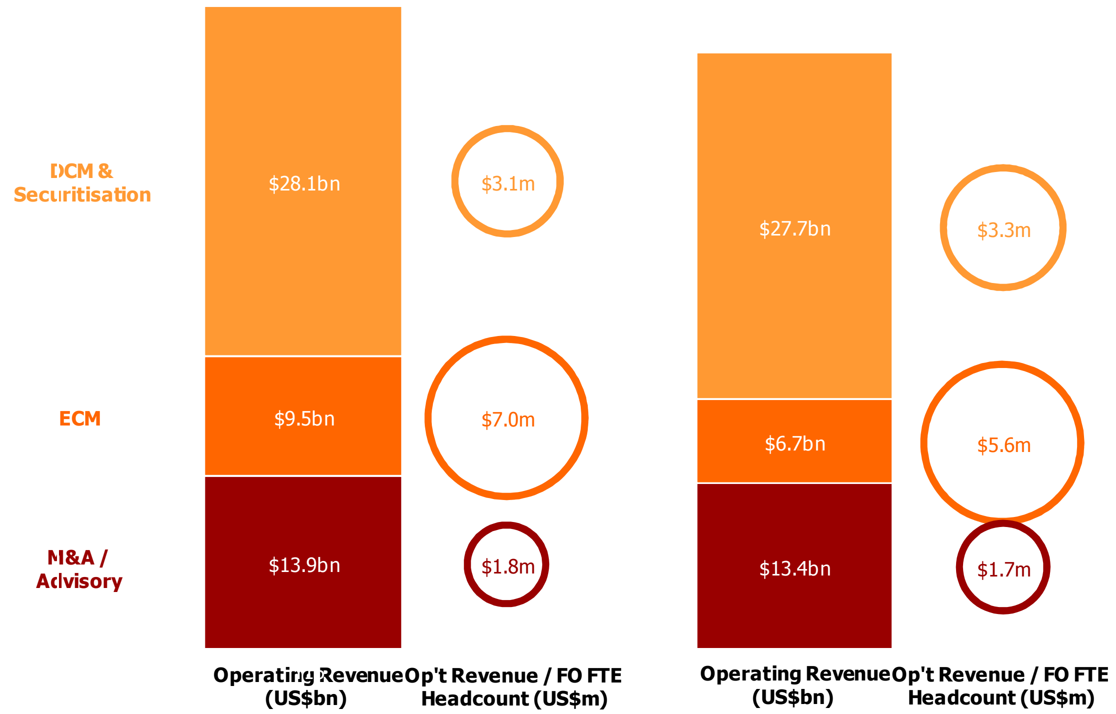


Notes: (1) Tricumen product definitions throughout. (2) Revenue is post-writedowns, excludes DVA/equivalent and one-offs. (3) Headcount: Front office full-time equivalent, adjusted for seniority. (4) Pre-tax profit excludes Prop & Principal Investments..

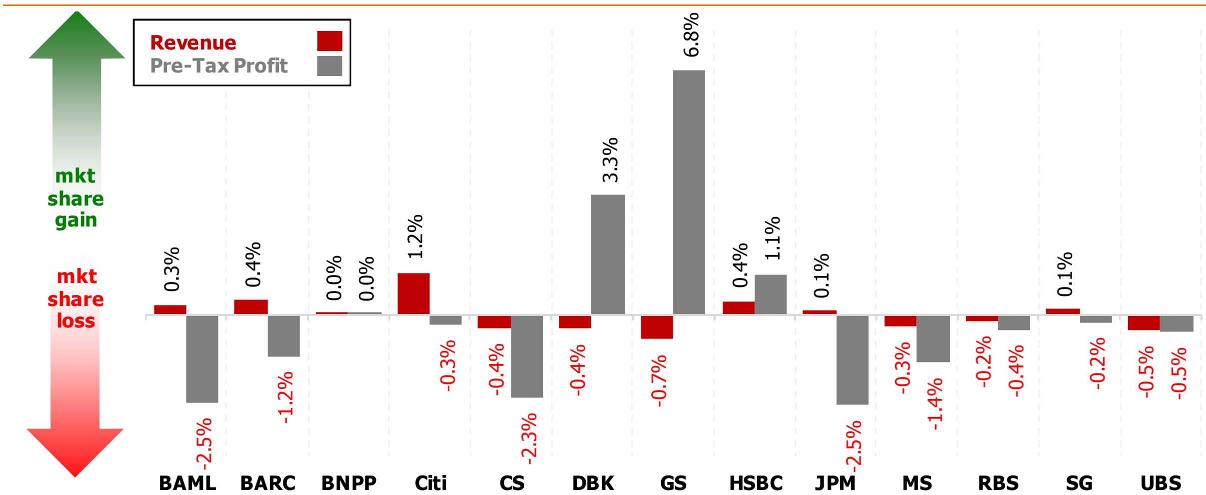
Capital Markets (cont.): Primary issuance & Advisory

