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BLUE PAPER



Wholesale & Investment Banking Outlook

Mis-allocated Resources: Why Banks Need to Optimise Now

Fixing mis-allocated resources presents an immediate opportunity for the industry. Greater visibility on constraining regulations, another poor year for FICC, large changes in market structure and shifting client needs will mean banks need to take tough decisions in the next 12 months. Banks who step up to the challenge could add 1-3% points to RoE (up to 20% improvement in returns) from making much tighter portfolio decisions, trading off leverage, risk capital, funding and where they have an edge.

Our proprietary client survey for this report underscores the need for re-allocation. Our interviews highlight that margins are likely to deteriorate further and that clients plan to polarize spend, paying partner banks and specialists but squeezing the rest. Banks need to pull back another 6-8% of capacity while redeploying resources to areas where client demand is growing or needs are unmet, such as serving multi-asset investors, solutions for financial services, or channeling credit to long-term assets or SMEs.

Winning business models will be more diverse as banks optimise where they have a real advantage. Balkansation will challenge returns and drive even starker regional choices, pushing more firms to focus more domestically/regionally, and putting pressure on global flowmonsters. US firms have the opportunity to benefit from home market advantages and their progress on leverage. We see outsized returns for banks who focus on where they have real advantage and scale. We estimate \$20-30bn of value could leak to a growing range of non-bank specialists.

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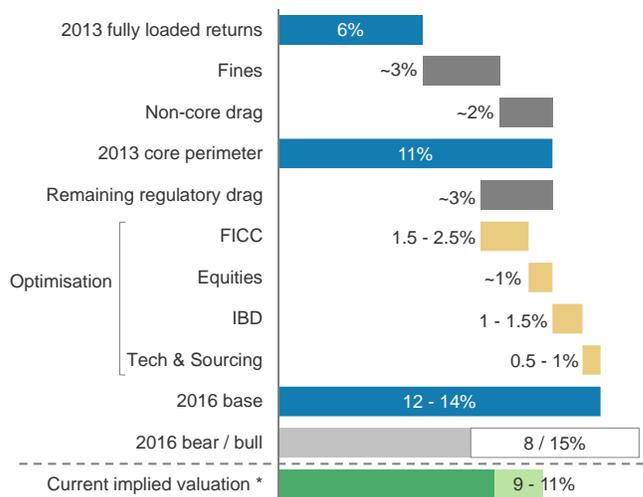
Executive Summary

We think the market under-estimates the scope for wholesale banks to increase returns over the next 12-24 months, as they are forced to focus on business optimisation and to make much sharper resource allocation decisions. We think resources are mis-allocated today, which presents a significant opportunity – we estimate banks could add 1-3% points to RoE as they adapt and are forced to trade off leverage, risk capital, funding, and where they have an edge.

We believe the conditions are set for this change in 2014 and 2015. First, banks are gaining much more visibility on the shape of regulation – and over the next 12-24 months many of the remaining post crisis rules will be finalised. In particular banks need to respond to game-changing higher leverage caps. We think these are likely to settle at 4-5% – higher than many European banks have assumed, forcing a tougher re-evaluation of where THE balance sheet is deployed. Second, we forecast lacklustre industry revenues with cyclical improvement in Equities and IBD being offset by another poor year in FICC. Whilst we see some potential for new forms of credit, central bank action to reduce volatility is hitting macro products hard. Third, there is too much capital and cost tied up in areas where client payback will be low and banks are still working on old assumptions about cross-sell and cross-subsidies that may no longer hold. Finally, client demand is changing rapidly. Our proprietary client interviews with investors and corporate treasurers suggest that margins are likely to deteriorate further, and that clients plan to polarise spend, paying partner banks and specialists but squeezing the rest. Against this backdrop there remains over-competition in areas where banks have no edge.

This is not to say banks have not already done a lot, having stripped out non-core operations. But there is more to be done. In the last four years, 20% of industry capacity has been withdrawn through strategic decisions on participation and through the focus on reducing Basel 3 RWAs. But the challenge now is to optimise the core. Banks must pull back another 6-8% of capacity while redeploying resources to the areas where client demand is growing and needs are unmet. Achieving this will require new operating models, embracing different market structures, which will lead to different winners and losers, and fundamentally shift where value in the industry is captured. We expect to see a much more varied industry structure, as banks reshape themselves according to their strengths and financial resources rather than mimicking the market leaders.

Exhibit 1
Evolution of industry RoE 2013-2016E, %



Source: Oliver Wyman analysis
* Morgan Stanley analysis

Why we anticipate significant further optimisation now

- Mis-allocation of resource relative to client demand.** For this report we have engaged with a wide range of senior individuals within key investor and large corporate clients of the banks. Our findings suggest some significant areas of under- and over-provision and add to our conviction that banks can re-allocate and optimise. In many cases this is the result of models of cross-subsidy that made sense in prior cycles but can no longer be sustained. We estimate 6-8% more cost can be pulled out across the business, with areas such as multi-layered sales and coverage, research, duplicative infrastructure and overseas operations in focus. We see a further ~8% or ~\$1 trillion of balance sheet across the business (even after mitigating actions) that is poorly directed and should be pulled out. Key areas include Repo, Short-Term Corporate Credit and OTC market structures. Beyond these reductions more needs to be done to shift resources towards growth areas.
- Muted growth and unmet needs.** Given the need to compensate for falling revenues in large businesses, such as Rates and Commodities, getting an edge on key growth segments will be critical to outperformance. More than two-thirds of the investors we spoke with expect

trading volumes and resource usage to increase, but buying patterns are shifting, skewing the benefits. Our research underscores the opportunities from multi-asset investing, a \$3.5trn segment today that we estimate could grow 10-15% pa. Our interviews suggest few banks are serving these clients well. We also see huge potential from the credit and risk intermediation needs in the wider economy that today's service and product structures do not meet – for example, long-term financing, pension de-risking, healthcare, SME lending, and alternative credit.

- Regulation and leverage.** In the last 6-12 months the bid-ask has narrowed substantially on many key regulations, and there is more visibility on the outstanding rules and their impact on valuation of different activities. The leverage ratio is a key new constraint that must be fed in to the pricing of capital. US regulators have already moved to a 5% ratio for the largest institutions and we think the odds of a 4% leverage ratio for some or all of Europe's largest banks are growing. This particularly impacts the economics of Flow Rates and Credit, Corporate Lending, Repo and Prime. But importantly it also changes the economics of cross-subsidy models whereby cheap financing is used to support the sale of higher margin products, and the banks' portfolio mix. Banks will need to look afresh at how much leverage they can sustain in their models and where best to use this scarce resource – as well as look to re-price where possible. The winners will move faster to understand and act on the dynamic trade-offs across multiple constraints.
- Bandwidth and conduct risk.** Finally there is some management bandwidth to tackle optimisation, a scarce commodity over the last few years of crisis management, repositioning and regulatory reform. Coupled with this, repeated misconduct issues have brought a starker realisation that more electronic, cleared and transparent market micro-structures will, over time, bring broad-based benefits and have to be embraced more quickly. We estimate if fines taken over 2011-13 were allocated back to the core wholesale business, returns would have been 3% lower in those years.

The likely evolution of business models

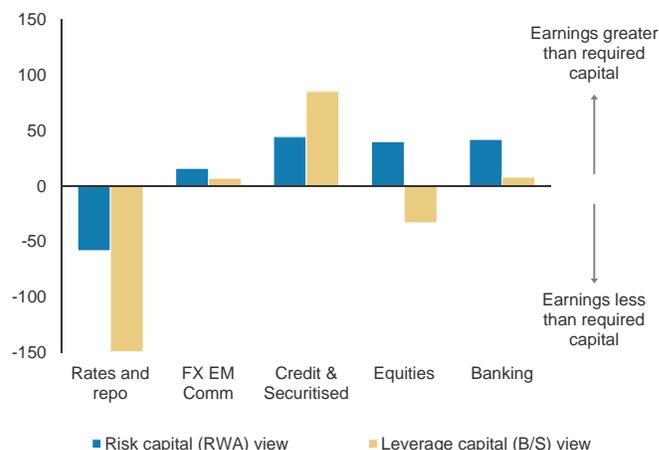
The case for significant optimisation is strongest in Fixed Income given the disruptive forces at work including vast changes in market structure, new leverage rules biting and revenues that are likely to disappoint again in 2014. We expect returns will remain challenged for many banks unless they grasp the benefits of market structure change, cut capacity further and re-allocate capital faster, primarily from

the structurally shrinking Rates business towards new forms of credit provision.

- Industry-wide returns were below hurdle in 2013 and we see little relief ahead. We estimate revenues will be down 5-10% in 2014 in our base case, with the turning rate cycle, central banks seeking to keep a lid on volatility and derivative reforms all headwinds.
- New leverage ratio constraints increase the heat on Rates books in particular. Rates revenues have now dropped 60% since their 2009 highs, but we estimate 30-40% of Basel 3 FICC assets are still tied up in OTC rates markets and deliver only single-digit returns. We estimate the industry as a whole needs to take up to \$15-20 billion more capital out of the business, and to strip out costs from areas such as voice sales and manual trading, but will need to embrace structural reform faster to achieve this.

Exhibit 2

Leverage constraints shift product return dynamics Capital supported minus capital required¹, \$BN



1. Risk capital (RWA) view defined as available risk capital vs. earnings based on 10% CT1 ratio, Leverage capital (B/S) view defined as available BS capital vs. earnings based on 4% leverage requirement
Source: Oliver Wyman analysis

- The lack of liquidity in credit markets was a top concern of most of the investors we spoke with for this report, while many banks cannot make money in flow credit. Right now, those banks able to commit risk and balance sheet are cleaning up. Others are being pushed to a primary-oriented or specialist models.
- The strongest firms are pressing their advantage. We estimate the top beneficiaries have already captured 1-2% share each in FICC over 2010-13, adding ~2% points on wholesale RoE. We think this trend will continue.

Experience from Equities and FX suggests disruptive share gain is possible and that scale players win out. But the breadth and complexity of Fixed Income markets mean a greater variety of models can be viable.

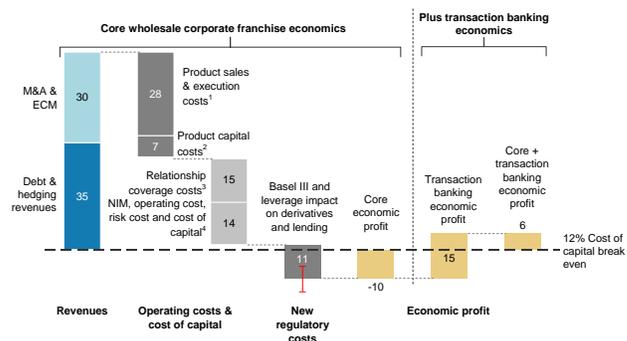
In Equities it is now clear that client activity is not going back to prior structural levels, while cost to serve remains punitively high for many banks with many of their clients. We think RoEs could be boosted ~1% from Equities as the cycle turns, but to achieve this will require significant optimisation of the model, even for the advantaged scale players.

- Equities presents a stark resource optimisation challenge – costs are the binding constraint for Cash Equities, as risk capital is for derivatives and leverage is for prime brokerage. Optimisation will mean looking at the economics of prime brokerage through a new lens: if leverage capital costs were fully charged to the business, returns for many Equities businesses would halve. Some leading banks are already starting to ration their balance sheet and seeking to re-price, but there is a need for a much broader challenge.
- The Equities service model – ‘give the client everything up front and hope they pay you’ – was developed in an era of rapid growth and has not yet adjusted to the profound shifts in client demand. We estimate that even at today’s volumes, the Cash Equities business doesn’t meet the cost of capital for all but a handful of players. Distribution and research are two of the biggest challenges. Investors we met highlighted that quality content and senior coverage were amongst the top differentiators between banks or boutiques that they used. But this said, many clients felt awash with research and distribution – some of which was of little value. We think as investors skew how they pay even more, an even higher share of the value will go to the most differentiated content with integrated coverage, whilst value will fall sharply elsewhere. We think up to \$1-2 billion or ~7-14% of Equities costs could be cut through tighter tailoring and tiering, investments in client analytics, and removal of coverage overlaps in distribution.
- Scale players and specialists are likely to remain advantaged: we estimate this will be worth an incremental 1-2% points on overall wholesale RoE over the next 2-3 years for those who grasp the opportunity.

The corporate franchise should be a key growth driver over the next 2-3 years, but returns are resolutely low so far. The extension of cheap credit will have to become much more selective and most banks will have to optimise around service corridors where they can generate economic profit.

- Corporates are bullish on growth prospects and we forecast 5-7% per annum growth for the ~\$65 billion sector. But lending and coverage over-supply and new leverage and funding constraints mean returns will be below hurdle for many banks. We estimate up to \$10 billion of economic profit destruction for the banks driven by these factors. The large corporates we spoke with are awash with under-priced credit, and have simply too many banks pursuing the same debt-derivatives solutions offering relative to their needs and available wallet.
- It’s unlikely that the model of sub-priced credit for ancillary benefits is going to unbundle, so to improve returns most banks must find narrower corridors where they compete and monetise, be that around clusters of underlying client need in terms of geography, sector and asset class.

Exhibit 3
Break-even economics for the wholesale corporate banking franchise
Estimated industry pre-tax economic profit of wholesale corporate banking franchise - 2013, \$BN



1. Includes all product origination headcount, sales and trading headcount, infrastructure costs
2. Includes all capital and leverage costs
3. Includes all relationship management coverage costs
4. Includes all franchise lending costs, losses and cost of franchise lending capital
Source: Dealogic, Oliver Wyman analysis

The industry has started to embrace new supply chain structures, and we believe there is significant further opportunity here. We also see considerable upside from more strategic investment in technology, as the focus of change initiatives starts to shift away from reactive regulatory response. We estimate a 7-13% cut in infrastructure costs (\$3-6 billion), and a bump of 0.5-1% points to RoE.

- The vast majority of IT, processing and support behind banking services is delivered in-house with platforms that are highly duplicative across players and offer very little by way of competitive advantage. At the same time the banks have suffered rising costs of infrastructure even while their profits have been dropping.

- We estimate up to \$7-9 billion of industry costs could be pushed out into an external supply chain that can deliver scale economies. We are seeing an acceleration of activity in this space as the industry matures and banks begin to overcome the competitive barriers to collaborative action. We estimate \$1-3 billion of annual cost savings are at stake for the sell-side by 2016, or 0.2-0.5% points of RoE.
- Technology investment has a critical role to play in delivering on the optimisation agenda, for example in supporting market structure change, and in tackling longstanding sources of inefficiency in bank processing. A shift in gear is required, away from reactive regulatory remediation towards a more strategic infrastructure change program, and we are already seeing the leading banks start to make this transition. We think this can deliver \$2-3 billion of cost efficiencies (0.4-0.5% points RoE) over the 2016 time frame, as well as being vital for capturing some key growth themes.

