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April 11, 2013

BLUE PAPER

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Wholesale & Investment Banking Outlook

Global Banking Fractures: The Implications

The bad news: The fracturing of global banking driven by Balkanisation has become one of the largest challenges for wholesale banks, taking 2-3% points off RoEs. Disjointed international policies pose the biggest threat. This presents a major challenge for non-US players who face higher costs to access the single most profitable market in the world – the US. It makes a profitable hub and spoke model in Asia and emerging markets much more challenging.

The good news: We think the market has overestimated the impact of the transformation of OTC markets on banks earnings. We estimate a 3-5% point base case fall in sales and trading revenues by 2015 vs. investors pricing in 10-20%, a thesis supported by our recent investor survey. We also see potential for collateral management earnings to offset lost revenues, though we think only a small number of firms will really benefit.

The fixed cost challenge: Much higher fixed costs against subdued revenues are proving a huge challenge. Many banks have started to embrace our “Decision Time” thesis, but the focus must shift from RWAs, capital and funding to managing the operational gearing. The quest for economies of scale/scope, and lower platform costs will lead to more tough portfolio decisions, particularly for mid-sized wholesale banks.

The bottom line: We think 12-14% returns on allocated capital are plausible in 2014-16 through restructuring and some cyclical recovery, but that the skew of winners and losers will be even greater as some firms fail to successfully clear these three key hurdles.

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Executive Summary: The Three Biggest Challenges

Challenge 1: The Bad News – Balkanisation of wholesale banking markets. We think the industry and the market have yet to get to grips with the forces fracturing global wholesale banking. In particular we now anticipate a 2-3% point drag on RoE from regulatory Balkanisation. While ring-fencing is getting a lot of attention, we see national subsidiarisation gathering pace quickly. With diverging national regulatory agendas, it poses a major risk to the global banking model.

The Balkanisation of banking markets will drive starker regional distinctions and participation choices. Regulators seeking to reduce the interdependence of their banking systems with perceived higher-risk overseas lending and markets activities are introducing a large and diverse number of new proposals. We think that in isolation the proposals for ring-fencing banking activity could take ~3% points off RoEs in a realistic worst case, with significant skews across banks. However, we argue that banks can meet regulators' objectives and see a much more limited impact on RoE (0.5% in our best case) through rethinking legal entity design, funding strategies and operating models. Much depends on the details of the final rules.

We believe the real challenge lies in the complexity and cost of dealing with multiple subsidiarisation demands across jurisdictions. The interplay of constraints imposed by host regulators in local markets, regulators in key hubs, and home market regulators creates an optimisation puzzle that is hard to solve. We estimate a total industry-wide RoE drag of 2-3% points, with limited scope for mitigation unless we start to see a more organised global policy response.

The breakdown of the hub-spoke model in Asia is accelerating. The revenue pools accessible to local business models are growing faster than the regionally accessible pools. This means the need for local funding sources is increasing. Finally, we are approaching the tipping point where the USD, the dominant regional currency, gives way to the RMB.

The US Foreign Banking Organisation (FBO) proposals are a particularly severe challenge given the importance of the US market. Funding and stressed capital are both potentially difficult to navigate and could lower returns for the Americas region by 2-4% for the most affected banks, albeit with heavy skews. And this is in a vital market that is already challenging for foreigners. We estimate the Americas delivered 55-60% of global profit in 2012 (vs. 45-50% of global revenues), with 60% of this accruing to US banks.

Differing stances across jurisdictions of key policies including financial transaction taxes and bonus caps are likely to further fracture the global industry. While not settled yet, the more aggressive stance of Europe on these issues would in time drive a less attractive environment for transaction settlement and for talent in Europe, and of course, call an end to the relatively fluid movement of personnel between regions that exists today.

Challenge 2: The Good News – OTC reform: We anticipate a bounded 1% drag on RoE for the industry at large – which is less severe than the market expects. The restructuring of OTC markets is accelerating; while the value shifts will be dramatic, the overall effect will be bounded. However, the unintended consequence of limited inter-operability of regional clearing houses will be to fragment markets regionally, and to place even greater strain on the chronic shortage of collateral, driving new opportunities in collateral financing.

We believe the market actually over-estimates the extent of likely revenue erosion in Fixed Income. We anticipate the reforms will force $5-10bn of current revenue to migrate out of the sell-side by 2015. While this represents a 10-20% reduction in revenues in the most heavily affected areas (and still poses significant challenges for those like the IDBs with limited ability to offset), it is only 6-12% of the total OTC derivative pools of $75bn, and 3-5% of total sales & trading revenues. This compares with our proprietary investor survey which suggests investors expect 10-20% of FICC trading revenues to be affected by 2015. However, this is not to under-estimate the extent of value shift; the challenge for dealers in cleared markets is getting payback on the capital costs of providing clearing services, which is likely to underscore the importance of depth over breadth in client relationships. Much of this is still up for grabs – In our joint proprietary survey of institutional investors (see page 16) around 70% of buy-side firms had only completed on-boarding with one clearing member to date, despite around 65% indicating a plan to clear with multiple members.

The regional fragmentation of OTC markets is emerging as an unintended consequence, driving up end-user costs for collateral and funding. Participation choices have an increasingly clear regional dimension, since netting occurs at the regional legal entity level and since the CCP landscape is fragmenting regionally, and since margining requirements drive up the importance of funding. Inter-operability between OTC CCPs is unlikely, resulting in the trapping of collateral at the clearing entity level. While few banking providers will participate across the full set of clearing markets, these trends are actually increasing the likelihood that regional competitor segments emerge.