- DCM bond fees ended 2016 on a strong note and up 6% vs FY15; syndicated loan fees, however, declined 12% vs FY15, despite decent showing from leveraged markets. UK high-yield issuance spiked in the immediate aftermath of Brexit, but the spreads fell below the pre-referendum level by September: January issuance topped GBP2bn, the highest on record. EU banks await ECB's clarification on incoming changes to leveraged lending regulation and whether those will apply retrospectively - the US' 2013 legislation allows adjustments to EBITDA, but ECB may not. In the US, leveraged loans had a strong start to 2017, with c.$3bn of investments in January alone. With US outperforming Euro spreads and a possible repatriation of funds held abroad, US corporates' appetite for issuance in Europe may cool in 2017.
- Top 13' ECM fees plunged 30% in FY16 (4Q16: -13%) amid a drop in both IPO and APOs. Energy & Power was a rare area of growth; China's share surged to 24%. In Europe, block trades jumped.
- M&A/Advisory fees declined 6% vs 4Q15; EMEA banks underperformed their US peers in revenue dynamics (US: -12%, EMEA +10%). Brexit led to a surge in UK companies' investments abroad: $135bn worth of cross-border M&A deals were announced since Brexit, a 54% y/y increase, with consumer and retail, financial services and mining sectors being the most active.

Operating Revenue (FY15) (FY16)



% change share of peer group operating revenue and pre-tax profit (FY16 / FY15)



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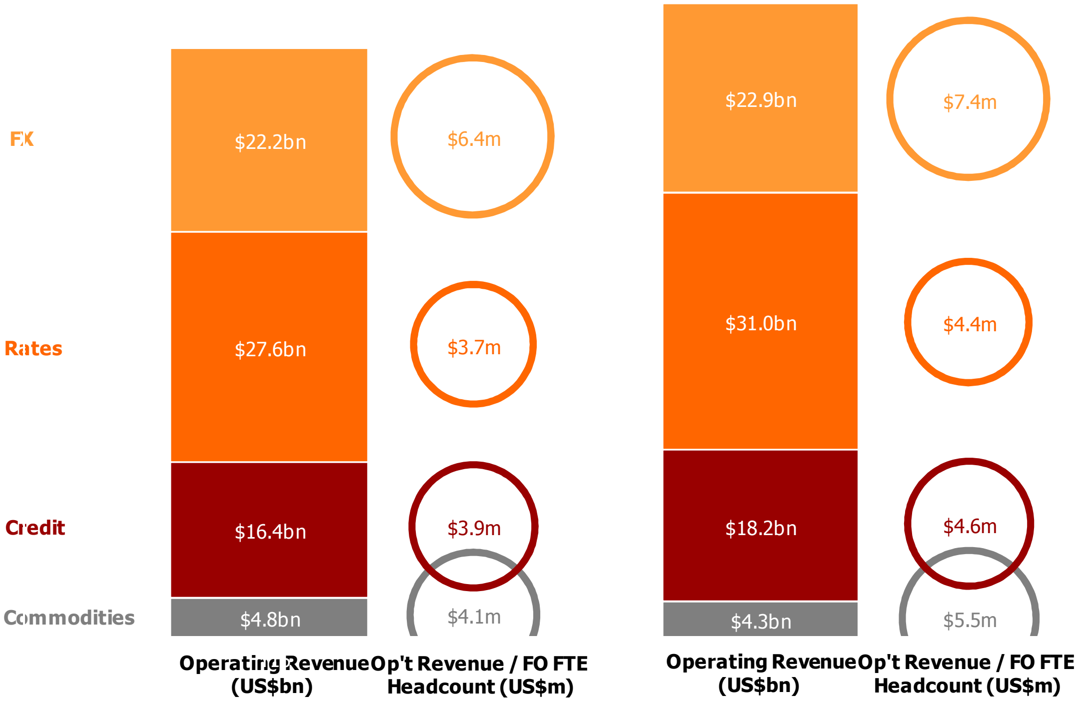
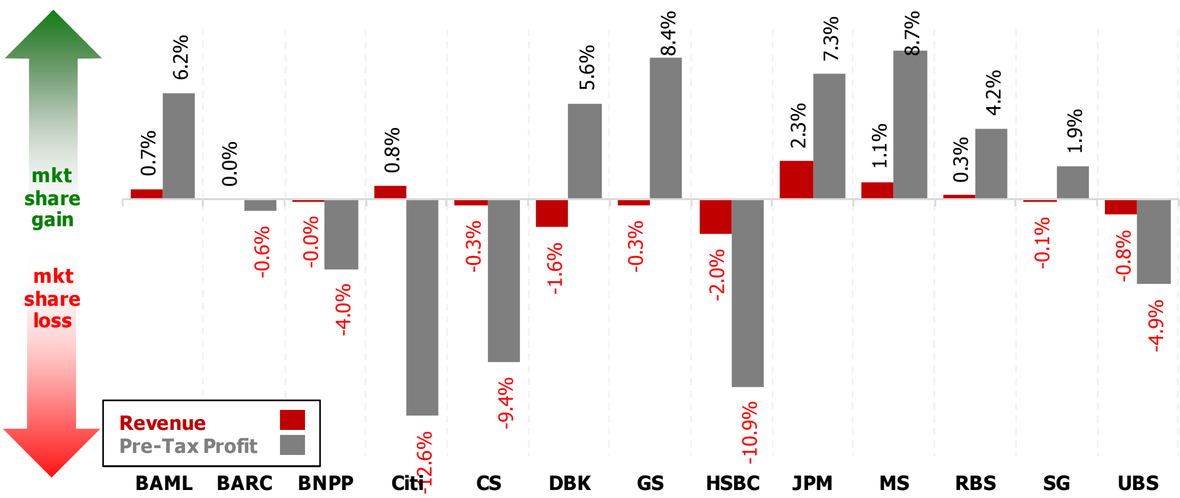
Capital Markets (cont.): **FICC**