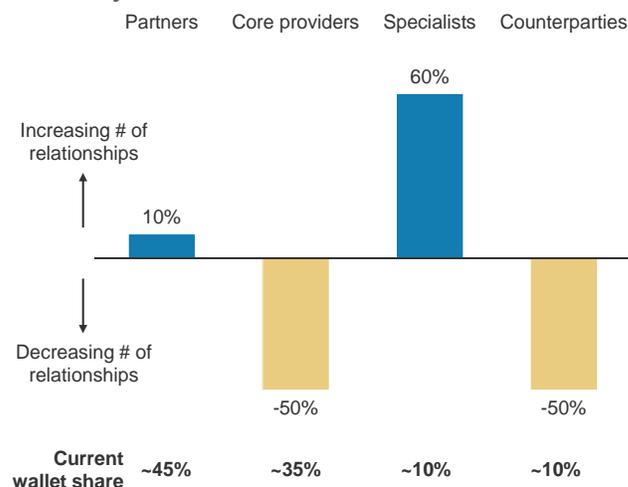
Winners and losers and capturing new value

Balkanisation remains the single biggest drag on returns yet to be absorbed. Banks will optimise very differently, forcing tougher choices on overseas operations. We continue to see US and some EM players as advantaged near term.

- The Balkanisation of banking markets will remain a key constraint – a core theme for us in prior reports. We estimate a total industry-wide RoE drag of 2-3% points that the industry has only started to work through. Developments over the last 6-12 months suggest that this trend is hardening rather than softening. In particular we would highlight jurisdiction-level leverage ratio constraints, fragmentation of liquidity under regional clearing and SEF models, and continued supervisory pressure towards subsidiarisation in both the major hubs and local markets.
- Clients value global capabilities – in content and in execution – but they do not need it from every bank. We anticipate more tough choices on overseas operations. More banks will look to pull back and focus more squarely on their core home regions.
- This process will continue to favour US banks, supported by their more advantageous home market and current capital structures. We estimate a \$2 billion PBT advantage for the top 5 US-domiciled banks compared to the top 5 Europe-domiciled banks. We estimate a ~1% point RoE advantage as a result.

Exhibit 4

Consolidation with partners and specialists % of surveyed institutional investors¹



1. Net proportion of institutional investors expecting to increase or decrease the number of banks in each relationship category
Source: Oliver Wyman analysis

Winning business models will be more diverse as banks optimise differently. The common theme will be those firms that focus resource allocation where they have real advantage.

- One of the most striking findings from our client interviews was that investor clients are actively looking to deal more with partner banks and specialists, reducing spend with the middle tier of core providers and the tail of counterparties to whom 45% of total wallet is directed today. We think this means banks will have to think much harder about where to offer full service, and where to compete much more specifically.
- The handful of remaining 'super globals' that aim to be a partner bank to their clients in all regions across all products certainly have scale advantages that position them well, yet execution is challenging and they risk being caught on the back foot by disruptive change. Mid-sized banks have to step forth and reshape themselves to find corridors of scale by region or product, and towards being multi-specialists – recognising that this may involve positioning themselves as broad service partners to some clients (e.g. domestic or local regional), and service / product specialists to others.
- We expect more wholesale banks to achieve some of that scale by reshaping themselves around the group's infrastructure and franchise objectives with their internal

wealth, retail and corporate clients, and deprioritising client groups where they have limited intrinsic advantage.

New value will be created outside the boundary of the wholesale banks as supply chains loosen and non-bank capital plays a larger role. We estimate \$20-30 billion of new capital can be created, against a current industry book value of ~\$400 billion. The key question is who will capture this value.

- With leverage constraints biting, we expect non-bank forms of capital to be more active – we estimate investors who can commit balance sheet and risk capital could capture \$7-10 billion in value in absorbing risk from the wholesale banks.
- With supply chains thawing, technology and processing companies that can become the solution to regulatory problems, build utilities or help with outsourcing will capture value. We estimate spinning elements of support and infrastructure cost out of the banks could unleash up to \$5-10 billion of new value.
- As the market starts to embrace swap execution facilities and clearing, and new information/data services become more established, we anticipate the new execution and processing venues could create \$5-8 billion of new value.

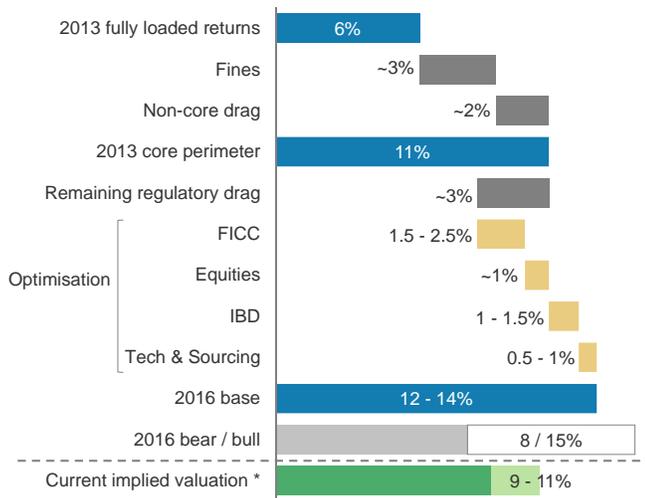
1. The case for optimisation, and why now

1.1 Optimisation time

Optimising the core businesses is now the top focus for bank management teams. We believe this can add 1-3% points to industry RoE as greater regulatory clarity enables banks to make sharper decisions over where they choose to focus their resources. This is not to say banks haven't done much already to pull back from the most challenged areas. We estimate that ~\$15 billion of cost (~10% of the total) and \$1.5 trillion of RWA (40% of the total) have been taken out over the last 3 years. Much of this has been achieved through moving legacy assets or whole businesses to non-core units for accelerated wind-down. The challenge now is to optimise the core and adapt historical business models to the new economic reality. In a low revenue growth environment this will be the key to outperformance.

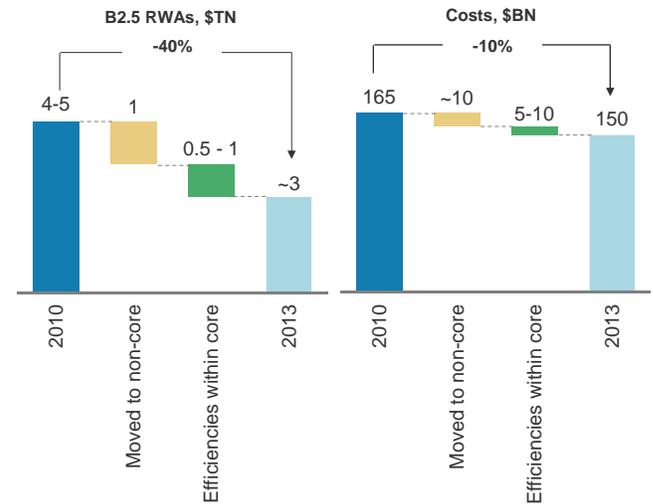
Much of this process is now about re-allocation, shifting capacity out of areas where it is not generating economic returns, into areas where client demand is more robust and through delivery models that are more resource efficient. However, more capacity must also be pulled out. We estimate a further net \$8-12 billion of cost (6-8% of total), ~\$200 billion of RWA (7% of total) and ~\$1 trillion of balance sheet (8% of total) must be stripped out of the industry with deeper cuts in the most impacted areas to fund growth.

Exhibit 5
Evolution of industry RoE
2013-2016E, %



Source: Oliver Wyman analysis
* Morgan Stanley analysis

Exhibit 6
Significant capacity has already been withdrawn
Change in industry RWA & Cost, 2013 vs. 2010, \$TN/BN



Source: Oliver Wyman analysis

We estimate a total RoE improvement of 4-6% points from this process. Partially offsetting this is a ~3% point drag from the remaining regulatory impacts not yet absorbed, in particular OTC derivative reform, leverage ratio and Balkanisation. The biggest challenge is FICC, where much of the outstanding regulation centres and where the revenue environment is weak. But we also see significant scope for re-allocation and growth within Equities and IBD, as well as opportunities for the industry to benefit from new supply chain structures and technology investment.

Returns in the core businesses were 11% in 2013, suggesting 12-14% RoE is achievable by 2016 in our base case – albeit with wide skews across banks. This compares to an implied 9-11% return from current market valuation. A key concern is the drag from non-core units and fines. In 2013 fully loaded returns, i.e. allocating centrally held fines and non-core units back to the business, were 6%. Non-core units were a 2% point drag. Looking ahead to 2016 the drag from these existing non-core units is likely to substantially reduce as legacy assets originated pre-crisis run-off.

Conduct risks intensify the need to optimise now. The Wholesale industry has paid out ~\$35 billion in fines and compensation over the last 3 years, worth an RoE drag of ~3% points per annum. The ongoing FX investigations are

likely the biggest outstanding source of further fines. The second order effects are also important, however. With much higher scrutiny and much broader accountability for the 'first line of defence', businesses are now more cautious and more constrained in some forms of client business. Price manipulation allegations have also deepened the resolve amongst some regulators and clients to bring greater transparency to the OTC markets.

1.2 Mis-allocation of resources against the client opportunity

It is more important than ever to align resources against the client opportunity. As regulation has made balance sheet and risk capital more expensive and harder to deploy, banks have strived to become more 'client centric'. Yet our research indicates that banks are misallocating their own resources relative to their clients' needs and willingness to pay. For this report we have engaged with a wide range of senior individuals within banks' key investor and large corporate clients.

Based on these discussions, and our analysis of industry capacity, we see three main sources of misaligned resources:

- **Duplicative infrastructure.** We estimate that \$10-15 billion of costs are tied up in areas we would characterise as undifferentiating infrastructure, such as basic processing, where there is too much duplication and no competitive advantage being gained across the banks.

- **Mismatch between supply and demand.** We estimate \$60 billion of capacity is tied up in market-making and financing in Fixed Income, where the banks have too much resource committed to OTC market structures in Rates compared to the client wallet available, and too little liquidity and risk capital in others. Poor liquidity in secondary credit markets was one of the top concerns amongst investors we spoke with.
- **Many traditional cross-subsidy models no longer work.** Our research highlights \$40 billion of industry capacity tied up in areas where old 'multiplier' models no longer add up. Relationship products, such as research or franchise lending, are committed up front, trapping the sell-side into a pattern of over-supply as they fight for share of a cross-sell wallet that is now too small to go around. Most of these cross-subsidies became ubiquitous in the industry structure during times when there was significantly more payback available. However, today for each bank only some clients pay for the subsidies, and the behaviour is proving extremely difficult to unwind.

Many of these pressure points are not new, but regulatory and market developments have accentuated them and are providing the conditions for change. Tackling them will require banks to compete more narrowly, focusing on the areas where they are advantaged and able to get real payback, and skewing service levels to deliver real impact into clients where it is most valued. Banks will also need to actively embrace disruptive new market and supply chain structures – a movement that has proven slow to date.

Exhibit 7

We see several areas where capacity is misaligned against the opportunity

Industry-wide operational and financial resource capacity¹ by product by activity, \$BN

Activity	Sales / coverage	Content / research	Financing & risk-taking	Execution & connectivity	Post trade + support	Controls & overheads	Total
FICC	15	<5	60	15	5-10	15	\$120BN
Equities	10	5-10	20	5-10	5	5-10	~\$55BN
IBD	25	5	10	5	<5	5	~\$50BN
Total	\$50BN	\$15BN	\$85BN	\$30BN	\$15BN	\$25BN	~\$220BN

Extent of overcapacity

High Medium

1. Capacity defined as operating expenses plus the cost of capital. Capital proxied as the average of 10% RWA and 4% assets (Basel 3, post-mitigation). 12% cost of equity Source: Oliver Wyman analysis

To support these changes an upgrade in client management disciplines are required. We have seen growing investment in this area to date, and expect this trend to continue. Key areas of focus should include:

- Better measurement of profitability at the client level
- Better tiering and management of service levels
- Better leverage of client data to develop propositions
- A stronger client dimension in management structures

1.3 Optimising against multiple constraints

We think banks now have sufficient clarity on regulations to make the next level of strategic choices. In the last 6-12 months the bid-ask has narrowed substantially on many key regulations. Over the next 12-24 months we think banks will gain a lot more visibility on the outstanding rules and their impact on different businesses. While many banks have already acted boldly where there was a single binding

constraint (such as RWA), or where there were clearly challenged business units (such as Commodities), many of the more difficult trade-offs were understandably deferred in favour of maintaining optionality in the midst of a very fluid regulatory and market environment.

The leverage ratio is a key new constraint that intensifies the need to optimise the business. US regulators have already moved to a 5% ratio for the largest institutions and we think the odds of a 4% leverage ratio for some or all of Europe's largest banks are growing.

We estimate that if banks were forced to comply at the Wholesale level there would be a total over-run of \$4-5 trillion of Basel 3 assets compared to what can be supported under the current allocated equity base.

In response, banks have already launched waves of tactical mitigation work to limit the inflation of the balance sheet that occurs under the proposed rules. We think this can reduce the deficit by 30-50%, mainly through initiatives such as better netting, novation, and derivative compression.