The chronic shortage in collateral, agitated by market fragmentation, will drive new opportunities around collateral demand and financing. We anticipate new revenue opportunities of $5-8bn, with Global Custodians and the sell-side well-positioned to take around 80% of this. The latest regulatory proposals imply a more gradual – but still massive – squeeze on collateral. We estimate +$750bn by 2015 and +$1.4trn by 2018. Access to stable sources of liquidity and the ability to integrate infrastructure solutions with risk intermediation will be vital competitive advantages. Market infrastructure providers are equipped to fulfill a central utility role; but we expect revenues to concentrate among 3-5 CCPs and 2-3 ICSDs. The overall upside for these players is likely to be lower than hoped given the incremental revenue opportunities will be divided among all participants, meaning the remaining impact will be marginal.

Challenge 3: Operational gearing – the fixed cost challenge. The industry has to find ~3% points of additional RoE through greater economies of scale and scope. With much progress on financial resources, managing operational leverage is now the driving force of portfolio rationalisation, as banks struggle to achieve economies of scale and scope in their cost structures. More innovation is needed here.

Many banks have started to embrace our "Decision Time" thesis of last year – but attention must shift from financial resources towards managing the operational gearing of the business. We've seen significant capacity reduction to help enhance returns. The greatest progress has been on RWAs, which fell ~25% as the industry worked through legacy credit books and improved velocity and RWA discipline in the core businesses. However, there has been much less progress on cost where we have only seen a 4% reduction, as increasing regulatory, restructuring and infrastructure costs have offset steep cuts in compensation.

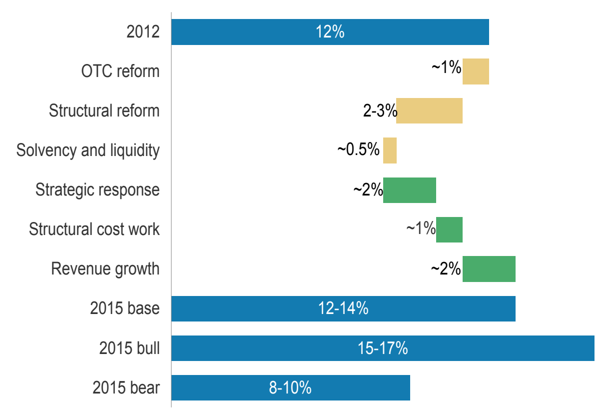
Business line dynamics have shifted materially as a result, returning FICC to reasonable returns and pressuring IBD and equities. Persistently low client volumes, the shift to electronic trading channels and higher fixed platform costs have left many equities franchises overly operationally geared and unprofitable. In banking the issues are concentrated in Europe and Asia, where most banks are simply not generating sufficient income to cover their platform costs. By contrast, faster reaction on RWAs in Fixed Income has positioned it to deliver strong economics, although structural concerns remain. We believe investors now undervalue the quality of FICC earnings as RWA release and footprint rationalisation play out.

It is becoming increasingly challenging for any bank without scale in the US to sustain a global footprint. The US is significantly more profitable than Europe or Asia, and crucially offers scalability. This is an earnings engine that allows economies of scale to be achieved in delivering infrastructure and risk management support to a broad global business footprint.

The industry must do more on reshaping the cost structure, particularly infrastructure. However, linear bank-by-bank cost reduction efforts are unlikely to achieve the cost flexibility needed – the industry has to focus more on reducing the duplication in basic processes by finding or creating third-party providers that can deliver these services in supply chains industry-wide. We believe there will be interesting opportunities for market infrastructure players to mutualise elements of the cost base – potentially a $1.5-3bn opportunity, and an improvement on industry RoE of ~0.5%.

Exhibit 1

Evolution of industry RoE



Source: Oliver Wyman analysis

Outlook for industry returns, and winners / losers

Despite the significant challenges facing the industry, we believe that industry-wide 12-14% RoE is possible in the 2014-16 window. Returns hit 12% in 2012, lofty by recent standards. There is also significant positive news: industry restructuring is in full swing now, albeit the reaction is faster on financial resources than operational leverage; regulatory costs yet to be absorbed have fallen as parts of the solvency and liquidity program have been moderated; revenue trends are cautiously positive (though muted in 2013), with margins improving as capacity is released; as we argue above, the impact of OTC reform industry-wide will be more bounded than many believe. Offsetting these trends, de-globalisation and sticky cost structures are proving increasingly difficult challenges. Waiting in the wings, conduct risk and financial transaction taxes could yet emerge as more significant drags on returns.

Sources of value in the business are shifting, driving new paradigms around economies of scale and scope with new winning models emerging. In this industry advantages now centre on at-scale financial intermediation in flow markets, expansion into post-trade / infrastructure and transaction banking business, credit market intermediation, true corporate and FIG content / advisory capabilities as well as leveraging group linkages to wealth and commercial banking.

The squeeze is beginning to hurt in Europe. Ring-fencing, subsidiarisation, becoming a structurally less profitable region, increasing headwinds to share capture for Europeans in the US, the spectre of financial transaction taxes, and bonus caps driving up fixed costs, are all making life increasingly difficult for European wholesale banks. Many banks are managing two major European centres, both a home market and London, with the attendant costs and regulatory burdens. US banks face different challenges, in particular with faster implementation of market structure reforms in Dodd-Frank.

Among the mid-sized banks we see substantial further value to be unlocked through strategic refocusing around areas of product excellence and / or regional depth. Capital release and cost reduction have to be delivered along lines that protect or enhance economies of scope. Strategic risks are the size and stickiness of the infrastructure cost base and the inherent volatility of a less broad product base and risk envelope.