- Top 13' aggregate FX revenue was broadly unchanged from 2015; options and exotics was an area of strength in 4Q16. Headcount reductions are set to continue: according to BIS, the share of pure voice-brokered FX trades dropped to 15%, with voice-/e-mix adding less than 25% to that.
- In rates markets, higher interest rates boosted trading revenues, which benefitted both repo and T-bills and swaps. Options and exotics trading continued a gradual decline throughout much of 2016. Muni trading soared versus 2015, though the rate of growth dropped significantly in 4Q16.
- Credit trading revenue surged 65% y/y in 4Q16, driven by the surging client revenue opportunity in the US - especially high yield. The overall revenue opportunity in European markets declined, though there were some areas of strength - e.g. CoCos, which returned c.30% in 2016 following a collapse early in the year. In Europe, Bank of England and ECB' buying of high-grade corporate continues to push investors into higher yielding crossover paper; and 1H17 may see elevated volatility in credit markets as the results of rising political risk and technical factors.
- Commodities revenue declined 10% vs FY15 to $4.3bn as strong markets in precious metals and energy in 4Q16 only partly offset withdrawals from the sector.

Operating Revenue (FY15) (FY16)



% change share of peer group operating revenue and pre-tax profit: (FY16 / FY15)



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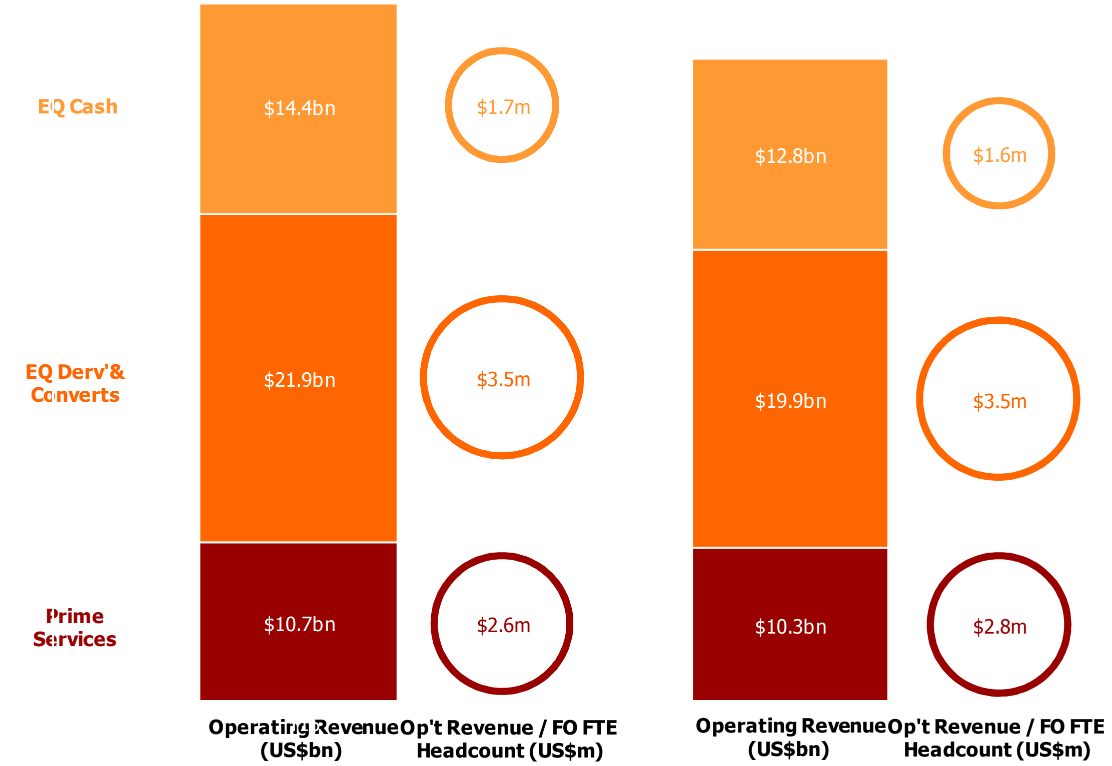
Capital Markets (cont.): Equities