Exhibit 8

The future regulatory landscape is becoming clearer

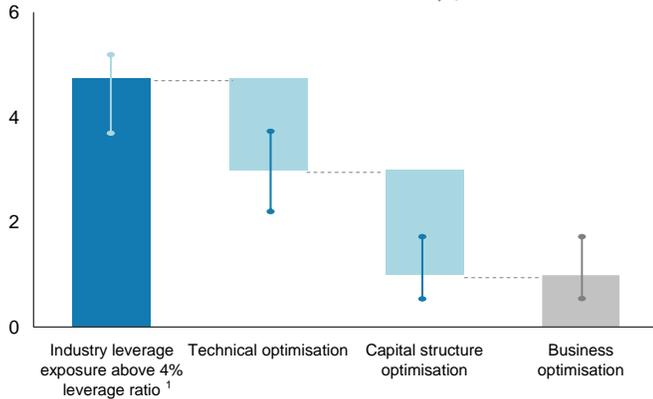
Area	Rule	Current clarity of rules	Final rulings clear 2014 - '15	Key watchpoints	RoE Impact (%)
Solvency and liquidity	RWA	High	✓	<ul style="list-style-type: none"> • Leverage ratio requirements (3%-5%) • Rules for leverage exposure add-ons • Fundamental review of trading book 	
	Leverage	Medium	✓		
	Liquidity	High	✓		
	Other	Medium	✓		
Structural reform	Ring-fencing	Medium	✓	Largest impact still to come	
	G-SIFI	Medium	✓		
	Single / multiple points of entry	Medium	✓		
	US FBO Rules	High	✓		
OTC reform	Clearing	High	✓		
	SEFs	High	✓		
	Margining	High	✓		
	Mkt structure	Medium	✓		
Conduct and tax	Investigations (LIBOR / FX)	Low	✓	<ul style="list-style-type: none"> • Remaining fines / mkt structure changes from rate fixing scandals • Pay and compensation structures 	
	Conduct	Medium	--		
	Compensation	Medium	--		
	Financial Transaction tax	Low	✓		
	Other	Medium	--		
Total					

Key ■ Absorbed ■ To come —●— Range

Source: Oliver Wyman analysis

Exhibit 9

Leverage over-run and reduction levers Optimisation of B3 Leverage exposure on a standalone basis to achieve above-hurdle returns, \$TN



1. Calculation based on 4% leverage ratio of equity to leverage exposure
Source: Oliver Wyman analysis

Capital structure optimisation – hybrid debt issuance, retained earnings and offsetting leverage ratio capacity (vs. RWA requirements) elsewhere in the group – can also help bridge the gap.

But for many banks, further business optimization will be required. We estimate up to \$1BN of balance sheet needs to be taken out as banks pull balance sheet away from low return areas and funnel it into higher returning activities.”.

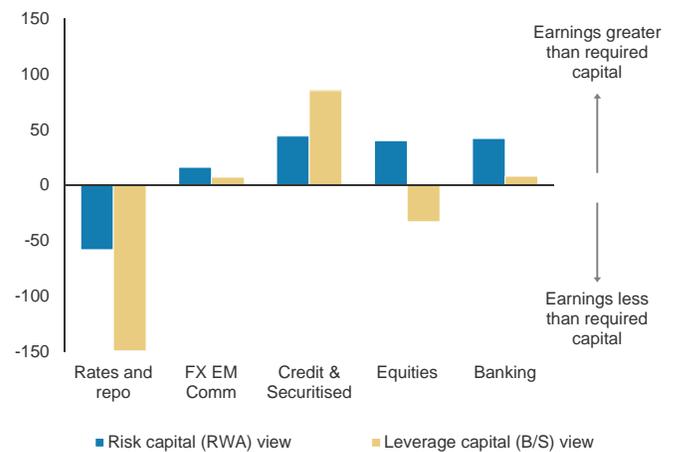
The leverage ratio changes the economics for Rates, Equities and Banking in particular. Taking a balance sheet lens on required capital, instead of an RWA lens, dramatically shifts the economics of Rates, Equities and Banking. In Rates and Repo there is the double impact of an already balance-sheet-intensive business under US GAAP being made much worse by the treatment of derivatives under the Basel rules. For banking, while the January amendment softened the impact, there is still a sizable grossing up of undrawn commitments in the new rules. For Equities the issue is less with the changes in measurement, but more simply with the large balance sheet associated with Prime businesses.

Each bank now faces a unique optimisation puzzle, trading-off across leverage, risk capital and liquidity constraints, and where they have operational gearing and competitive advantages. This is forcing banks to think harder about their business mix and shape at the Group and the Wholesale banking level. For example, Equities businesses are constrained by leverage ratio and operational gearing, while products such as securitisation and illiquid credit are more RWA intensive and less operationally geared. Combining an RWA-intensive credit business with a balance-sheet-intensive Equities business creates a portfolio benefit.

We are already starting to see the more agile banks adjusting. At one level this means making business portfolio decisions that marry group financial structure with the competitive advantages of the Wholesale business, setting top-down appetite across the various constraints. At another level it means pushing a broader set of more dynamic charges into the business to drive behaviour on the desks. We are already seeing the more advanced banks move in this direction and this will mean more efficient deployment of resources, and better ability to pick off the profitable opportunities that arise as competitors re-price and re-focus.

Exhibit 10

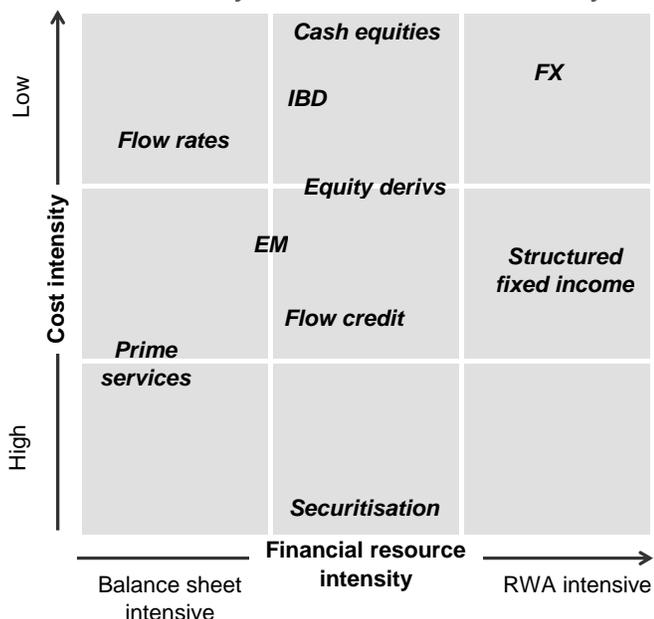
Leverage constraints shift product return dynamics Capital supported minus capital required¹, \$BN



1. Risk capital (RWA) view defined as available risk capital vs. earnings based on 10% CT1 ratio, Leverage capital (B/S) view defined as available BS capital vs. earnings based on 4% leverage requirement
Source: Oliver Wyman analysis

Exhibit 11

Banks must trade-off against multiple constraints Product cost intensity vs. financial resource intensity



Source: Oliver Wyman analysis

1.4 Muted growth

The good news. We believe that economic recovery and stabilising markets will break the patterns of hesitant client behaviour that have dominated the last 2-3 years, driving stronger volumes and more conviction both among corporates and investors. Client sales over 2012-13 have been down ~5% on historical levels, with macro uncertainty driving risk-on / risk-off patterns and stuttering volumes. This has led to corporates hoarding liquidity and putting off material transactions. Most of the clients we spoke with expected growth in their own business to drive increased needs for banking services.

The bad news. Continued pressure on margins and commissions and lower levels of leverage and risk-taking mean that the industry is now less geared towards economic growth than prior cycles. Around half of the investors we

spoke to said they were under pressure to reduce their expenditure on execution, with both regulators and investors cited as major sources of pressure. Only a third of investors said they thought spend would increase, while nearly half said it would decrease. Secular trends on the buy-side towards more passive investment, lower turnover levels and lower leverage levels are all headwinds for the banks. On the corporate side, competition is likely to remain intense, limiting the potential for the re-pricing of credit.

Net, for revenue pools we think this means only muted growth. Cyclical recovery and improving revenues in Equities and IBD is offset against challenging conditions in FICC and continued margin pressure. In our base case for 2014, we forecast revenue pools down 0-5%, with Equities and IBD up ~5% but FICC down 5-10%.

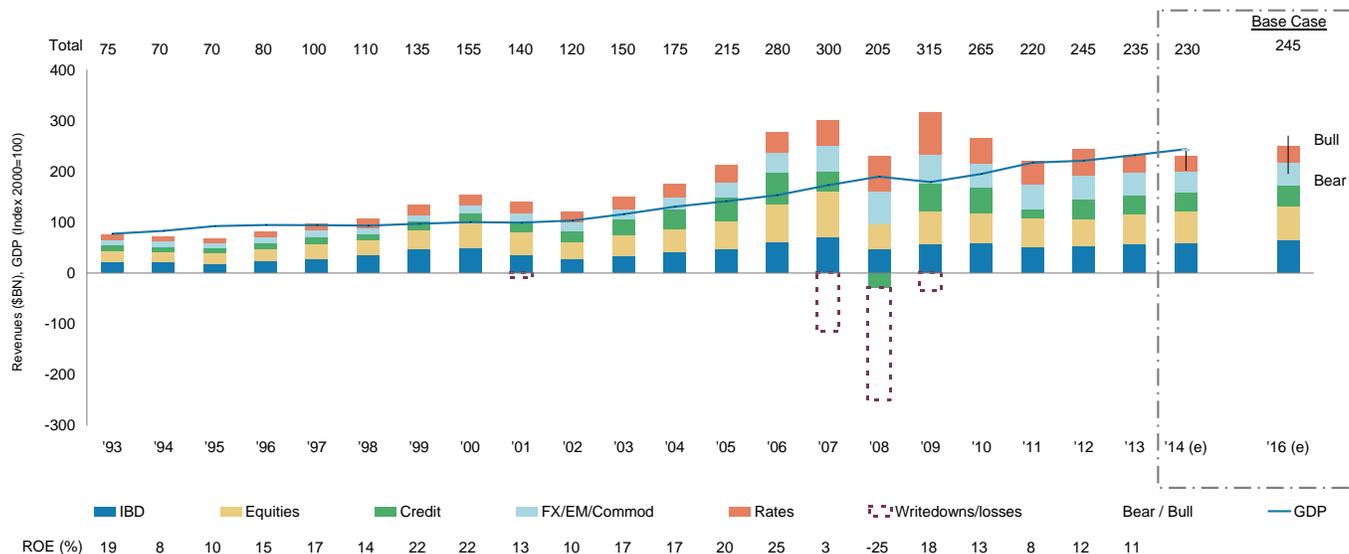
Looking out to 2015/16 we expect revenues to remain in the \$240-250 billion range (up 0-5% points from 2013), with FICC revenues remaining in the 2012-13 range, while Equities and IBD continue to grow. In our bull case for 2015/16, a stronger recovery in Equities and IBD lifts revenues to \$270 billion. In our bear case a disorderly policy unwind heavily affects FICC, and undermines Equities and IBD growth, and puts revenues in the \$200-210 billion range.

Addressing growth segments

In a low growth environment, innovating and getting an edge on key growth segments will be critical to outperformance. We remain bullish on opportunities from banks' balance sheet restructuring, deepening of onshore FIG clients, Corporate Finance, and Multi-Asset investing. We think these segments together could add \$10-15 billion in new revenues to the banking industry. At the same time we see huge potential from addressing un-met needs in the wider economy – long term financing in areas like infrastructure and public policy, pension de-risking, SME lending in Europe, and financing healthcare needs. In most cases the market structures and products do not exist today to serve the needs of these segments of opportunity, hence the financing shortfalls. Rediscovering the entrepreneurial spirit to find innovative structures that address these needs in a socially mindful way could be a significant source of value.

Exhibit 12

Historical and forecast Wholesale industry revenue pools 1993-2016E, \$BN



Source. Oliver Wyman analysis

Exhibit 13

Base/ bull/ bear macroeconomic scenarios

	Base case	Bull case	Bear case
Economic growth	<ul style="list-style-type: none"> Continued growth and recovery in US and European economies Modest investment and wage growth Less impressive story in EM as capital outflows continue and political disruption damages growth outlook; but widespread disruption avoided 	<ul style="list-style-type: none"> Strong recovery in growth and employment across G10 economies Rising inflation in Eurozone and Japan boosting consumer spending Improved outlook for China with easing of fears over debt ratios Limited impact on real economy for EM from currency volatility and investor flows 	<ul style="list-style-type: none"> Failure of US / European economies to consolidate on green shoots of H2 2013 Disorderly unwind of taper causes further damage to Rates businesses and across EM AQR in Eurozone adds pressure to scale of European bank operations Equity market downturn reverses much of the gains in Equities and IBD
Regulation	<ul style="list-style-type: none"> Rates markets continue to be pressured by OTC reform, but revenue impact bounded Remaining uncertainties resolved in line with current expectations Investigations into LIBOR / FX disrupting specific markets, but not spreading to wider OTC markets 	<ul style="list-style-type: none"> No new major regulatory shifts Less painful absorption of remaining regulation with leverage ratios causing only minor disruptions Derivative market reforms offset by underlying growth in client demand 	<ul style="list-style-type: none"> Remaining regulatory uncertainties fall unfavourably against sector Tightening of leverage ratio and capital requirements Scrutiny of OTC markets increasing as a result of conduct events (LIBOR / FX investigations) Transaction tax and ring-fencing enforced across Eurozone
2014 revenues	\$230BN ↓ ~0-5%	\$240BN ↑ 5%	\$200BN ↓ ~10-15%

Source. Oliver Wyman analysis

2. Likely evolution of business models

2.1 FIXED INCOME

Fixed Income is in the midst of profound change that will define the future supply side structure. A weak revenue environment and continued regulatory pressure create an urgent case for change. Rates looks particularly pressured, while areas of Credit are under-served. We think a range of business models will remain viable, but only a subset of banks will generate attractive returns.

2.1.1 The case for optimisation

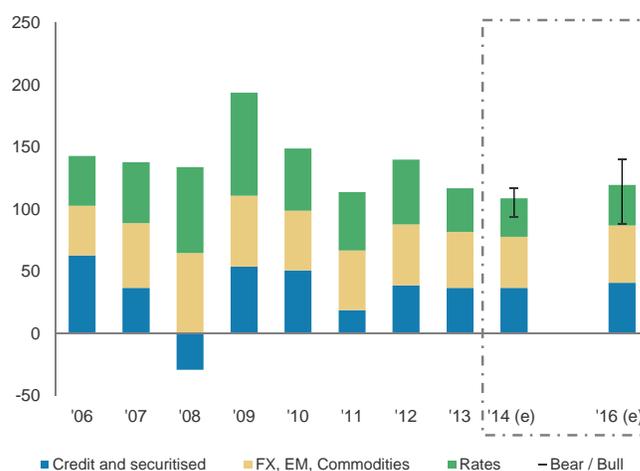
Sell-side economics are under severe strain. We estimate that fully loaded returns for the Fixed Income businesses across the industry were below hurdle in 2013. Banks have done much to pull back from non-core activities and shrink their RWA base. But over-competition and collapsing margins in Flow Rates/FX, combined with a much more challenging trading environment, have seen the revenue base collapse to 60% of 2009 highs, and the current run-rate is now close to 2005-06 levels. Yet the business must now cover Basel 3 RWA and liquidity charges, as well as new leverage constraints and increased collateral requirements for non-cleared trades.