The gains for the winners from market share consolidation are only just beginning to accrue. For those able to consolidate market share around areas of true scale, while reducing the cost and complexity of the platform, the rewards could be high. At the same time increased operational gearing, combined with multiple regulatory challenges to navigate mean the risks of failure for this approach are also high. Whether firms can compete successfully on a regional or product level for clearing business will be a key issue to watch.

Market infrastructure players are in a battle to grasp new revenue streams as the existing businesses remain under pressure. OTC reform presents new opportunities but in many cases these are smaller than hoped and will not fully recover lost execution revenues. The advantaged will be those with a first mover edge or differentiating capabilities as second movers in collateral solutions and back office outsourcing.

The spread of returns will remain wide as banks that achieve economies of scale or scope deliver improved returns. The differential impact of the three forces we centre on in this report – subsidiarisation, OTC market structure reform, and operating leverage – are all high. Some firms will feel the impact much more severely than others. Our analysis suggests that returns for the winners could be up to 3-4% points higher than the average and up to 8% points higher than the losers. Importantly, our analysis indicates that the multipliers from the wholesale banking business into the rest of a universal banking group can drive an additional 2-4% points of RoE, as measured on the wholesale banking capital base, partially explaining why many wholesale banks are willing to live with structurally lower returns.

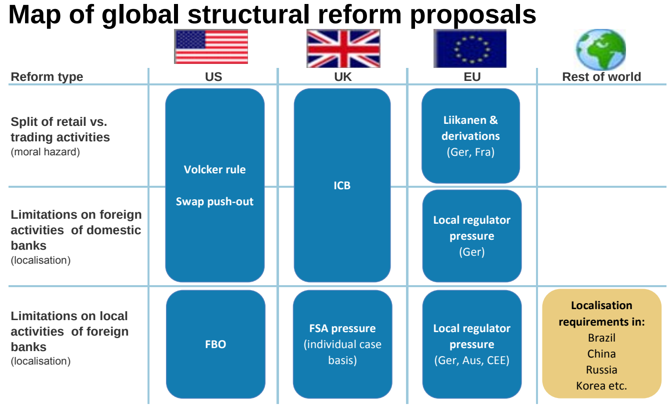
Chapter 1: Structural Reform and De-globalisation

1.1 Subsidiarisation and the threats to the global model

Regulators are introducing a large number of new proposals seeking to reduce the interdependence of their banking systems, to aid recovery and resolution, and to remove moral hazard from trading businesses. The cost and complexity of complying with these requirements across jurisdictions is up to $15bn p.a. or 2-3% off RoE for the industry, with considerable skews across banks. There is limited scope to reduce this impact unless we start to see a more coordinated global policy response. This will drive starker regional participation choices, and underscore the importance of a large home market. We believe the industry has to move faster in restructuring its legal entity and funding models and proactively engage with the regulatory community around the solution.

Exhibit 2

Map of global structural reform proposals



Source: Oliver Wyman analysis

Multiple overlapping solutions

The cost and complexity of complying with the emerging ring-fencing and resolution requirements across jurisdictions is substantial. We estimate $10-15bn p.a. of costs industry-wide, across increased capital, funding and operating costs. This could mean an industry-wide RoE drag of 2-3%, albeit with significant skews around this across banks, and much depending on the evolving regulatory landscape. The rules not only increase the cost of an in-country presence, but also make it tougher to operate cross-border businesses via hubs. The pressures stem from:

- Home market regulators pressuring banks to curtail and / or ring-fence their external activities either through explicit rules (e.g. ICB in the UK) or through the lens of resolution planning (e.g. in Italy).
- Home market regulators seeking to limit proprietary trading activity, or ring-fence this from retail deposit-taking activity.
- Host regulators in the key hubs limiting, and seeking greater transparency and control, over risk-taking conducted overseas but booked into the hub (e.g. UK PRA).
- Host regulators in the hubs and other markets pushing for increased capital and liquidity to be held locally, as well as onerous (and at times unpredictable) governance requirements (e.g. local risk appetite frameworks, local limit frameworks etc.).
- Host regulators pushing for foreign bank branches to become subsidiaries, or treating them as if they are subsidiaries, heightening the level of scrutiny and supervision.

While each of these initiatives in isolation would have a bounded impact or could be effectively navigated, degrees of freedom are severely limited when taken in aggregation. There are levers available to reduce the impact on RoEs, but the scope and effectiveness of these will be limited unless we start to see a more coordinated global policy response. At this point, however, the direction of travel among regulators is towards lesser, not greater, harmonisation. There is increasing evidence that the period of multi-lateralism in policy response is over.

In Asia, for example, each country is now looking independently at how to best (or not) implement Basel 3. Another example is the approach to model approvals: in many countries, gaining approval for internal risk models is an increasingly slow and difficult process, even when the models have been approved by the home market regulator.

Regionalisation and starker participation choices

One consequence is a much starker focus on country and regional participation choices and investment priorities. Banks increasingly have to make decisions about whether they are in a given location with a diversified set of businesses, implying access to local funding, a more diversified earnings stream, and a broader revenue base against which to set the increased fixed costs of the onshore presence.