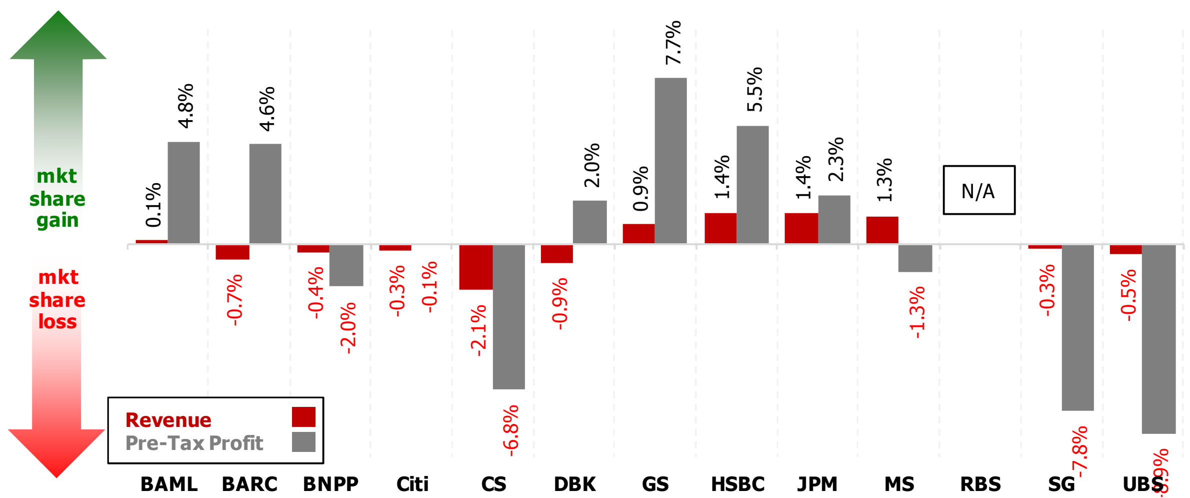
- In FY16, main high-touch <u>cash equity</u> markets fell; declines were modest in Europe and the US, but dropped 60% in Japan, largely due to the outsized contribution of 1H15. E-volumes continued growing, though, especially in Europe., where crossing and OTC activity jumped 23% y/y on Brexit.

  The unbundling of research will impact the already precarious profitability of cash equity units and further diminish the number of publishing analysts. We estimate that banks in this report reduced the number of analysts from c.7,100 at the end of 2013 to 6,400 at the end of 2016, a 10% reduction. However, smaller players are (quietly) hiring senior analysts.
- <u>Equity derivatives</u> revenue declined in FY16 amid reduced structured product issuance across the globe - especially in APAC - and subdued flow trading in North America and APAC. These falls were partly mitigated by increased client activity in Europe and growth in APAC in 4Q16/4Q15.
- <u>Prime services</u> held up comparably well, due to steady hedge fund AuM levels (though not in APAC, where redemptions are at the highest level since 2013/14). Securities lending activity declined 16% y/y in FY16, but improved margins and synthetic financing supported revenues.

Operating Revenue (FY15) (FY16)



% change share of peer group operating revenue and pre-tax profit (FY16 / FY15)