We expect the revenue environment to remain challenging. We think central banks aiming to manage volatility and the withdrawal of downward pressure on rates and credit spreads will all continue to make trading conditions tough. We expect 2014 revenues to be down another 5-10% on 2013 in our base case. Furthermore, we see only limited growth potential in the medium term. Reform of the OTC derivative market remains a key secular challenge: our base case is that this acts as a drag of 2-4% points on FICC revenues over the next few years as collateralisation increases the cost to trade (see our report last year [Global Banking Fractures: The Implications](#)). On the other hand, economic growth and renewed Corporate Finance activity would be positive for Credit and Corporate Rates/FX.

Risks remain skewed to the downside. With the heavy burden of regulatory response and business change initiatives it is important for management teams to ensure that sufficient attention is being paid to understanding the potential impact of the turn in the interest rate cycle on Fixed Income business economics, as and when this comes. The effects are complex, with many moving parts across the bond inventories, rates derivative books and collateral pools.

Furthermore, there is huge uncertainty around the process for the unwinding of the unprecedented central bank interventions currently in place. Unlike a typical recession, in which steadily falling interest rates and steepening yield curves provide favourable conditions for Rates trading, a disorderly policy unwind would likely involve shocks that could catch the banks out in a rising rate environment. We estimate that the tapering confusion in 3Q13 knocked \$3-5 billion off industry revenues; more severe shocks would have much larger impacts.

Exhibit 14
Historical and forecast industry FICC revenues 2006-2016E, \$BN



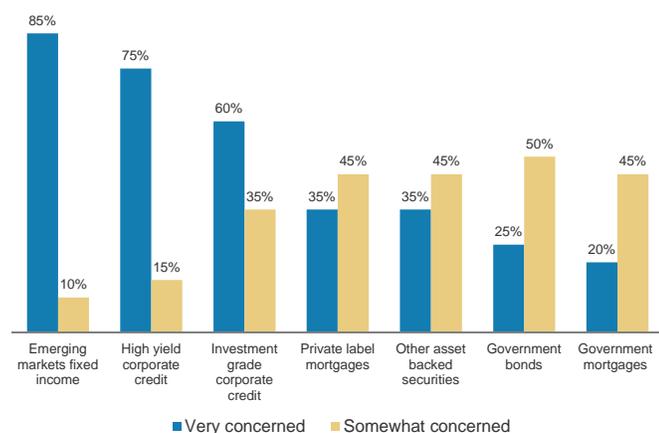
Source: Oliver Wyman analysis

The leverage ratio is raising the heat on Flow Rates in particular. We estimate 35-40% of industry-wide FICC Basel 3 assets will be tied up in OTC Rates businesses that generate only single-digit returns, even after mitigating actions to compress the balance sheet. The revenue boom of 2008-10 has now unwound and the outlook is tough: Rates businesses are at the centre of OTC reform, and are the most exposed to downsides from central bank withdrawal of quantitative easing. Radical action is required for many banks: the balance sheet and RWA drag is simply too large to be carried by other businesses. We estimate \$15-20 billion of capital would need to be withdrawn from Rates businesses across the industry to meet hurdle against the prospective earnings stream.

The lack of liquidity in credit markets was a top concern for most of the investors we spoke with. Secondary trading

volumes in US corporate bond securities are down 60% from 2007 peaks, despite growth in primary issuance of 80% over the period. Concern among the investors we spoke with was highest in Emerging Markets debt and high yield corporate credit (particularly in Europe), but around two-thirds of investors said they were also very concerned about liquidity in investment grade corporate credit. For those banks able to put up risk capital and balance sheet while it is in short supply, this represents an opportunity to gain share and make good returns. However, with patchy liquidity and risks of policy shocks, only a few have the required DNA and risk appetite to make this work.

Exhibit 15
Liquidity in credit is a top concern for investors
% of respondents



Source: Oliver Wyman analysis

2.1.2 Embracing the agency model?

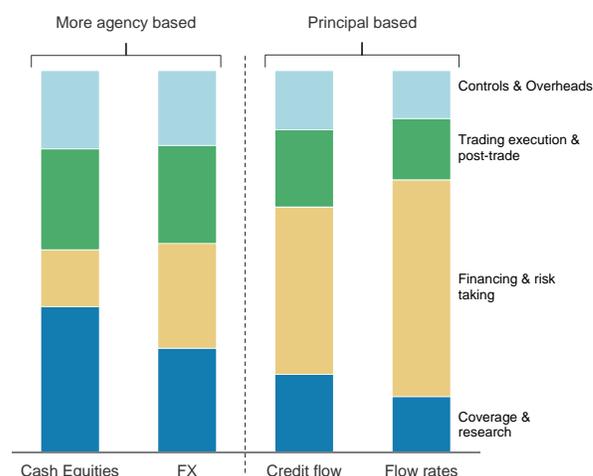
There is growing support for an agency execution model in FICC – but the game theory remains critical. Appetite for reform is greatest among the larger investors who have extensive trading operations and would be able to navigate fragmented liquidity across multiple venues, and who have most to gain from lower execution costs. Yet they alone do not command sufficient liquidity to push the change through. Banks must decide whether to push change, or to defend the status quo. Experience from FX and Cash Equities suggests that early movers who define the new market structure can carve out leading positions that are hard for competitors to assail. But the largest banks have much to lose.

A more agency-like execution environment would profoundly change the economics for the sell-side.

Financing and risk taking currently represent 55% and 45% of the total economic cost for the sell-side in Flow Rates and Flow Credit respectively, compared to 15% in Cash Equities

and 25% in FX. Central clearing exchange-like venues have the potential to dramatically reduce RWA and balance sheet tied to execution in liquid FICC markets. At the same time, some banks are already thinking through how new business models could allow them to structurally lower the cost base by re-imagining the sales force structure and by leveraging more technology throughout the business.

Exhibit 16
Agency models have fundamentally different economics
Allocation of capacity¹ by product, %



1. Capacity defined as operating cost + average cost of capital held against RWAs and SLR exposure, based on average capital based on 4% SLR and 10% B3 CT1 ratio
Source: Oliver Wyman analysis

But those able to commit balance sheet will remain advantaged. With liquidity likely to remain thin in some markets, the investors we spoke with expect to skew more spend to those banks that are willing to put up capital to facilitate trades in those markets. That meant either deepening relationships with partner banks, or dealing more with specialists able and willing to provide depth of liquidity in specific markets. Investors were more divided on the extent to which they would use new peer-to-peer platforms, or change their own trading behaviours to better suit electronic venues.

At the same time, the clients we spoke to were expecting to manage the relationships with their top tier of partner banks more holistically as more liquid markets standardise. This means a more 'Equities-like' relationship taking into account the full range of services provided to allocate spend. As such more capital-intensive, relationship-building services, such as OTC clearing and financing, will remain important for those banks seeking to offer a full service proposition.

2.1.3 Winners and losers

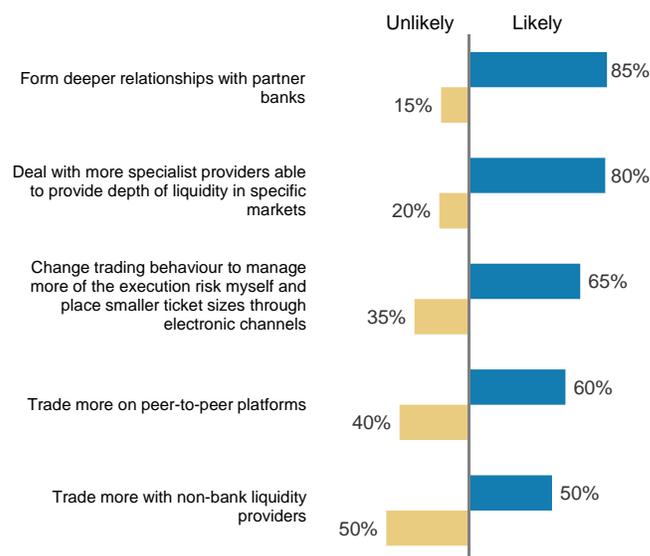
We expect a range of models to be viable – but only a subset will make attractive returns. The experience of Equities and FX was that electronication drove concentration and margin compression, with the economics increasingly skewed towards the largest scale players. However, the breadth and complexity of Fixed Income markets suggest a more nuanced picture.

We think that scale incumbents will remain advantaged as large clients skew spend to partner banks offering full services. However, the full service model will only be profitable for a handful of banks that can win the battle for market share, and deliver leading-edge efficiency.

More focused models will have to choose much more selectively where to compete. This will mean building around clear advantages, such as specialist execution and origination in less liquid markets, access to franchise clients, or depth in Emerging Markets, and embracing market structure change to radically pull back capacity elsewhere.

Exhibit 17

Investors will form deeper relationships Investors average expected response to liquidity concerns, %



Source: Oliver Wyman analysis

Exhibit 18

Fixed Income, Currencies and Commodities revenues: 2013-14 base case

	2013 market dynamics	2013 (vs. 2012)	2014 outlook	2014 (vs. 2013)
Rates	<ul style="list-style-type: none"> Tapering dynamics impacting fixed rate inventory and driving losses in Q3 Fall-off in positive central bank intervention vs. 2012, with Europe especially hard hit More stable revenues in structured 	\$35BN ↓ ~30%	<ul style="list-style-type: none"> Global central bank intervention to limit volatility, suppressing client activity and trading opportunities Sell-side retrenchment to cut balance sheet Continued migration to SEFs and clearing Some upside in H2 vs tough 2013 	\$31BN ↓ 10-15%
FX	<ul style="list-style-type: none"> Higher FX volatility and strong volumes, but margins extremely tight 	\$14BN ↓ 5-10%	<ul style="list-style-type: none"> Limited volatility hitting volumes severely Rebound from strong options and exotics figures in 2010 Regulatory probe casting a shadow 	\$13BN ↓ 10-15%
EM	<ul style="list-style-type: none"> Solid investor demand through the year but mixed trading through tapering dislocations Continued solid results for onshore corporate EM Rates/FX 	\$24BN ↓ 0-5%	<ul style="list-style-type: none"> Liquidity withdrawal, increasing political risk and weaker macro-fundamental pressuring appetite for risk assets Onshore corporate business more stable 	\$22BN ↓ 5-10%
Credit	<ul style="list-style-type: none"> Favorable trading conditions in flow, albeit on the back of a very strong 2012, and with a thinner supply side Mixed results in structured businesses; recovery in CLOs overwhelmingly a US trend 	\$21BN ↑ ~5%	<ul style="list-style-type: none"> Continued dearth of liquidity, with dealers constrained and investors adopting buy-and-hold patterns Challenging regulatory environment for derivatives 	\$20BN ↓ 0-5%
Securitized	<ul style="list-style-type: none"> 2013 down on 2012, with no Fed QE effect and trading spreads tracking sideways and interest in US MBS tempered by tapering comments 2013 market looking thinner after 2012 redemptions 	\$16BN ↓ ~15%	<ul style="list-style-type: none"> Regulators looking to rehabilitate Geared to recovery in US economy Continued pressure on RWAs and withdrawal of QE weighing down on upside potential 	\$17BN ↑ ~5%
Commodities	<ul style="list-style-type: none"> Acceleration in moves to dispose of Commodities businesses Move away from integrated physical model 	\$7BN ↓ ~20%	<ul style="list-style-type: none"> Further retrenchment likely, given challenges Remaining business more stable around the core client hedging activity 	\$6BN ↓ ~15%
FICC		\$117BN ↓ 15-20%		\$109BN ↓ 5-10%

Source Oliver Wyman analysis.

2.2 EQUITIES

The prospects for Equities have improved, with rising indices and growing revenue pools; but the value delivered to the bottom line and the benefits of growth will not be shared among participants. Even the advantaged scale players need to rethink the cost and service model in light of changing client behaviour and regulation.

2.2.1 Time for change: The case for optimisation

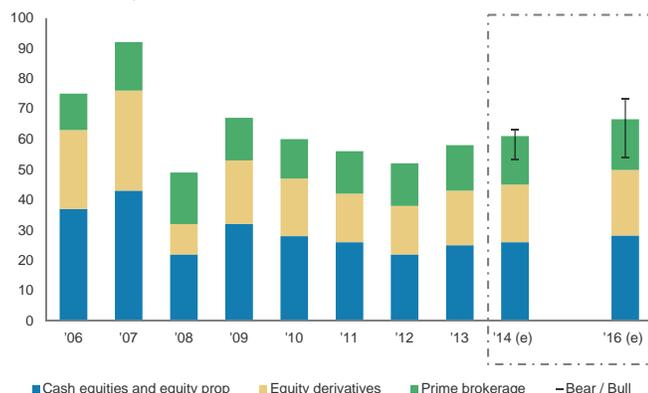
The tentatively improving revenue environment will benefit a few large banks. We estimate that efficiently capturing the growth in global Equities can add net 1% point to bottom line Wholesale RoEs for banks with significant Equities businesses, so the opportunity to grasp here is significant.

The improving revenue environment in 2013 saw Equities returns move strongly positive and we see further growth over 2014-15. However, we are cautious in our base case as much of 2013 was idiosyncratic and Japan-linked. Uncertainty remains over the strength of the global recovery, while margin pressure remains intense and the pressure from passive investment strategies is still keenly felt.

We anticipate 5-10% revenue growth in 2014 in global Equities revenue pools in our base case. By contrast, in prior upturn cycles Equities growth was 20-30% per annum at this point in the cycle. Revenue growth is delivering muted real benefits to the bottom line, even for some of the largest players. The fixed cost structure remains stubbornly high, so the lack of client volume means the benefits of operational gearing are not kicking in. Beyond the leading 4-6 firms, Equities remains highly challenging for mid-sized players that are supporting the costs of a quasi-global platform.

Exhibit 19

Historical and forecast industry Equities revenues 2006-2016E, \$BN



Source: Oliver Wyman analysis

2.2.2 A rethink needed on distribution and research.

The cash Equities service model – ‘give the client everything up front and hope they pay you’ – was developed in an era of rapid growth and has not yet adjusted to the profound shifts in client demand. We estimate that even at today’s volumes, the Cash Equities business doesn’t meet the cost of capital for all but a handful of players. Distribution and Research are two of the biggest challenges

Research is a differentiator, but wide variety of what is valued. The industry as a whole is spending more on research than investors are willing to pay for. Investors we met highlighted that quality content is amongst the top differentiators between banks or boutiques that they used. But this said, many clients felt awash with research and distribution – some of which was of little value. We think as investors skew how they pay even more, an even higher share of the value will go to the most differentiated content, whilst value will fall sharply elsewhere. A shift towards unbundled pricing would accelerate this trend.