Exhibit 3

Impact of structural reforms

	Base case industry impact	Range of impacts across banks	Regulatory uncertainty
US FBO	<1%	0-3%	Low
Multi-jurisdictional localisation	1-3%	1-5%	High
Moral hazard	<1%	0-3%	Medium
Total	**2-3%**	**1-5%**	

Source: Oliver Wyman analysis

This issue is most acute in Asia and the emerging markets due to the fragmented nature of these regions. In extremis the choice is between a retreat towards a hub-based model accepting reduced earnings power and EM growth potential, or accepting the higher costs of a multi-local model with fragmented balance sheets. Such a model might give an RoE drag of up to 5-6% (pre-mitigation). This is comparatively large versus a model that optimises capital and funding globally.

Global banks must challenge the presumption that duplicating the onshore infrastructure of the local banking system is a precondition for access to international capital and trade flows. One way is to take a more strategic approach to managing the correspondent banking network, building closer ties with selected partners whose local expertise and infrastructure can provide access to credit information and local capabilities in transaction banking, risk management and deal structuring.

The issue is not limited to the Emerging Markets of course; Balkanisation is evident even between EU states. Home market advantages will be reinforced, pushing medium- and smaller-sized banks to focus domestically, and benefiting banks with larger home markets.

The US FBO proposals present a material challenge for the US business of many foreign banks

US Foreign Banking Organisation (FBO) proposals potentially impose a 2-4% ROE drag on the US businesses on average across the key affected banks, with the impact heavily skewed across banks depending on business mix and funding model. This is a material strategic concern as the US remains a key profit and growth driver and an already difficult market for foreign banks. The Americas represented not only 47% of global revenues in 2012 (up from 44% in 2011), but we also estimate that 55-60% of global profit originated there in 2012, Around 60% of this was captured by US banks (Exhibit 4 and Exhibit 33).

While the proposals are still in consultation, signs point to the core elements remaining in the final rule since they fill a major gap in the Fed's regulatory mandate under Dodd-Frank. The rules will most strongly affect foreign banks currently operating large wholesale businesses as broker-dealers in the US.

The most immediate concerns are funding, liquidity and leverage as the US entity – the intermediate holding company (or 'IHC') – must now comply with local leverage rules (shifting from ~2% to ~5+%), and meet both local Fed-supervised and Basel 3 liquidity tests. This has a number of potential implications as banks seek the most cost effective response:

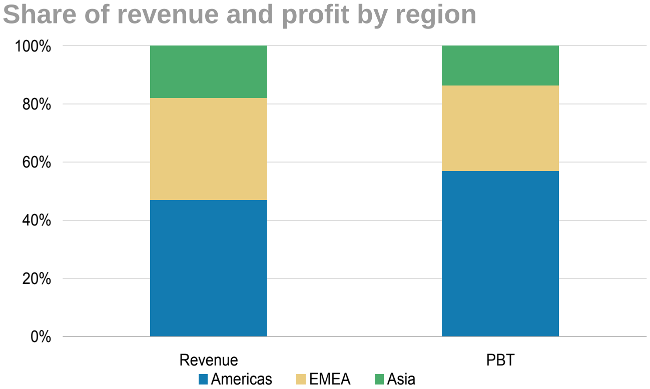
- Shrink the US balance sheet, targeting activities with a low return on asset (e.g. repo, some corporate exposures), but accepting some associated revenue loss.
- Issue additional senior unsecured funding (most likely through group level Yankee issuance to avoid dependency on cross-currency swaps), accepting some incremental funding cost increases (30-50bps).
- Seek local funding sources for the US – increasing the strategic value of deposit gathering activities (wealth management, corporate transaction banking, retail banking).

These issues are being complicated as other regulators are pressing banks to repatriate trades, putting further pressure on the US balance sheet.

Exhibit 4

America is the most profitable region

Share of revenue and profit by region



Source: Oliver Wyman analysis

In the medium term, however, we believe the changes to local risk management frameworks and particularly the adoption of the CCAR (Comprehensive Capital Analysis and Review)stress-testing programme could be even more significant.

- This year's CCAR points toward how punishing it is on capital markets businesses: The Fed projects all five big US dealers to take at least $10bn (and some over $20bn) in trading and counterparty losses in the severely adverse scenario. It is tough to know whether the post-stress risk-based capital ratio or the post-stress leverage test would be the binding constraint on capital in 2016 when FBO IHCs would get their first CCAR results, but there is a strong chance it will be the risk-based capital ratio for any firm still holding mortgage assets.

- There are also material new operating costs resulting from the new stress testing and risk management procedures: substantial one-off investments (we estimate $100-150mn for the most affected banks) to cover legal entity registration and build-out of new risk infrastructure (including CCAR) and reporting structures (including US GAAP), as well as ongoing costs ($20-100mn p.a.).

The proposed rules also place restrictions on the ability of foreign banks to use USD funding raised in US wholesale markets in funding global activities. The continued importance of the US dollar as the functional global currency of trade means non-US banks without access to USD liabilities will not simply be less competitive beyond just business undertaken in the US, but also in commodity finance, trade finance, and the like. That said we anticipate acceleration in the internationalisation of the RMB, which means this will diminish as a concern in Asia at least over 2013-14 (indeed access to RMB funding will become a key differentiator in that region).