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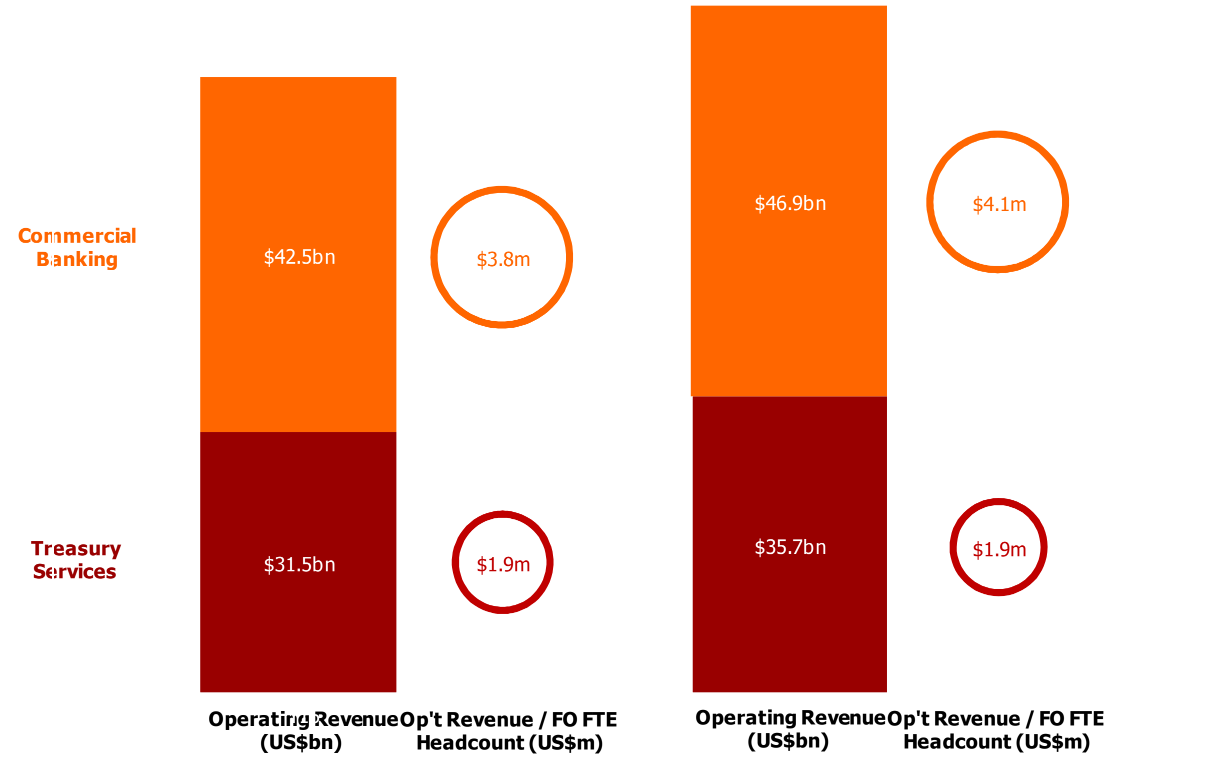
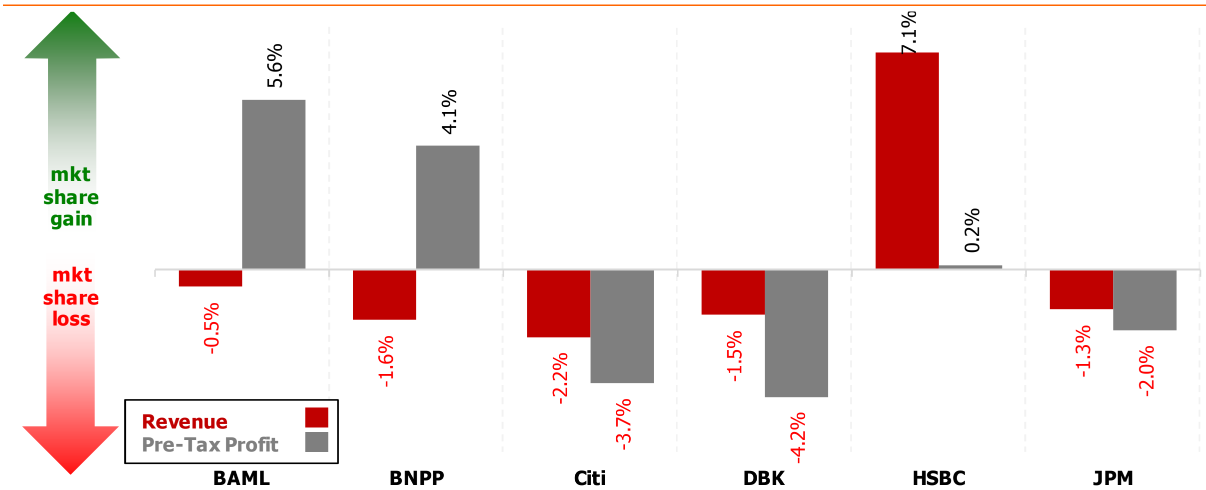
Commercial/Transaction Banking

- Following a steep growth in loans in 1H17, commercial lending volumes steadied in 4Q16. Banks raised interest rates in December, a move which has continued into January.
- In Treasury services, FY16 payments grew 7% y/y with APAC and Americas being the greatest beneficiaries. Trade finance volumes declined 6% y/y in FY16 in the wake of weaker APAC economies and protectionist sentiment in the US and parts of Europe. Citigroup is considering changing its transaction banking platform from 'hub-and-spoke model' to a 'network model' in the light of the Trump administration's protectionist leanings with regard to global trade. J.P.Morgan is building out its corporate banking presence in southeastern US - and making senior hires.
- In Greater China, banks are focused on their competitive positioning. HSBC named Frank Fang new Head of Commercial Banking for China; it also appointed Terence Chiu (ex-Head of Global Trade and Receivables Finance) as Head of Corporate Banking in Hong Kong. Elsewhere, Mahesh Kini was hired as Deutsche Bank's Head of Global Transaction Banking in China; and Sridhar Kanthadai joins J.P. Morgan in Apr-17 as Head of Treasury Services for APAC, based in Hong Kong.