Banks need to respond more incisively to profound changes in investor demand for research, as investment styles have changed, market data and news have become near ubiquitous, and buy-side analysis has increased in quality at some firms. Investors would like their brokers to get better at packaging analytics about companies and the implications of different scenarios. Also, a key finding from our interviews – particularly from multi-asset firms – was few banks or boutiques are sufficiently weaving macro and micro insights together into clear “thematic trade ideas” consistently. The prize for the best in class who do this should be large. But others must be more selective. We think more can be done across the board to leverage technology into the operating model, and differentiate much more sharply.

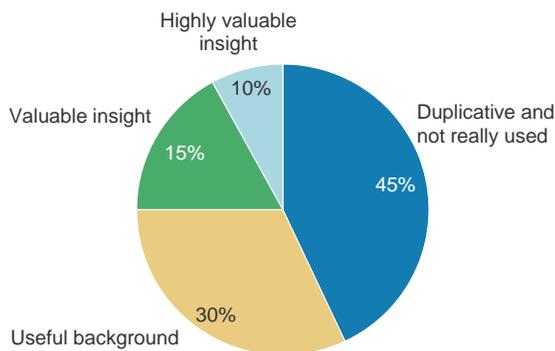
By contrast, distribution is another area requiring attention. The sell-side has built up multiple overlapping sales functions as new channels have emerged (generalists, research sales, specialists, sales traders, electronic sales, regional sales, delta one sales). These could be justified when investors turned over portfolios at least once per year and paid blended rates of 10bps / 4c per share, but those conditions are not coming back.

In total, we estimate that to deliver cost/income ratios that create economic value across the Flow Equities industry, the sell-side needs to cut ~\$1-2 billion in further costs across research and distribution, or 7-14% of costs. At the same time there needs to be investment in higher value content, and better technology enablement for client service and client management.

Exhibit 20

Investor perception of sell-side research

Percent of research received classified according to perceived value, average across investors surveyed



Source: Oliver Wyman analysis

2.2.3 New leverage constraints are adding to the complex optimisation challenge for Equities

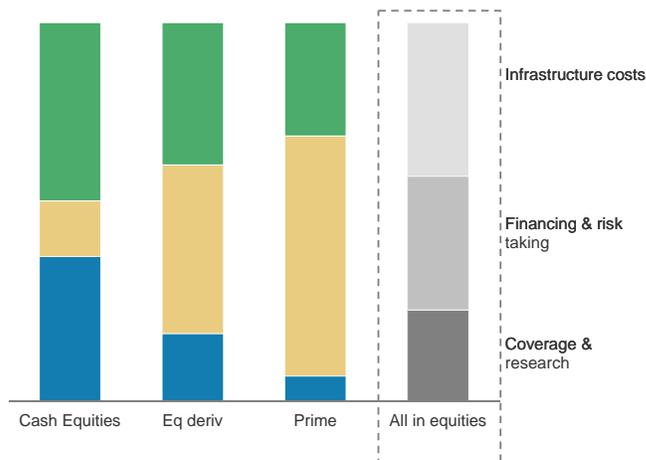
Equities presents a classic resource optimisation challenge, trading off the Flow businesses which are cost intensive; the Derivative businesses, which are risk capital intensive; and the Prime and Servicing businesses, which are balance sheet and operations intensive. Add in the multipliers between businesses and you have a complex optimisation challenge, with each bank trying to find an efficient frontier based on its own edge.

New leverage constraints are changing these optimisation dynamics and forcing a re-evaluation of business models. We calculate that if Equity businesses were charged for the balance sheet costs of a 4% leverage ratio the economic returns of the business would halve. Already we are seeing some banks marginally re-price leverage exposure in Prime and refocus client lists, but we see further to go on this road.

Exhibit 21

Equities sub-businesses face very different constraints

Breakdown of operating and financial resource costs¹



¹Financial resource costs defined as average cost of capital held against RWAs and SLR exposure, based on average capital based on 4% SLR and 10% B3 CT1 ratio
Source: Oliver Wyman analysis

2.2.4 Achieving scale and efficiency remain critical to success

As an operationally geared business, achieving scale in Equities remains a key determinant of success. Through the most difficult years, the returns, on an absolute and relative basis, have been best for the largest players with global scale, and smaller specialists with adequate scale in specific segments or markets – this is the notorious “Equities returns smile”. These cohorts continue to have natural advantages.

For the rest caught in the middle, the challenge will be to find ways to capture the benefits of scale, for example, by finding industry-wide solutions to create cost scalability such as utilities or smart sourcing. At the same time, these firms will have to challenge the conventional wisdom that this business needs to be uniformly global, and identify ways to compete more selectively in products and regions where they have less of an edge.

Exhibit 22

Equities revenues: 2013-14 base case

	2013 market dynamics	2013 (vs. 2012)	2014 outlook	2014 (vs. 2013)
Cash Equities	<ul style="list-style-type: none"> Stronger volumes, rallying markets in H1 (H2 more uncertain) Great rotation out of FICC into Equities driving Equities trading Rise in global stock markets to provide increasing support over the year Pressure on remaining prop units, and risk taking in general, as final rulings on Volcker rules became clear 	\$25BN ↑ ~20%	<ul style="list-style-type: none"> Continued growth on the back of general macro-economic improvement in Eurozone and US Increased IPO pipeline, particularly in Eurozone also providing uplift Some (negative) rebound from 2013 highs – Japan and EM markets most vulnerable Some capacity withdrawals by smaller firms taking some revenues from the industry pool 	\$26BN ↑ 0-5%
Derivatives	<ul style="list-style-type: none"> Significantly stronger ECM issuance driving new issuance hedging Uptick in client activity on greater interest in Equities exposure (especially Europe) Reduction in m-t-m losses as indices broadly positive for the year Continued regulatory pressure supporting ETD revenues 	\$18BN ↑ ~15%	<ul style="list-style-type: none"> Continued growth in IPO market boosting demand for hedging activity No significant m-t-m rebound as per 2013 Marginal erosion at the fringes led by push to ETD 	\$19BN ↑ ~5%
Prime and ETD	<ul style="list-style-type: none"> Support from strong growth in hedge fund AuM Macro funds in particular more active given volatility in global risk assets Margins under pressure as supply side capacity remains high 	\$15BN ↑ 5-10%	<ul style="list-style-type: none"> Deleveraging of bank balance sheets and B3 implementation pressuring balance sheet intensive businesses Industry shift towards ETD continuing, offset by tightening of margins 	\$16BN ↑ ~5%
Equities		\$59BN ↑ ~15%		\$61-62BN ↑ 5-10%

Source: Oliver Wyman analysis

2.3 CORPORATE BANKING

The corporate franchise offers attractive top-line growth, but this will only translate into strong returns for some. Over-supply, increased leverage, funding and capital-related costs will lead to below-hurdle returns for many banks. To improve returns, banks must define narrower corridors where they compete, streamline coverage and better integrate products and capabilities

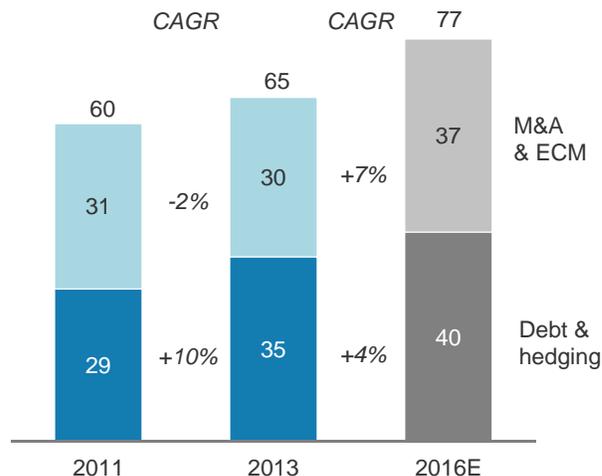
2.3.1 The need for optimisation

Capturing growth with corporates can add 1 to 1.5% of ROE, but we expect returns to be skewed across banks.

We expect corporates to be a core driver of top-line growth over the next 2-3 years. Corporates have hoarded cash over the last 5 years and are now in a position to expand organically and/or inorganically as the economic outlook improves. In our conversations with corporates we were struck by their positive sentiment, with many considering more material organic activity. This underscores our view of the positive growth prospects for corporate finance revenues. The growth outlook for debt and derivatives is more tempered, given the rising cost of derivative activity and strong debt issuance over recent years as corporates took advantage of the low interest rate environment.

Exhibit 23

Forecast growth in Corporates revenues Industry wide sales to corporates, \$BN

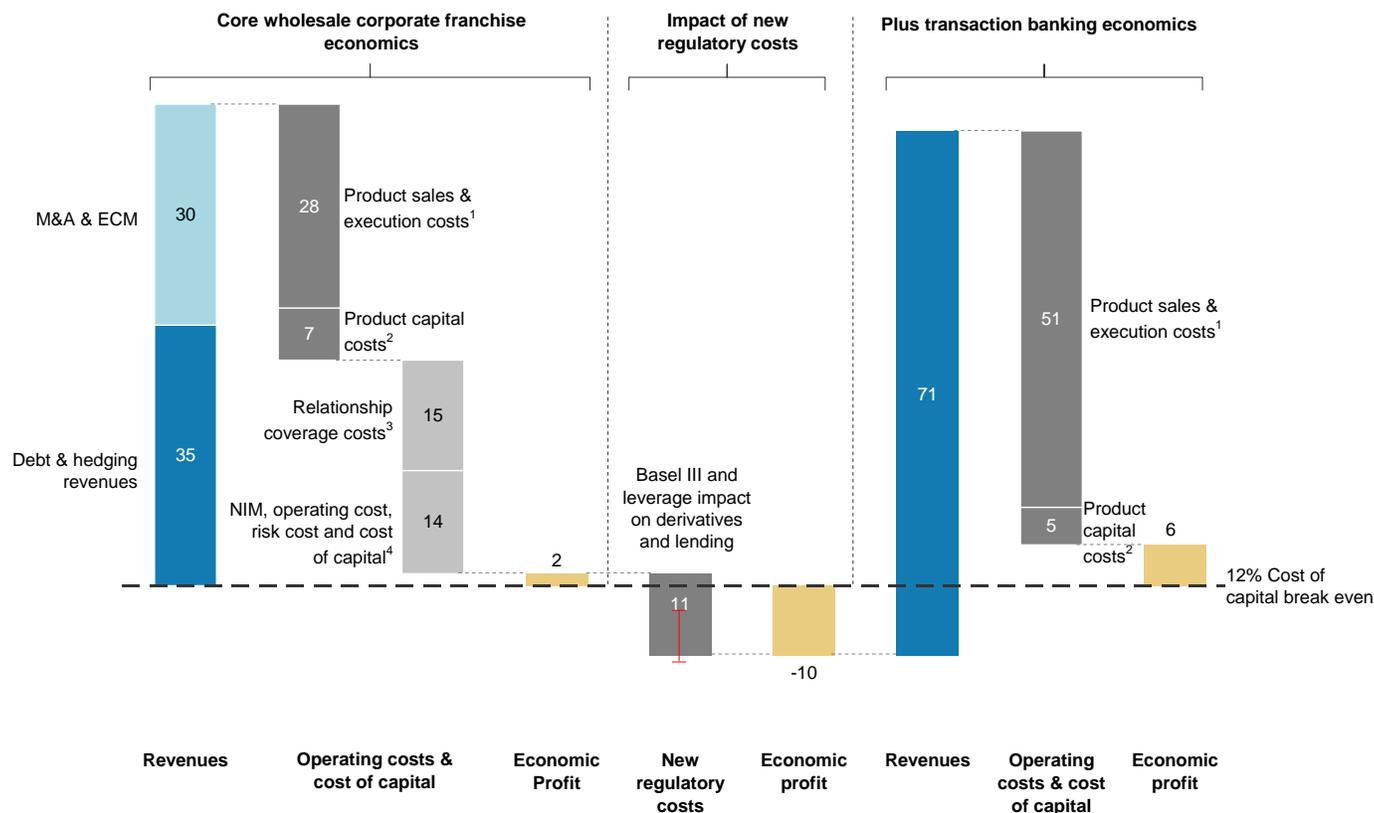


Source: Dealogic, Oliver Wyman analysis

Exhibit 24

Break-even economics for the Wholesale Corporate Banking franchise

Estimated industry pre-tax economic profit of Wholesale Corporate Banking franchise - 2013, \$BN



1. Includes all product origination headcount, sales and trading headcount, infrastructure costs
 2. Includes all capital and leverage costs
 3. Includes all relationship management coverage costs
 4. Includes all franchise lending costs, losses and cost of franchise lending capital
 Source: Dealogic, Oliver Wyman analysis

However, our estimates suggest the corporate franchise barely meets hurdle returns today – and leverage worsens the picture. We estimate total revenues of ~\$65 billion set against total economic cost (operating costs and cost of capital) of ~\$63 billion today. These costs are made up of ~\$29 billion of relationships costs in the form of loss-leading ‘franchise’ lending and client coverage, plus ~\$35 billion of operating and capital costs for delivering cross-sold products into the client base.

Once new regulatory costs are factored in, we estimate the core corporate franchise will generate returns below the cost of capital. There have been multiple regulatory concessions to protect the corporate franchise, including revisions to the liquidity rules, more favourable treatment of un-drawn lines for leverage ratio purposes and exemptions from CVA VaR charges on derivatives (in Europe at least). However the leverage ratio in particular is a key new drag.

Transaction banking remains a more lucrative activity with relatively low capital consumption and factoring in the economic profit from these activities it lifts the sector as a whole above the cost of capital. But many banks do not have these activities. Or if they do, they run them separately, since the business is far more infrastructure-driven, and the large corporate elements form a relatively small part of a wider business that also serves retail, commercial and financial institution clients. Furthermore, these businesses are also facing regulatory pressures, in particular from the impact of the Liquidity Coverage Ratio which could erode profits on core deposits by up to 30%.

The corporate clients we interviewed consistently said there are too many banks competing for their business. Despite the pressure on bank balance sheets over recent years and the spectre of Basel 3, large corporate clients say they have banks lining up to extend heavily discounted, short-

term, committed credit lines and backstops as an anchor to their relationship – whilst the economics have changed, this traditional business model remains intact.

The corporates we spoke to saw no signs of a withdrawal of capacity or a re-pricing of the relationship loan product; they continue to cite the relationship loan as the single most important factor in determining the allocation of their more profitable ancillary business. As Basel 3 bites and the aggregate relationship lending vs. ancillary income equation moves in to the red, banks will need to be much more clinical and disciplined in the ‘who?’ and ‘how much?’ of relationship lending decisions to ensure that the equation is positive.