Exhibit 5
Impact of US FBO proposals

	Requirements	Implications	Expected Cost (p.a.)
Funding and Liquidity	• Basel III liquidity ratios (LCR and NSFR) • IHC must hold 30-day US liquidity buffer under stress	• Increasing term $ funding, most likely through group level Yankee issuance (avoid cross-currency swaps), accepting increase in funding costs • Acquiring of a source of stable local funding – increasing strategic value of deposit gathering	**$0-300mn**
Leverage & Capital Adequacy	• Home country stress test and capital requirements • US BHC risk-based capital (de facto >10% Core Tier 1 / RWA) and leverage (de facto 7% vs. GAAP assets) requirements • US stress test requirements (internal company run and CCAR)	• Shrinking US balance sheet - Leverage constrained: Repo, corporate loans - Stressed capital constrained: mortgages • Injection of capital into the US entity	**$0-150mn[1]**
Operational	• Governance: new US Risk Committee and CRO function • Risk processes: Compliance with CCAR process, Fed approval for risk models • Reporting: Annual, quarterly and monthly report submissions	• Ongoing systems, processes, tools and resources to manage CCAR process and other US regulatory requirements • Establishment of US risk committee and appointment of US Chief Risk Officer	**$20-100mn**

1. Assuming cost of capital of 12%
Source: Oliver Wyman analysis.

Exhibit 6

Diverging approaches to moral hazard and risk-taking activities

	UK	EU	France	Germany	US
Regulation	• Independent Commission on Banking (Vickers) • "Banking reform" paper	• Liikanen report (EU High-Level Expert Group)	• Banking Reform Bill (Dec 2012); in close cooperation with German regulation	• German draft legislation; in close cooperation with the French regulation	• Dodd-Frank Act (DFA) §619: The Volcker Rule • DFA §716: Swap Push-Out
Applicability	• UK banks with >£25bn mandated deposits • Likely to affect 2-5 UK banks	• EU banks >15–25% or €100bn of HFT[2] & AFS[3] assets • Likely to apply to 15–20 large EU banks	• French banks >20% or €100bn of HFT[2] & AFS[3] assets • Likely to apply to 3 French banks	• German banks >20% or >€100bn of HFT[2] & AFS[3] assets (only for banks >€90bn total assets) • Likely to apply to 2-4 large German banks	• §619: All US banks and FBOs with $1bn+ in global trading assets • §716: FDIC insured institutions
Ring-fence type	• Retail ring-fence	• Trading entity	• Speculative trading activities unrelated to financing economy	• Speculative trading activities unrelated to financing economy	• §619: Not explicit ring-fence • §716: Swaps dealer
Explicitly segregated into trading entity	• Most wholesale / investment banking activities including market-making and underwriting • Non-EEA activity • Transactions with other FIs except permitted activities	• Prop trading • Market making • Alternative investment funding (HFs, PE, SIVs)	• Prop. trading (without direct client context) • (High-risk) Trading activities above threshold • Market making without direct client context • Lending & guarantee business with HF & PE	• Prop. trading (without direct client context) • (High-risk) Trading activities above threshold • Market making without direct client context • Lending & guarantee business with HF & PE	• §619: Ban on proprietary trading and investment activity, subject to exemptions (e.g. US government securities) • §716: Trading in derivatives subject to exemptions
Timing	• 2019	• TBD	• Examined by parliament Feb 2013, enforced by July 2015	• Law expected Jan 2014, enforced by July 2015	• §619: July 2014, dependent on final rule • §716: July 2013
RoE impact[1]	• **0.5-3% drag** • Worst case: Additional capital and funding required • Best case: Mitigated via new funding structures	• **0.5-3% drag** • Impacts and mitigation levers similar to UK ICB • Political process less certain	• **0-1% drag** • Impact on RoE muted by limited scale of activity in the impacted areas	• **0-1% drag** • Impact on RoE muted by limited scale of activity in the impacted areas	• **0-1% drag** • Significant impact already absorbed • Depending on final rules, risks remain to core market-making activities

1. Range reflects regulatory uncertainty on average industry impact; 2. Held for trading; 3. Available for sale
Source: Oliver Wyman analysis.

Moral hazard reforms are manageable in isolation but add complexity to the puzzle

Regulators have drafted a range of widely varying regulations aiming to insulate deposit-insured retail banking from the risks arising from trading activities, ranging from the Volcker rule in the US, to the Independent Commission on Banking (ICB) proposals in the UK. We believe that taken in isolation the regulatory goals of these 'moral hazard' reforms may be addressable with only limited incremental impact on wholesale banking RoEs. However much remains dependent on the final specification of the rules. Furthermore, the US, the UK and wider European rules add complexity to the design of international legal entity structures and funding models.

The UK is the most committed to ring-fencing and is pressing ahead with the ICB proposals to ring-fence the retail bank, although key details remain to be defined. In Europe, the Liikanen proposals suggested a comprehensive ring-fencing of trading activities, although national proposals (e.g. France and Germany) are somewhat more narrowly focused.

There has been much talk of trapped capital and liquidity from ICB/Liikanen-type separations – and a first pass analysis can indeed lead one to be nervous. But we think that overall effects will be muted with a maximum average loss of 2-3% off RoE on the wholesale bank and a best case impact of near zero. Careful positioning of funding sources across entities is the key lever in managing down financial costs, with much depending on the final details of the proposals.

- In a realistic worst case, loss of sovereign support and structural subordination effects would result in a 2-notch downgrade to senior ratings, with a knock-on impact on short-term ratings and the ability to issue AAA covered bonds. In such a scenario, we envisage banks raising additional capital to reduce the rating impact and suffering a funding cost hit to senior unsecured funding – translating into a 2-3% points loss of RoE on average to European trading entities, albeit with significant skews across banks.

- At the other end of the spectrum, positioning of funding at a mix of holding company and operating subsidiary levels could mitigate the prima facie impact of Liikanen-type separation on earnings diversity; rating agencies may continue to view holding companies and trading entities as enjoying some degree of sovereign support and the financial impact could be near zero.