Operating Revenue (FY15) (FY16)



% change share of peer group operating revenue and pre-tax profit (FY16 / FY15)



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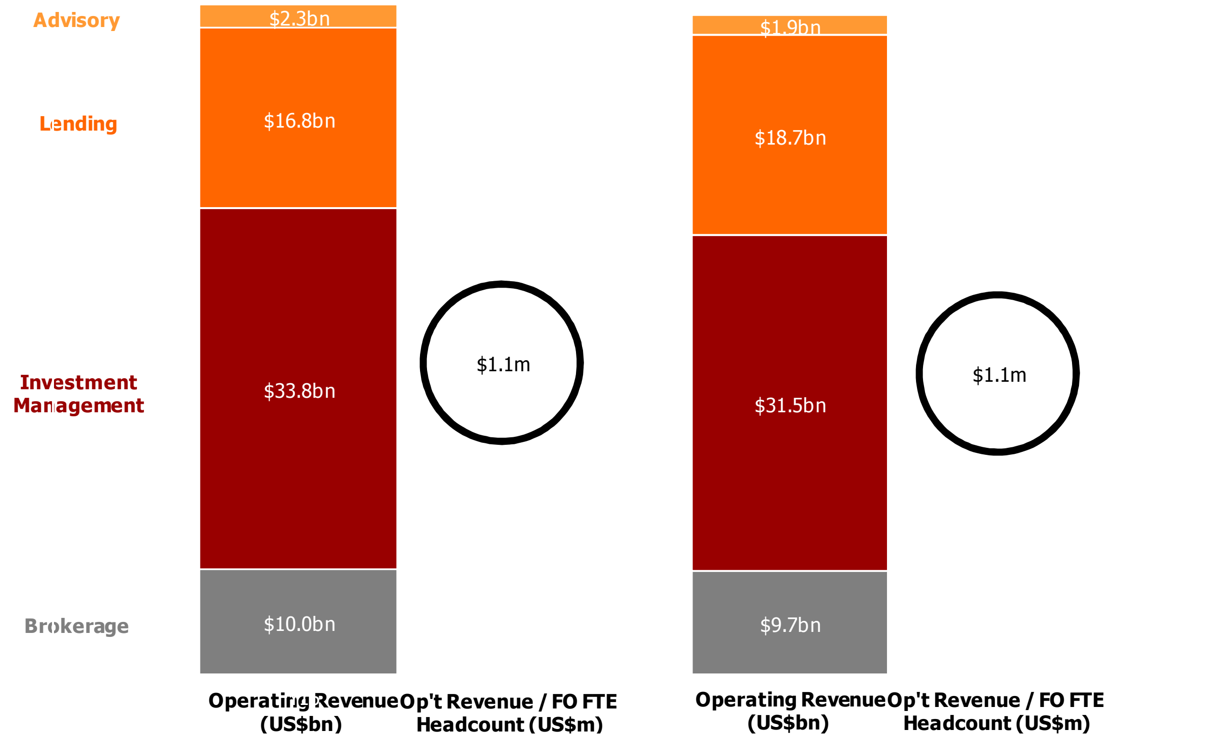
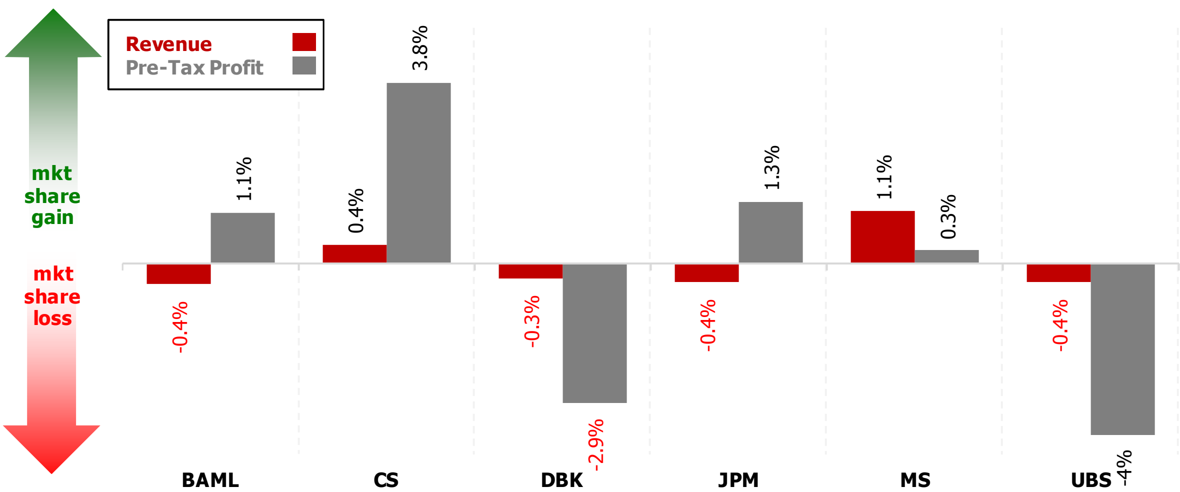
Wealth Management