2.3.2 Narrower corridors

With balance sheet now more expensive than ever, banks need to be more selective about which corridors they choose to compete in. Too many banks are striving to offer a full-service, full-cost corporate banking proposition globally. Only a handful of at-scale globals can make this work.

The drivers of success in the CFO-down business, around trade, payments, debt and hedging, are very different to those in the CFO-up business around strategic transactions and capital markets events. Yet pursuit of top-line income often still leads to banks competing for businesses in areas where their own economics are not advantaged.

For instance, many regional Universal banks commit balance sheet and coverage to clients in the hope of winning M&A or ECM mandates, though they lack scale in those businesses. According to our analysis of corporate finance activity over 2009-13, global Investment Banks achieved cross-sell across corporate finance and debt/derivatives with clients who represented ~45% of balance sheet extended and these clients generated ~60% fees. For regional Universals both figures were around 30%.

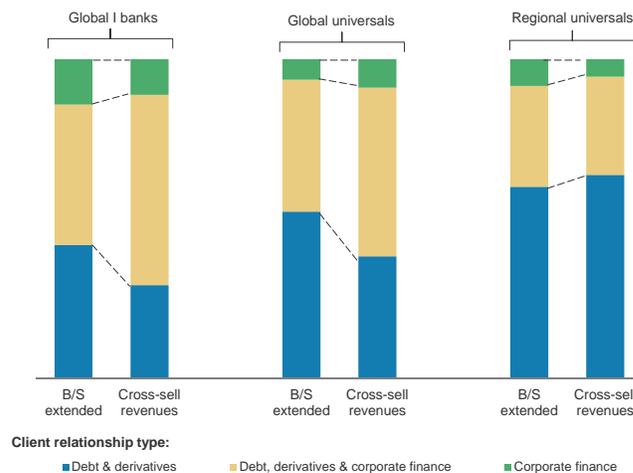
Similarly, many regional and domestic banks have built out significant international networks when the lion’s share of flows into and out of their home markets can be captured with a relatively modest footprint.

Better deal-by-deal discipline is part of the solution. But a renewed look at where to compete at what level of intensity given the new climate is needed in many cases. For some, the business model is clear, e.g. the Global Corporate Finance house or the EM specialist; but for many the proposition is much less defined.

Exhibit 25

Cross-sell patterns differ by business model

Cross-sell revenues associated with lending - 2009-2013, %



Source: Dealogic, Oliver Wyman analysis

2.3.3 More efficient and effective client service

Coverage is an area ripe for cost savings and improvement. We estimate up to \$30 billion of industry costs are tied up in client-facing roles through a combination of relationship managers, corporate finance and transaction banking product specialists, secondary trading product specialists and other management roles. Yet many of the corporates we spoke with felt over-covered by their banks, and that much of the coverage they receive is generic and not sufficiently tailored to their needs to be valuable.

We see both a cost and an effectiveness challenge. We see significant potential for cost reduction from stripping out inefficient, duplicative layers of sales, coverage and client service. At the same time there is more to be done to improve effectiveness and productivity, for instance from more targeted coverage and tailored sales pitches. This will support banks both in competing more selectively, as well as in better-integrating parallel sales and coverage functions.

We see further upside from integrating Transaction banking more closely. For many banks, Transactional banking products are the source of value that make relationship economics ‘whole’, particularly if they are closely integrated with the banking and markets businesses. A global Universal winning a cross-border cash management mandate or a domestic player winning local payments business can make the difference between above and below hurdle returns. There are substantial opportunities to integrate elements of

client management from coverage personnel to account planning and the tailoring of bespoke solutions.

Combining relationship expertise and subject knowledge, with more integrated, joint coverage will allow banks to develop solutions that better meet corporates' needs, e.g. cross-border working-capital solutions, payment-linked FX strategies and bespoke issuer services.

Better data, and better use of data is a key enabler. At a minimum, banks need to work harder to understand customer profitability to support resource allocation and client-management decisions. Many banks are simply not able to pull together a reliable view of the profitability of their corporate clients, largely because risk and product systems are siloed, but also because they have designed such complex systems of revenue splits, shares and double-counts. Leaders are investing management time in developing

much more robust views of client economics, fully loaded for regulatory costs, both to drive decision-making at granular levels (product targeting and pricing) and to inform top-down strategy and resource allocation.

At the same time banks could do a much better job at mining data on trade and payment flows to improve portfolio management and to identify new opportunities be they sales to existing clients or prospects. Beyond the tactical, there is a sizeable and real opportunity for banks to develop client orientated products based on the data they collect and hold. The corporates we spoke to are crying out for banks to provide them with benchmarking data on their competitors' levels of straight-through processing, error rates, payment processing efficiency – all data that banks are sitting on. Developing this data into a client service will have the dual benefit of differentiating a bank's offering whilst also increasing client 'stickiness'.

Exhibit 26

IBD revenues: 2013-14 base case

	2013 market dynamics	2013 (vs. 2012)	2014 outlook	2014 (vs. 2013)
ECM	<ul style="list-style-type: none"> Rebound after multi-year declines Greater investor demand for Equities offering market for issuers Increased supply of equity issuance driven by <ul style="list-style-type: none"> Improved valuations pushing corporates to market Private Equity firms looking to sell off investments into higher valued markets 	\$20BN ↑ ~35%	<ul style="list-style-type: none"> Large backlog of new equity issuances still exists across the market Risks remain, but increasing economic stability driving increased issuance 	\$21BN ↑ 5-10%
M&A	<ul style="list-style-type: none"> Macro-economic risks continue to push Cash rich corporates continue to hoard balance sheet Fee compression due to shift of proceed distribution to lower margin, larger deals Smaller boutique firms and independent advisors playing a more prominent role in the M&A landscape 	\$15BN ↓ ~5%	<ul style="list-style-type: none"> High level of announced deal activity set to flow through in 2014 Persistent strong corporate cash balances and Private Equity driving deal activity as economy recovers Margin pressure on banks from increasingly competitive structure 	\$16BN ↑ 5-10%
DCM	<ul style="list-style-type: none"> HY revenues slightly off a record 2012 as issuance continues to be supported by investors seeking yield, and low rates for borrowers Investment grade activity off as prices in secondary markets fell slightly, particularly in the US 	\$22BN ~0%	<ul style="list-style-type: none"> Additional Fed tapering and rising interest rates dampening issuer activity Underperformance relative to Equities leading to rotation of investor assets out of Fixed Income 	\$22BN ~0%
IBD		\$57BN ↑ 5-10%		\$60BN ↑ ~5%

Source: Oliver Wyman analysis

Exhibit 27

Transaction banking revenues: 2013-14 base case

	2013 market dynamics	2013 (vs. 2012)	2014 outlook	2014 (vs. 2013)
Large Corporate Transaction Banking	<ul style="list-style-type: none"> Economic concerns in Europe and China and margin compression limiting upside in traditional trade finance Growth in receivables finance predominately driven by volume growth in Europe and Asia Increasing adoption of supply chain solutions driving strong growth in supply chain finance PCM revenues flat 	\$71BN ↑ 0-5%	<ul style="list-style-type: none"> PCM revenue growth as large corporates expand their geographical footprints, though margin restricted by ongoing fee pressure Trade finance growth largely driven by EM countries 	\$73BN ↑ 0-5%

Source: Oliver Wyman analysis

View from the corporates

We spoke with around 30 treasurers at large corporates in Q1 2014 and discussed their relationship with their banking partners. Our findings reinforced our view that many of the longstanding issues in Corporate and Investment Banking have not been sufficiently addressed – in spite of the new regulatory and economic pressures.

Key takeaways:

- **Corporates are expecting growth and material inorganic activity.** All of the corporates we spoke with expect to grow in the next 2-3 years, and around 70% expect to do so through some form of material inorganic activity.
- **Franchise credit has not re-priced.** Around 60% of respondents have not experienced any reduction in availability of credit, or any increase in the cost of credit. Those that had were generally at the smaller end of large corporates.
- **Franchise credit remains the key driver of ancillary spend.** Around 80% of respondents said that an RCF (Revolving Credit Facility) was a pre-requisite to winning ancillary business. The amount of credit extended was cited as the most important factor in how ancillary spend was awarded.
- **Corporates feel over-covered by their banks.** Over 60% of participants felt that they were visited or called upon too often by their Wholesale banks, with several commenting that they are looking to consolidate banking partners as a result.
- **Yet the quality of the dialogue is often low.** Over 60% described the level of dialogue they have with their Wholesale banks as generic and not tailored to their needs. More than 30% complained that they were too often the recipients of generic 'product-push' pitches.
- **Product usage patterns are expected to shift.** Strategic products and payments are expected to see the sharpest increase. Around 60% expected hedging to get more expensive, yet only 20% expect to reduce their use of derivatives.
- **Key unmet needs include liquidity management and data provision.** Over 75% of surveyed participants would like to see benchmarking of finance-related performance, position forecasting or real-time liquidity management products.

2.4 TECHNOLOGY AND SOURCING

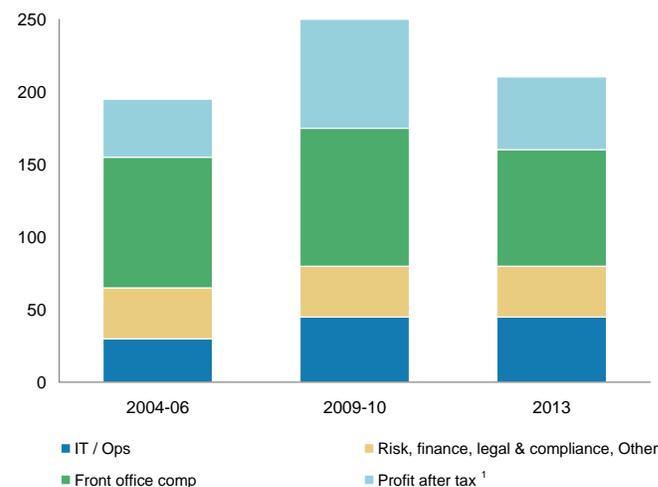
Delivering the optimisation agenda will require a more strategic approach to technology investment, as banks shift away from reactive, regulatory-driven change. The industry has started to embrace new supply chain structures, and we believe there is significant further opportunity here. We estimate \$3-6 billion of cost savings at stake for the sell-side by 2016

2.4.1 Investment required

We believe technology investment has a critical role to play in delivering on the optimisation agenda. The sell-side is in the midst of a profound shift in cost structure towards a more technology leveraged model. Overall we have seen the share of technology and operations within the cost base rise to 30% in 2013 from 20% in 2004-06. Bank infrastructure costs have increased 25% since 2004-06 and have remained flat since 2009-10, while front office compensation has decreased 15% and industry profits have fallen 60%.

Exhibit 28

Increasing spend on infrastructure costs Evolution of industry spend, 2004-2013 \$BN



¹ Based on 30% tax rate, 12% cost of capital
Source: Oliver Wyman analysis

Looking ahead we believe technology will continue to grow in importance as banks look to simplify processes throughout the middle and back offices, continue to increase the role of technology in client service and trading, and pull out expensive mid-level manual layers. We estimate technology investment has the potential to save \$2-3 billion of industry

costs per annum (0.4-0.5% points of RoE) over the 2016 timeframe.

At the same time capturing many of the growth opportunities, and better aligning the business against client wallet, will require investment in new technology.

Potential areas of focus include:

- New capabilities in Fixed Income market connectivity
- Better integrating solutions for corporate treasurers (payments, liquidity management, hedging)
- Electronification of Equity derivatives
- Using customer data across the bank to drive insight
- Upgrading client management information to better understand the economics of client business
- Client self-service and dynamic reporting - giving clients more and reducing manual touch
- Asset optimisation solutions, across risk, collateral, settlement and legal entity optimisation
- Reference data control and quality assurance
- Retooling research and analytics

2.4.2 A more strategic approach

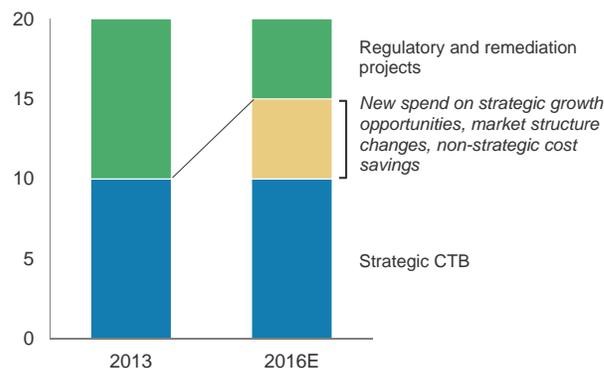
A shift in gear is required away from reactive regulatory remediation and cost-cutting work towards a more strategic infrastructure change program. Regulatory and remediation costs have added \$8-12 billion to the industry cost base per annum, and taken up a disproportionate amount of senior management time and capacity. We expect strategic infrastructure change spend to increase 30-50% over the next 2-3 years as this burden lessens.

Deploying this spend effectively requires a clear medium-term vision for the business that is shared between the front office and the infrastructure functions, and hard-line discipline to retain focus on implementing against this.

We are already seeing some banks starting to make this transition, supported by moves to upgrade key personnel and put in place better governance structures. Yet for many others progress is slow. We think this will be an increasingly important differentiating factor.

Exhibit 29

Transition in Change the Bank expenditure Spending on CTB programs - 2013-2016E, \$BN



Source: Oliver Wyman analysis

2.4.3 The case for smart sourcing

We estimate \$1-3 billion of annual cost savings from smart sourcing are achievable by 2016. The majority of IT, processing and support behind banking services is delivered in-house with platforms that are highly duplicative across players and offer very little by way of competitive advantage. We estimate up to \$7-9 billion of industry costs could be pushed out into an external supply chain (net savings of \$3-5 billion) that can deliver scale economies as well as enhanced flexibility and potentially more innovation. We expect only a part of this to be achievable within a 2-3 year time-frame and estimate \$1-3 billion of annual cost savings at stake by 2016.

One of the key barriers that must be overcome is banks' fear of losing scale advantages and decreasing the barriers to entry associated with complex, high fixed cost. We have seen most action to date around compliance processes that are readily standardised and offer no potential source of differentiation. However, the bigger opportunity lies in extending the smart sourcing concept deeper into core infrastructure.