Operational separation would inevitably create some duplication, while increasing the complexity of management. However, we believe that more extreme operational impacts can be effectively mitigated through use of operating subsidiary structures separate from the financial subsidiaries as well as shared services and service level agreements consistent with a carefully considered recovery and resolution plan. If this were well managed, we would expect the operational cost impact to be <0.5% of RoE.

The US has taken a different tack through the Volcker rule, which is edging towards implementation, while swaps pushout (section 716) introduces a ring-fence of sorts by removing a large portion of swaps from legal entities holding FDIC-insured deposits and branches of foreign banks. Much has already been done to adjust to the Volcker rule, suggesting limited further RoE impact in a base case implementation. However material risks to this view remain, pending the final rule definition.

We believe the industry has to move faster in restructuring its legal entity and funding models and proactively engage with the regulatory community around the solution. While the industry has started to grapple with the regional participation choices posed, less progress has been made in reconciling legal entity and funding structures across these multiple constraints. Banks must find a way to achieve the goal of improved recovery and resolution, while minimising the costs to shareholders and debtholders. This is a complex optimisation that must also consider client booking requirements, operating costs and revenue implications, and risk management considerations.

Optimising legal entity structure raises a host of practical questions:

- How many legal entities do you need in each jurisdiction? Do you operate with a branch or a subsidiary? Is an ‘international CIB unit’ a viable option in a major hub?
- What is your main determinant for which assets go to which legal entity in the new world order?
  - Trader / salesman has to be licensed and supervised by regulator of legal entity of destination?
  - Client preference for booking locally?
  - Regulator preference for booking locally?
  - Consolidation of certain products in one booking location to save costs?
  - Margin and netting considerations, as well as collateral availability within legal entity?
  - Tax regime differentials or tax credit considerations?
- Can you continue to manage “global books” in the major hubs? If not, where are the best locations to manage market and credit risk? And how should this be monitored, managed and controlled?
- How costly are changes to legal structure and balance sheet usage to implement? When could second order costs like tax exceed potential benefits?

Given the uncertainty around some regulatory outcomes, and the considerable changes seen in other recent regulation, there is an understandable temptation to “wait and see” on this question. We believe a more proactive approach is warranted by banks to set out clear suggested changes to structures and to engage with regulators, rating agencies and investors to build support around a proposed way forward.

EU Financial Transaction Tax (FTT)

The FTT has considerable political momentum but debate remains around the final form. Due to be implemented by 11 EU Member States in January 2014, the FTT Directive proposes a tax on all types of financial instruments (excluding spot FX and physical commodities). However, Member States have increasingly diverging views over exactly how to administer this tax, with France (Aug 2012) and Italy (Mar 2013) already having introduced different scopes, rates and technical design features. Notable exemptions to these taxes include market making and intra-group transactions.

The current draft directive would be costly in its current form, as it is broadly defined and has very few exemptions. There are no exceptions for intra-group transactions or market making, and would be applied at a gross level for each leg of a transaction. This means a particularly high impact on high turnover products. For example, our analysis of the potential impact on the FX market suggests a direct increase in transaction cost for eligible FX product transactions of 3-7x, and an even larger cost of up to 18x for very high turnover products such as FX swaps with maturity less than 1 week. Also, financial institutions located outside the EU would be obliged to pay the FTT if they trade securities originally issued within the EU.

Transaction costs will increase the most for derivative transactions with a tight mid-to-bid, but local cash equities and listed derivatives are most susceptible to taxation. The global nature of derivatives means that where possible users will relocate these transactions to non-taxable jurisdictions executed out of non-taxable entities; the exemptions in the Netherlands and Ireland are key enablers. Purchases and sales of local cash equities and listed derivatives are most tied to local markets so cannot move outside the tax remit, and there is limited scope for mitigation. Bond activity would face a more marginal impact due to lower underlying trade velocity. Hedge funds and asset managers with flexible mandates are likely to re-balance their portfolios away from affected markets. The largest impact would likely be on end-users that are least mobile, meaning higher costs and / or less hedging in corporates, and potentially higher asset liability mismatch and basis risk in pensions and insurers.

There is considerable debate around the current Directive and we anticipate material change. Key elements that make change likely are:

- *Adverse impact on Member States' real economies due to costs being passed on to end-users and "cascade" effects*
- *Challenging collection process*
- *Extraterritorial scope and potential for reactionary measures*
- *Creation of an uneven playing field (between participating and non-participating EU member states) hindering enforcement*
- *Hinders functioning of repo markets, disrupting bank funding mechanisms*

That notwithstanding, we believe that this poses meaningful downside risks to banks, exchanges and end-users in affected countries, given the political momentum behind the policy.

1.2 Conduct, culture and compensation

The industry is beginning to adjust to the medium term implications of the linked challenges of conduct, culture and compensation reform. The stakes are high – we estimate the impact of a conduct-related loss on market value is 2-3x higher than the impact of an equivalent 'on strategy' trading loss. Different responses in different jurisdictions will further reshape the industry landscape, with the stance on bonus caps the most significant distinction to emerge to date.

Wholesale conduct risk is moving up the regulatory agenda and shifting in emphasis

The recent history of the industry is blighted with conduct failures. Few global wholesale banks have failed to be impacted by one or more of the various scandals around market manipulation and mis-selling, or trading control issues. Regulators are responding with new rules and frameworks, with potentially far reaching implications. This means not just increased compliance burden as banks adopt more sophisticated approaches to 'conduct risk management', but also more fundamental changes to the way business is done in some areas – and potentially erosion of revenues as a result. The European and American approaches are diverging, with the Americans hardening the existing legalistic and compliance-driven approach while the Europeans pursue a more principles-based and pro-active approach. This latter approach is harder for banks to respond to, with the concept of appropriate margin particularly difficult to manage to in an industry where cross-subsidy of 'franchise building' loss-leaders by higher margin products is common.