- Lending revenues grew by 35% y/y in FY16 on higher interest rates.
- Investment management and brokerage assets at banks grew by 6-9% FY16/FY15 in the US. The growth in Europe was a more muted 3%; this was partly due to investors - spooked by the political uncertainty surrounding various political events in Europe - being reluctant to invest in fee-earning products. APAC remains a more complex and fluid market, with investors favouring direct, co-investments, such as venture capital, private equity and real estate. APAC recorded the world's highest growth rate in AuM in FY16; some of the banks we track grew market share aggressively and growing AuM at double-digit rates, while others lost ground.
- In 4Q16, UBS suffered $15bn withdrawals from clients seeking to avoid Switzerland's full disclosure; Credit Suisse, though, expects a pick-up in Europe. Meanwhile, US banks are investing. Bank of America rolled out a robo-advisor called Merrill Edge Guided Investing, which combines the online brokerage advice from Merrill Lynch and US Trust; BAML is also adding 100 wealth advisers for ultra-rich, bringing the total headcount to 450. J.P.Morgan's investment in InvestCloud's tech is now a CRM system for wealth management and a data-mining tool for product suggestions.

Operating Revenue (FY15) (FY16)



% change share of peer group operating revenue and pre-tax profit (FY16 / FY15)



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Revenue dynamics

FY16 / FY15 (Operating revenue, % change, US$, Global Level 1)

	BAML	BARC	BNPP	Citi	CS	DBK	GS	HSBC	JPM	MS	RBS	SG	UBS	Top 25%	Bottom 25%
Capital Markets	→	→	↓	↑	↓	↓	↓	↓	↑	→	↑	→	↓	+2%	-6%
Primary	→	→	→	↑	↓	↓	↓	↑	→	↓	↓	↑	↓	-2%	-12%
DCM Bonds	→	↑	↓	→	→	↓	↑	↑	↓	↓	↓	→	↓	+11%	-3%
DCM Loans	→	→	↓	→	↑	↑	→	↓	↑	↓	↓	↓	↓	+4%	-16%
Securitisation	↑	→	↓	↑	↓	↓	↑	→	→	↓	↓	→	↓	-5%	-16%
ECM	↓	→	→	↓	↑	↓	↓	↑	→	↓	N/M	↑	↓	-14%	-37%
M&A / Advisory	↓	→	↓	↓	↑	↓	↓	↑	→	↑	N/M	→	↓	+2%	-11%
Sales & Trading	→	↓	↓	→	↓	↓	→	↓	↑	↑	↑	→	↓	+6%	-6%
FX	↓	↓	↓	↑	→	↓	→	↓	↑	→	↑	→	↓	+7%	-5%
Rates	→	↓	→	→	↓	↓	→	↓	↑	↑	↑	↓	↓	+23%	+3%
Credit	↑	↑	→	→	→	↓	↓	↓	→	↑	↓	→	↓	+28%	-7%
Commodities	→	↓	↓	→	N/M	↓	↓	↑	→	↓	N/M	↑	↑	+1%	-25%
EQ Cash	→	↓	↑	↓	↓	↓	↓	↑	↑	→	N/M	→	↓	-5%	-22%
EQ Derv & Converts	→	↓	↓	→	↓	↓	↑	↑	→	↑	N/M	↓	↓	+3%	-20%
Prime Services	↑	↓	↑	↓	↓	↓	→	↓	→	→	N/M	↑	↓	+1%	-7%
Prop Trading	N/M	↓	→	N/M	↑	N/M	→	N/M	↓	N/M	N/M	N/M	N/M	+13%	-41%
Principal Investments	N/M	N/M	N/M	N/M	↓	↑	↓	↓	N/M	↓	N/M	N/M	N/M	+4%	-36%
Commercial / Transaction Banking	↑	N/M	↑	↑	N/M	↓	N/M	↑	↑	N/M	N/M	N/M	N/M	+7%	+2%
Commercial Banking	↓	N/M	↓	↓	N/M	↓	N/M	↑	↓	N/M	N/M	N/M	N/M	+9%	+1%
Treasury Services	↓	N/M	↓	↓	N/M	↓	N/M	↑	↓	N/M	N/M	N/M	N/M	+4%	+1%
Wealth Management	→	N/M	N/M	N/M	↑	↓	N/M	N/M	↑	↑	N/M	N/M	→	+1%	-5%
Advisory	↓	N/M	N/M	N/M	↓	↓	N/M	N/M	↑	↓	N/M	N/M	↓	-8%	-22%
Lending	↓	N/M	N/M	N/M	→	↓	N/M	N/M	↑	↑	N/M	N/M	→	+17%	+6%
Investment Management	↑	N/M	N/M	N/M	→	→	N/M	N/M	↓	↑	N/M	N/M	↑	-6%	-13%
Brokerage	→	N/M	N/M	N/M	→	↓	N/M	N/M	↑	↓	N/M	N/M	↓	+3%	-13%