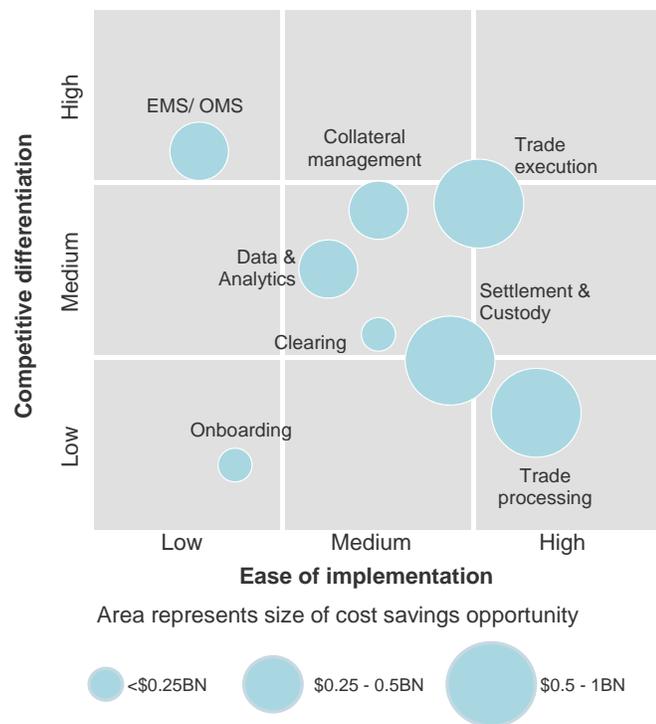
We see five main opportunities:

1. Use of vended solutions, hosted externally through a third party e.g. core trade execution/processing platforms, EMS/OMS engines;
2. Use of another bank's infrastructure, e.g. eTrading portals, listed execution capabilities, DMA channels, trade finance back office;

- Use of a market infrastructure player's infrastructure, e.g. custodian collateral management or clearing infrastructure;
- Use of a market utility, e.g. securities settlement utilities, KYC/onboarding utilities; and
- Sale and leaseback, e.g. offshore captives, properties.

Exhibit 30

Smart sourcing has the potential to save \$3-5BN
Cost saving opportunities from smart sourcing vs. competitive differentiation & ease of implementation, \$BN pa



Source: Oliver Wyman analysis

There are examples of application outsourcing and cost mutualisation today across elements of pre-trade, execution and post-trade that have allowed banks to save 30-50% of any one component of processing. Banks need to be bold in pushing change, challenging whether a perceived competitive advantage is real and resisting the natural instincts for management to retain direct ownership.

2.4.4 Smart sourcing introduces a number of new challenges for banks

The benefits of smart sourcing are sustainable and will position banks for returns growth. Yet it can be difficult and costly to achieve, as it requires senior management commitment, investment and follow-through, often over multi-year programs.

We are now seeing an acceleration of activity in this space as the industry matures and some of these barriers are overcome. We highlight three main catalysts that are driving these changes to traditional operating models

- The intensity of the economic pressure on the sell-side has forced it to reconsider the “we built it here” philosophy and to push harder than ever before to find solutions to long-standing infrastructure problems.
- The strategic sourcing industry has matured. Vendors and market infrastructure providers – seeing the opportunity – have invested to develop solutions.
- Several high profile transactions have raised the perceived viability of this concept.

Furthermore, there are a number of operational risks associated with smart sourcing that must be overcome. For instance, if a service provider (either outsourcing provider or utility) grows to sufficient scale, they may themselves become a concentration risk presenting a systemic risk to the broader financial system. Equally, sourcing arrangements must be compatible with Recovery & Resolution plans. There is also a shift required in banks' management and skills to interface with and manage potentially multiple external providers rather than run an internal infrastructure support function. We believe that most of these issues are surmountable – but equally they do place a natural limit on the extent to which the concept can be pushed into some core banking operations.

Lessons learned from other industries

What can capital markets firms learn from other industries that have already been through the process of shifting from a vertically integrated to a supply-chain model?

The Auto industry has over time shifted from a model in which each manufacturer made everything, including the tyres, to one in which two-thirds of the cost base now sits in the supply chain. The industry has set up an action group to standardise elements of the supply chain – for instance, key features and components are increasingly standardised across competitors to allow suppliers to develop economies of scale in their operations.

Latterly, under intense profitability pressure, manufacturers have pushed the model even further, for instance sharing the same chassis between competitors. Competition remains intense, but is focused around recognised areas of distinctiveness and value creation- design, distribution and assembly. Strikingly, some of the largest manufacturers have been the most ambitious, seeing that the benefits of a lower and more flexible cost base outweigh any strategic benefits that high fixed costs might confer.

The Telecoms industry presents another interesting example. Here the driver for change was the huge investment required to fund new technologies. Initially, incumbents were cautious about network sharing, fearing dilution of network quality and loss of control of their infrastructure. However, these reservations were swiftly overcome as operators realised that “network” was no longer a strategic advantage. In addition, large players were able to heavily influence the deal structure and preserve a degree of strategic autonomy, such as independent control of a site for large business customers. Thereafter, three successful archetypes to create the business case emerged:

- Deal between market leaders: Primarily to secure cost advantages
- Deal between smaller players: Primarily to join forces to strengthen value proposition (e.g., utilise operational expertise, bring economies of scale)
- Deal between a large and a small player: Large player dictates the deal to capture a niche advantage

These network sharing initiatives have helped telecom operators achieve infrastructure cost reductions of up to 50%.

3. Winners and losers and capturing new value

3.1 BALKANISATION

Balkanisation will continue to harden regional disparities, favouring US and EM players in the near term and forcing tougher optimisation choices for many banks in their overseas operations.

Exhibit 31

Map of global structural reform proposals

Ring-fence type	US	UK	EU	Rest of world
Split of retail vs. trading activities	Volcker rule	ICB	Liikanen & derivations (Ger, Fra)	
Limitations on foreign activities of domestic banks	Swap push-out	ICB	Local regulator pressure (Ger)	
Limitations on local activities of foreign banks	FBO ¹	FSA pressure (individual case basis)	Local regulator pressure (Ger, Aus, CEE)	Localisation requirements in: Brazil, China, Russia, Korea etc.

■ Moral Hazard
■ National subsidiarisation/localisation

1. Foreign Banking Organisation
Source: Oliver Wyman analysis

3.1.1 Regulatory Balkanisation continues to harden

Balkanisation has been a key theme for us in prior reports. The interplay of constraints imposed by host regulators in local markets, regulators in key hubs, and home markets adds cost and complexity for banks. In our report last year we estimated a total industry-wide RoE drag of up to 2-3% points that the industry has only started to work through. Developments over the last 6-12 months suggest that this trend is hardening rather than softening.

In particular, we highlight:

- The implementation of jurisdiction-level leverage ratio constraints (e.g. Swiss, UK, Continental European and US Supplemental Leverage Ratio),
- Fragmentation of liquidity under regional clearing and SEF models,
- Continued supervisory pressure towards subsidiarisation in both major hubs and local markets, with regulatory emphasis on subsidiary Recovery & Resolution planning, and

- Stress testing, such as the Fed's Comprehensive Capital Analysis and Review (CCAR) program, continuing to grow in importance in determining local capital levels.

Progress has been made in some areas, for instance single point of entry vs. multiple points of entry bail-inable debt, and work on adjusting booking centres. However many of the core operational and business implications are yet to be worked through. We see this as the single biggest drag on future returns.

3.1.2 Tougher choices on overseas operations

Management teams must optimise against local constraints as well as global constraints, forcing more thought than ever around the right shape for an overseas business. We expect many banks to conclude that very different strategies by major region are consistent within the umbrella of a global business.

Much has been done already to trim the footprint, but we still see too many cases of over-ambition in overseas markets. A classic example of this is in corporate finance, where many banks have a global presence that delivers significantly poorer returns on balance sheet in the non-home region than the home region. Another is Cash Equities, where the widely held misconception is that service needs to be consistent across regions for global investors.

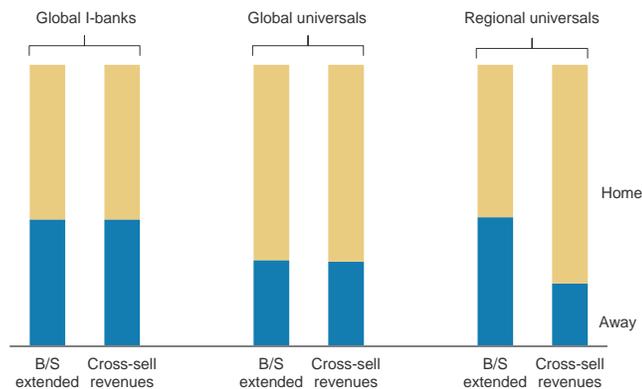
Clients value the ability to deliver a global service – in content, in execution – but they do not need it from every bank across every product. Clients also value depth and specialism and we believe there are viable business models built around regional and/or product expertise.

Supporting this trend, we have seen continued efforts to strengthen the regional dimension in management. In 2014 more banks will look to manage to regional PBT and even RoE targets rather than the global business line view, forcing more disciplined regional optimisation choices.

Exhibit 32

Regional Universals win lower corporate ancillary business outside of home regions

Cross-sell revenues associated with lending by location - 2009-13, %



Source: Dealogic, Oliver Wyman analysis

3.1.3 US players continue to be advantaged

The US banks will continue to have an advantage in the near term, as they benefit from a much stronger home market. We estimate a \$2 billion PBT advantage from the home market for the top 5 US-domiciled banks compared to the top 5 European-domiciled banks, driven by a more concentrated supply side, a more profitable industry structure in the US, and a propensity to “buy American” amongst clients.

This provides US banks with a strong PBT base to fund investment in overseas markets and, combined with the active deleveraging of the European banks, has resulted in the US banks consistently consolidating market share. We estimate they have gained 4-5% points in share globally over the past 3 years.

3.1.4 Local players favoured in Emerging Markets

It also favours local (and quasi-local) Asian and EM players. EM is no longer a growth story for many global banks, with local Asian and EM players advantaged. The global banks have become much more selective about where they are present in Emerging Markets, with banks pulling out of countries where they cannot make a decent return given local regulatory and infrastructure costs.

We think the more challenging growth outlook, reversing investor flows and volatility will underscore this trend. This will open up these markets to some share re-consolidation by local players, and we see Asia and LatAm as most prominent in this regard.

So far EM businesses built around trade, payments FX and hedging in the corporate franchise have held up much better than those more focused on global institutional client flows, and we expect that trend to persist. The deepening of local capital markets is also increasingly favouring local (and quasi-local) players. These players dominate in faster growing local currency origination, have local funding, and have deeper relationships with the small but fast-growing on-shore institutional investor segments.

In particular we are likely to see much more active participation amongst the Chinese banks. As China begins to liberalise the interest rate environment (likely over the next 1-2 years) and increasingly open the capital account, we anticipate a much more pronounced role of the RMB. Over a longer term this will result in the same benefits for Chinese banks that the US banks currently draw from their USD access. The Shanghai Free Trade Zone is likely to be an accelerator for all of this. Risk management will be key particularly given concerns around shadow banking and RMB transition risks.

3.1.5 New partnership structures

As banks become more selective about where they operate internationally, we are likely to see the emergence of more joint ventures and possibly co-ownership structures. The compliance and legal risk pressures on correspondent banking are likely to accelerate this shift, as banks look to de-risk and streamline their networks.

At a minimum we will see the re-emergence of hub-and-spoke or region-to-region relationships, in particular to manage trade finance, payments and cash management. Given the pressures on traditional correspondent banking, the nature of these relationships must evolve to more stable bi- or multi-lateral partnership structures.

More disruptive change is also possible. A number of strategic alliances have emerged in recent years (e.g. Standard Bank+ICBC) between banks who now effectively directly or indirectly co-own the Wholesale banking business.

Another example is the emergence of “Balance Sheet Rental” partnerships, where larger banks invest debt/equity into smaller, non-regulated broker-dealers or asset managers to then lever up and provide financing services whilst retaining client relationships. While disadvantages are complexity and loss of control, the benefits are significant in terms of capital and balance sheet efficiency, retention and expansion of synergies, and Recovery & Resolution management.

3.2 DIVERGING MODELS

We expect returns to remain divergent as banks optimise along different paths. Winning business models for the sell-side will be more diverse in structure as banks optimise across different client needs. Aligning the Wholesale strategy with the Group strengths and capabilities will reinforce returns.

3.2.1 Shifting market share and diverging returns

Capacity has to be reallocated effectively by banks across the board and by some banks in particular. The game theory here will be vital. Ultimately banks must give up their old ways, exiting uneconomical structural subsidies, re-allocating

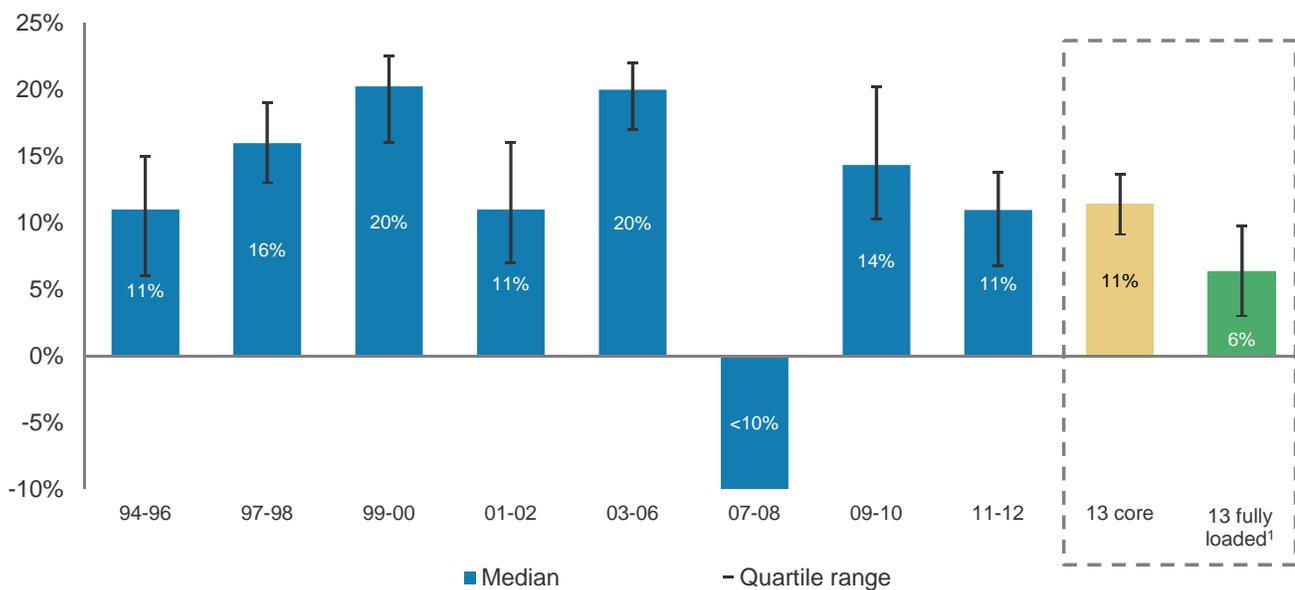
resource away from over-served areas, and grasping the benefits of new micro-structures. The question is whether fortune will favour the brave or banks position themselves from here to benefit from incumbency, letting the pretenders do the running.