The stakes are high. We estimate that over the last 5 years conduct breaches have cost the industry $30-40bn in lost revenues, reparations and fines. And these losses have a much higher 'multiplier' effect on bank valuations than 'normal' trading losses. The decrease in market capitalisation relating to a conduct loss is typically 2x to 8x greater than the size of the underlying loss event, depending on the type of event. This compares to multipliers on announced 'normal' trading losses that are typically in the 1-2x range.

Exhibit 7

Conduct risk has emerged as a very material source of value destruction

Risk	Size of loss/fine ($bn)	Market cap impact* ($bn)	Multiplier**
Mis-selling	0.5-1	1-8	8x
Trading control issues	2-7	5-13	2x
Market manipulations	0.2-1	1-5	4x
Other conduct fines	0.1-2	~1	6x
'Normal' losses	0.5-6	0.5-6	1-2x

Key: "On-Strategy" Loss "Conduct Risk" events

* Measures underperformance relative to a sector index at the time around the loss
** Measures the ratio of market cap impact to size of the loss/fine
Source: Oliver Wyman analysis

The emerging European regulatory frameworks mark a departure from the compliance-driven approach of the past to one that will require an approach that is led from the top, embedded in the frontline and driven by judgement. Key characteristics of the new approach include:

- Focus on root causes (e.g. culture, incentives, governance),
- Greater scrutiny of strategy and business models,
- Early identification of potential systemic issues, and
- More interventionist – particularly on the business and leadership rather than risk or compliance.

While Europe has taken a more principles based approach, the US remains on the legalistic and compliance driven path in its approach to tightening conduct. This approach has been taken across various markets in the wholesale space. For example, Title 7 of the Dodd-Frank Act lays out, among other things, explicit, heightened rules that govern how swap dealers may interact with their customers and impose onerous pre-trade compliance requirements that will have an impact on the speed and effectiveness of trading. These requirements are tailored to the type of counterparty (e.g. special entity) – another example is the CFTC tightening of segregated account rules.

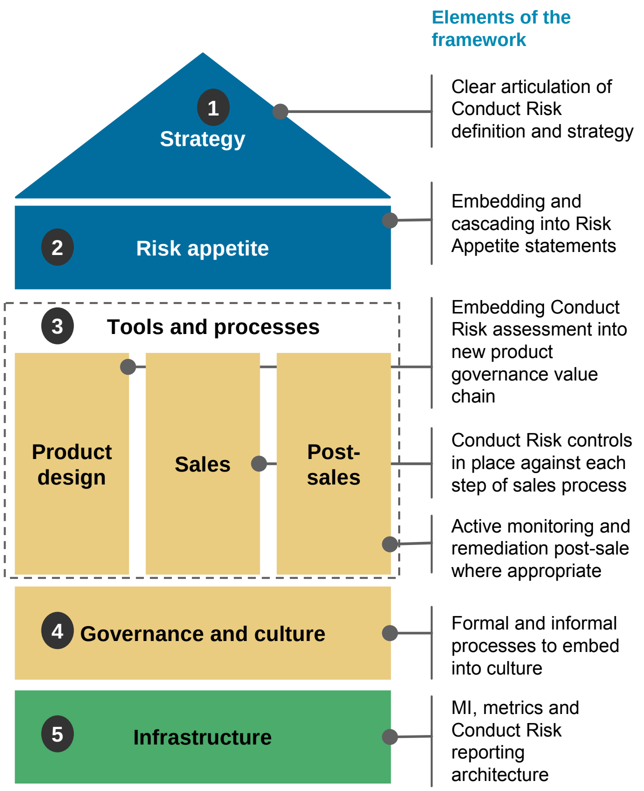
What should the banks be doing about it?
Achieving best-in-class capabilities for managing conduct risk requires:

- Adequate senior attention – the potential cost and share price implications of conduct mishaps should be a part of management performance review.
- Robust governance and accountabilities that extend down into the desk / originator level, which is where these risks are taken.
- Clear understanding and awareness by the business of conduct risk, its cultural implications and management's role in the first line of defence.
- A comprehensive set of tools and adequate resourcing to ensure that second and third lines of defense can provide a robust oversight.

There is a raft of alternative directives and regulations across regions. While abiding by local regulations is essential, global coordination will be necessary to avoid cross-border issues. Some banks have even decided to implement the strictest jurisdictional standards on a global scale in order to avoid this problem.

Exhibit 8

Wholesale Conduct Risk framework



Source: Oliver Wyman analysis

A key pillar is the linked challenges of compensation and culture reform

Increased emphasis on business conduct underscores a wider shift in the talent management model from one characterised by star producers to a more industrial approach. Individual discretion and innovation are reduced in importance while control, standardisation and franchise value is increased. This has implications for the required profiles of people to attract, retain and promote, and for compensation structures.

Diverging regulatory approaches to compensation add to the challenge. The introduction of bonus caps in the EU (in CRD4) and "say on pay" will put additional pressure on variable compensation and create further challenges for European banks globally as well as banks operating in Europe. The challenge will be to identify sustainable risk-adjusted performance at a team and individual level (alpha vs. beta performance) against the backdrop of cross-jurisdictional differences in terms of the consistency of comp approaches and competitiveness. The challenge is particularly acute for European banks operating globally who will need innovative solutions to avoid being disadvantaged in the battle for talent outside of the home market.