4Q16 / 4Q15 (Operating revenue, % change, US$, Global Level 1)

	BAML	BARC	BNPP	Citi	CS	DBK	GS	HSBC	JPM	MS	RBS	SG	UBS	Top 25%	Bottom 25%
Capital Markets	↓	↓	↑	→	↓	↓	↑	↓	→	↑	→	↓	→	+16%	+7%
Primary	↓	→	↓	→	↑	↑	↓	↑	↓	↓	↓	→	→	+10%	+1%
DCM Bonds	→	→	↓	↓	↓	↑	↓	→	↓	↑	↓	→	↑	+28%	+7%
DCM Loans	→	→	↓	↓	↑	→	↑	N/M	↑	↓	↓	↓	↓	+31%	-4%
Securitisation	↑	↓	↓	→	↑	→	↑	→	↓	→	↓	↓	↓	+20%	-8%
ECM	↓	↓	↓	↓	↑	→	↓	↑	→	↓	N/M	→	↑	-4%	-12%
M&A / Advisory	↓	↑	→	↓	→	→	↓	↑	↓	↑	N/M	↓	→	+11%	-8%
Sales & Trading	→	↓	→	→	↓	↓	↑	↓	→	↑	↑	↓	↓	+25%	-3%
FX	→	↓	↑	↑	↓	↓	→	↓	→	→	↑	↓	↓	+13%	-1%
Rates	↓	↓	→	↑	↓	→	↑	↓	→	↑	↓	→	↓	+38%	-10%
Credit	↑	↓	→	↓	→	↓	↑	↓	→	↑	↓	↓	↓	+94%	+2%
Commodities	→	↓	↓	↑	↓	↓	↓	↑	→	↑	N/M	↓	→	+4%	-14%
EQ Cash	↑	↓	↓	→	↓	↓	↓	↑	→	→	N/M	↓	↑	-2%	-28%
EQ Derv & Converts	↓	↑	→	↓	↓	↓	↑	↑	↓	→	N/M	↓	→	+39%	+8%
Prime Services	↓	↓	↑	↓	↓	↓	↓	→	→	↑	N/M	→	↑	+3%	-8%
Prop Trading	N/M	N/M	→	N/M	N/M	N/M	↑	N/M	↓	N/M	N/M	↓	N/M	+33%	+13%
Principal Investments	N/M	N/M	N/M	N/M	↓	N/M	↓	↑	N/M	↑	N/M	N/M	N/M	+289%	+50%
Commercial / Transaction Banking	→	N/M	↓	↓	N/M	↓	N/M	↑	↓	N/M	N/M	N/M	N/M	+26%	+6%
Commercial Banking	→	N/M	↓	↓	N/M	↓	N/M	↑	↓	N/M	N/M	N/M	N/M	+32%	+5%
Treasury Services	↓	N/M	↓	↓	N/M	↓	N/M	↑	↓	N/M	N/M	N/M	N/M	+17%	+4%
Wealth Management	↑	N/M	N/M	N/M	↑	↓	N/M	N/M	↑	↑	N/M	N/M	↑	+6%	-1%
Advisory	↓	N/M	N/M	N/M	↓	↓	N/M	N/M	↑	↓	N/M	N/M	↓	+4%	-10%
Lending	↓	N/M	N/M	N/M	→	↓	N/M	N/M	→	↑	N/M	N/M	→	+13%	+2%
Investment Management	↑	N/M	N/M	N/M	↑	↓	N/M	N/M	→	↑	N/M	N/M	↑	+3%	-6%
Brokerage	→	N/M	N/M	N/M	→	↓	N/M	N/M	↑	↓	N/M	N/M	→	+3%	-16%

Source: Tricumen. Notes: (1) Tricumen product definitions throughout. (2) Arrows show % change in revenue vs peers. Up-/down-arrows: top-/bottom-quartile. (3) Revenue is post-writedowns, excludes DVA/equivalent and one-offs, as described in the Company Section. (4) In-scope: Large Cap/MNC and Mid-Cap/SMEs.

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.

Notes & Caveats

Tricumen Limited has used all reasonable care in writing, editing and presenting the information found in this report. All reasonable effort has been made to ensure the information supplied is accurate and not misleading. For the purposes of cross- market comparison, all numerical data is normalised in accordance to Tricumen Limited's proprietary product classification. Fully-researched dataset may contain margin of error of 10%; for modelled datasets, this margin may be wider.

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