The distribution of returns narrowed in 2013 on the core businesses. But if we include the non-core businesses, which in part reflect the transition costs of strategic repositioning carried out to date, the spread of returns between banks is as wide as ever.

We expect returns to remain divergent as disadvantaged banks incur transition costs of shrinkage, and the leading players capture an outsized share of the upside.

Exhibit 33

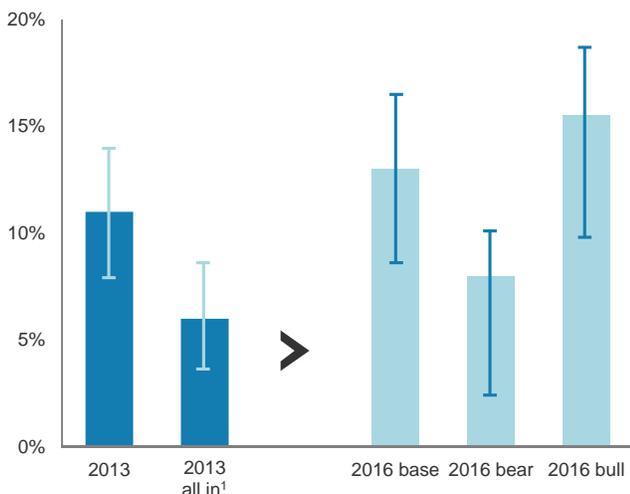
Historical spread of Wholesale bank returns are around the average RoE (%)



1. Includes impact of legacy books and fines attributable to Wholesale banking activities
Source: Oliver Wyman analysis

Exhibit 34

Increasing divergence of Wholesale returns 2016 Forecast RoE



1. Fully loaded RoE includes impact of fines and non-core
Source: Oliver Wyman analysis

3.2.2 Consolidating client relationships

One of the most striking findings from our client interviews was that many clients are actively looking to reduce the number of banks they deal with and consolidate spend.

Investor clients in particular are looking to reduce spend with the middle tier of 'core providers', who are present in most markets yet not in the top tier, as well as cutting down the tail of smaller 'counterparty' banks.

We have seen a steady trend of consolidation of spend by clients amongst a handful of their largest dealers over recent years, and it looks like this trend is not reversing. The biggest beneficiaries are specialists – banks that bring depth of content and execution in specific markets – and 60% of surveyed institutional investors expect to increase the number of specialist relationships they have. The attributes valued by clients of a specialist are very different from those of a partner bank or core provider.

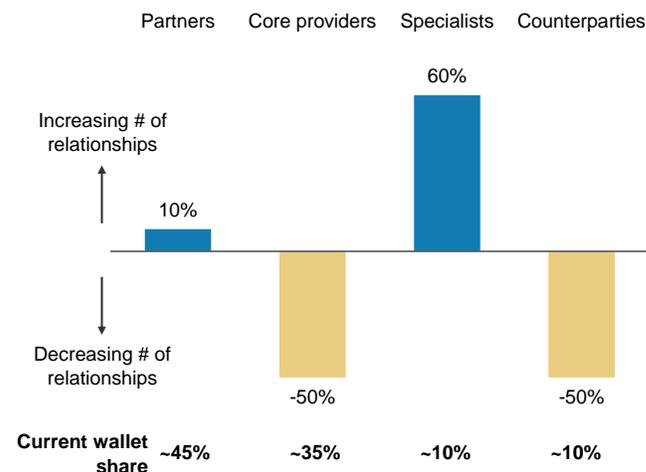
We think this means banks will have to think much harder about where to offer full service, and where to compete much more narrowly. This is not simply a matter of trimming the tail of clients. Banks need to re-shape their platforms to better match the services that clients value from them. This process has already begun, but we think it has much further to run.

A key fear often cited by banks is that pulling back service levels in one area will adversely affect another. Our client conversations underscored our view that these fears are often

over-blown. For instance, three quarters of the investors we spoke to told us that the strength of a bank's Fixed Income business had no bearing on their Equities relationship with that bank.

Exhibit 35

Consolidation with partners and specialists % of surveyed institutional investors¹



1. Net proportion of Institutional investors expecting to increase or decrease the number of banks in each relationship category
Source: Oliver Wyman analysis

3.2.3 The Group context is becoming ever more important

Over time we see more of the winning models being those Wholesale banks that can create value from and generate value from the Group's client base. For instance, some of the key areas for focus are:

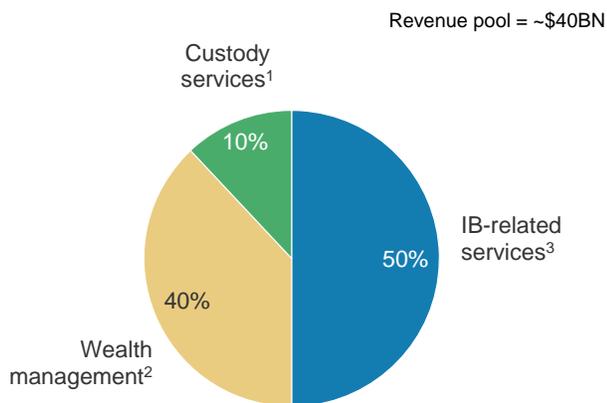
- International payments and FX.** This is a \$45 billion market divided among global Wholesale players, local players and a growing number of specialists. The winning banks are those able to deliver a coherent and targeted proposition across corporate, commercial, retail and Transaction banking.
- Asset management.** Best execution prohibits the channeling of business from the Asset Manager to the securities arm. However the more innovative players are finding ways to collaborate in offering a holistic range of solutions to end investors across a broad spectrum, from capital markets access, to synthetic products, to traditional asset management vehicles.
- Private clients.** There are opportunities both for synergies in client coverage as well as product

manufacturing and distribution with wealth, brokerage and private banking arms. For example, we estimate IB products and services represent ~50% of the total opportunity from ultra-high net worth individuals.

A portfolio of complementary businesses within the Group is also becoming more important, as banks trade off across multiple financial constraints. For instance, a banking Group with a large RWA-intensive SME lending business enjoys financial synergies with a balance-sheet intensive flow securities business that a banking Group with a large prime mortgage book doesn't.

Exhibit 36

Revenue opportunities across the UHNWI segment Revenue breakdown by service



¹ Includes safekeeping, reporting, etc..

² Includes discretionary mandates, investment funds, investment consulting, inheritance & tax consulting, trusts, etc.

³ Includes M&A advisory services, IPO, derivatives, structured finance, brokerage/ trading, research, hedging

Source: Oliver Wyman analysis

3.2.4 Winning models

With diminishing scope for outsized trading returns or leverage, we argue that effective client penetration becomes the defining feature of winning business models. Furthermore, we would advocate taking a value-lens rather than just a RoE lens to success – sticky clients offer significantly higher long term franchise value, and as a result Wholesale banking models need to be judged in the context of their group's strategy and the Wholesale bank's success in supporting and integrating with this.

Models we would highlight and key success factors are as follows:

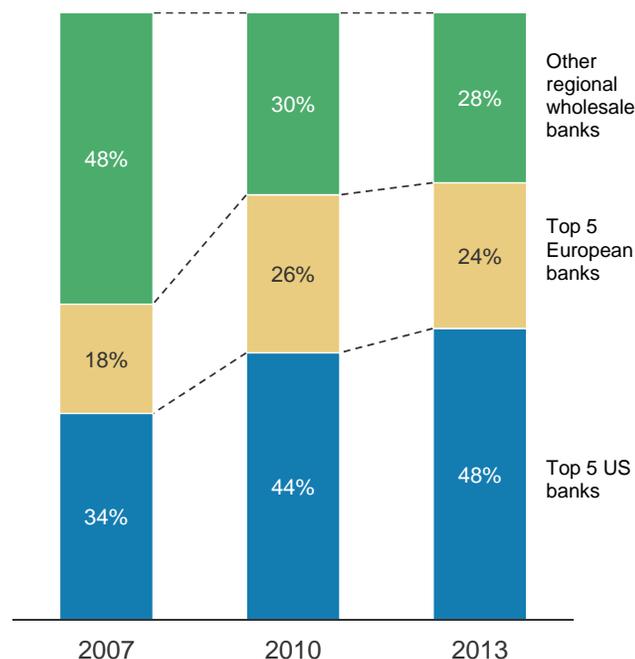
- The global super-banks.** A small number of 'super global' banks can deliver superior returns, but execution risks are high. A key hurdle for this group will be the transformation of FICC markets: these banks have scale advantages that position them well, yet also much to lose and risk being caught on the back foot. The winners within this group will be those able to pick up share while optimising the core platform and client base to improve the cost-to-serve equation; others will struggle as heavy operational gearing and RWA drag on returns. The likely group of banks remaining in this segment is small and looks to be dominated by US firms.
- Wealth managers and investment banks.** The value of wealth management clients to a Wholesale bank is very high, given the synergies in transaction execution, asset management and content. This group as a whole will benefit from increasing value of their content platforms as the cycle turns. The winners will be those with either global scale or outsized share in the markets where they operate. Those in the middle must ensure they do not get caught with the cost and capital structure and regulatory overhead of a quasi-global super-bank without the revenues to support this resource base.
- On-shore EM.** As fewer banks play on a pan-regional or global basis, the value of on-shore access will increase. The winners within this category will be those who can manage risk well, given the need to serve local middle market clients and trade EM products through volatility. They must also balance their core advantages with onshore corporate clients with highly selective investment in the FIG segment that enables them to achieve better balance sheet velocity, but does not over-expose them to areas where they are strategically disadvantaged. Doubling down on the fastest growing and more stable country corridors will also be key success factors, given growing risks across the EM regions.
- Boutiques and specialists.** There are clear opportunities to pick up share. Advantages include fewer conflicts of interest, more attractive environments for talent, more nimble technology and a lower regulatory burden. The challenge is to find business models that can deliver payback on the content and technology capabilities. We think Investment Banking models, for instance, are advantaged.
- Commercial corporate and retail servicers.** More banks are waking up to the high franchise value in revenue streams from mid-market corporate and retail clients, and focusing more on better penetration of these

segments. Product and service definition is changing rapidly given the conduct risks involved here, and given threats to some parts of the business from specialist and internet providers. Winners in this segment will be those who are able to effectively integrate products and services across divisions to deliver convenient and transparent solutions for clients, while shaping their cost structures very sharply around their advantages. This means avoiding too many off-strategy dalliances, and in particular getting the FIG footprint right.

- Regionalised Wholesale banks.** This will continue to be one of the hardest categories in which to define a winning model given the cost structure disadvantages. To win, banks will firstly have to be outstanding cost managers - taking a ruthless knife to non-core regional cost structures, avoiding scope creep, steering clear of businesses with high operational gearing, be inventive on cost sourcing and JVs. Secondly they will have to manage client footprint equally ruthlessly, skewing resource and senior attention to clients in their core region that are realistic partner candidates and shifting to specialised service for everyone else.

Exhibit 37

Share has consolidated considerably Change in market share, 2013 vs. 2010 vs. 2007



Source: Oliver Wyman analysis

3.3 VALUE CREATION AT THE BOUNDARY

An unbundling industry creates significant value at the boundary, and we anticipate this will be the case in Wholesale banking in the coming years. Across new market structure solutions, smart sourcing and new risk managers we estimate the potential for \$20-30 billion in new equity value to be created outside the core banking industry.

An industry redefining its boundaries. Many of the trends identified in our report amount to Wholesale banks needing to optimise to re-focus on areas of natural advantage given the emerging clarity on regulation and client demand. In some areas, no bank is naturally advantaged and the right solution is for some activities to drift out of the regulated banking sector. Regulatory trends are key here as operational risk becomes much more of a focus, and regulators push for more transparency. We see significant opportunity for new value creation through this process as synergies are extracted and higher valuations are achieved. A key strategic question for the industry is who captures this value.

New regulatory market structure solutions. The need for better risk management, regulatory problems, such as FX and LIBOR probe, and the need for new infrastructure to meet regulatory requirements provide multiple new revenue opportunities for market infrastructure providers and technology companies. We estimate the \$5-8 billion on new equity could be created through new revenue streams captured by non-banks such as data providers, execution venues, post-trade market infrastructure players and others.

Smarter cost sourcing. We estimate \$5-10 billion of trapped equity value could be realised through the smart sourcing of IT applications and processing capabilities from banks to new providers. Bank IT and processing infrastructure is hard to value and limited by the scale of the individual bank. By externalising this infrastructure and charging for it explicitly the true value and future opportunity can be better quantified and priced. There are multiple formats that this process could take ranging from specific sourcing providers to the use of existing utilities to the creation of new utilities and service providers.

Exhibit 38

Sources of equity value creation

New equity value, \$BN

	Revenue opportunity	Examples	Potential value to be created (\$BN)
New revenue streams	\$3-5BN	<ul style="list-style-type: none"> Growth in revenues for execution and alternative trading venues (particularly SEFs, corporate bonds) Opportunities arising from the shake-up in reference pricing mechanism / Fixes (e.g. LIBOR etc.) New data providers associated with removal of other conflict of interest problems 	5-8
Smart Sourcing	\$3BN	<ul style="list-style-type: none"> Pre-trade services, particularly KYC and pre-trade analytics tools Trade services, including trading IT infrastructure and EMS / OMS systems Post-trade services, including trade processes, clearing, collateral management, settlement 	5-10
Disintermediation of risk and BS	\$5-8BN	<ul style="list-style-type: none"> Loan funds and leverage loans seen dramatic expansion, total assets of \$800BN-1TN in 2013/2014, up ~\$200BN over 2 years SME lending, infrastructure projects also being spun out to shadow banking 	7-10

Source: Oliver Wyman analysis

New non-bank risk managers. The transition of risk capital and balance sheet to the buy-side over the last five years has been well documented. We estimate that non-bank lending has increased by up to \$0.5 trillion between 2008 and 2013. This has come as banks have reduced lending in the face of higher funding costs. The less onerous capital and liquidity requirements levied on non-bank providers mean that they are at an economic advantage in lending to certain sectors. We believe the expansion of risk capital and balance sheet in non-bank providers has the potential to create \$7-10 billion in new equity value.

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