This is in the context of continued economic pressure on compensation levels. While 2012 saw compensation : revenue ratios fall (43% in 2012 vs. 50% in 2011), compensation as a percentage of economic profit remains stubbornly high, as do capital and infrastructure costs. In a context where the overall compensation pool will remain constrained, banks need to adapt their approaches to retain top talent (vs. advantaged peers, the shadow banking sector and boutiques) and motivate their workforce to perform. Two types of initiatives will differentiate winners in terms of Talent Management:

- Effective re-assessment of the employee value proposition to steer performance in a lower bonus environment, seeking motivational levers outside of variable compensation – focus on culture, team environment, career prospects, type of work, branding and public perceptions of the company, non-traditional benefits, quasi-partnership approaches, etc.

- Bringing performance management to the next level: more granular assessment of risk adjusted performance taking into account franchise value brought by the bank vs. individual and team performance, cooperation frameworks as part of performance measurement, KPIs and objectives setting, on-going management and clarity of the link between performance and compensation and other motivation levers.

The experience in the UK mid-market derivatives business provides an interesting case study for the potential business impacts of conduct risk.

The market in derivatives and FX sales to UK mid-market corps and SMEs has been hit by severe challenges over the last 2-3 years, with considerable business erosion as a result, and a risk of continuing erosion. The challenges include:

- *Provisions for fines that we expect to total ~£1.5bn across the industry*
- *New and more proactive regulatory oversight from the Financial Conduct Authority (FCA)*
- *Customer suspicion*
- *Nervousness about the product set among bank relationship managers*

However, we still see this business as a key part of the mid-market / SME product portfolio, serving a real economic need. A derivative remains the cheapest and most effective product for managing interest rate risk in most cases, with more favorable terms and often better pricing than fixed rate loan structures.

To ensure a sustainable franchise banks are taking action to overhaul their approach to the business:

- *A more formulaic, controlled sales approach supported by simple menus of products*
- *Rules over appropriate products for different target customer bases*
- *Removal or radical overhaul of sales-based incentives for front-line sales staff*
- *Better use of the credit process and formal reporting structures in decision-making*

Taken together this implies a significant change to the culture and approach of the business. In financial terms it means a smaller, more slimly resourced, but still profitable business.

Chapter 2: Shifting Sources of Value

2.1 Transformation of the OTC markets

The transformation of OTC markets is now under way and will drive profound shifts in value. The aggregate impact on revenue pools, however, now looks more clearly bounded and phased. We anticipate the reform will force $5-10bn of current revenue to migrate out of the sell-side by 2015 (off a total OTC derivative revenue base for the industry of ~$80bn) and this is likely to rise to $10-15bn in 2018 in our base case. Partially offsetting this will be new opportunities in clearing provision and new solutions to address the huge increases in collateral demand (+$1.4trn by 2018). We estimate $5-8bn offsetting revenue at stake by 2018, with the spoils to be divided between those sell-side providers, global custodians and market infrastructure players best able to adapt.

Revenue erosion over 2014-18
Our base case is a revenue decline of $5-10bn in existing execution revenue pools by 2015, primarily driven by increased capital and funding costs for both dealers and clients. While this represents a 10-20% reduction in revenues in the most heavily affected areas, it is only 6-12% of total OTC derivative pools, and 3-5% of total sales & trading revenues. The impact is heaviest in FICC, where we estimate revenue erosion represents 3-7% of total S&T revenues. We expect a "rolling thunder" as mandatory clearing in Europe is not expected until 1H 2014, while Initial Amounts (IA) margining rules for uncleared bilateral trades will only begin to be phased in during 2015 and whose impact has been mitigated by the introduction of a €50mn threshold. The impact in 2013 is likely to be minimal (<0.5% FICC revenues at risk), potentially growing to $10-15bn in 2018. We put a bull / bear range around the 2018 impact of $5bn / $25bn, with key uncertainties around the level of volume and margin erosion.

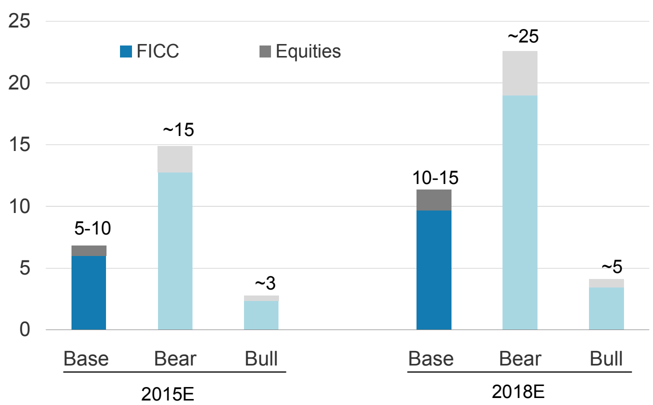
Affected activities represent $40-75bn of 2012 revenues
OTC derivatives contributed ~$80bn in revenues in 2012, representing ~45% of total sales & trading revenues across equities and fixed income. Regulation is now driving the OTC market into four broad buckets:

- $20-25bn of revenue in liquid contracts likely to become classified as standardised and mandated for central clearing and SEF / OTF (electronic) execution, having already started in the US in March 2013, with Europe to follow in 2014 and Asia thereafter.
- $15-25bn of uncleared institutional OTC derivative contracts that fall above the €50mn threshold that will see dealer and end client collateral requirements increase dramatically as two-way initial margin is posted for the first time.
- $10-20bn of uncleared institutional OTC revenues with clients will fall under the €50mn threshold for new IA-exemption and remain broadly unaffected.
- $20-25bn of end user (primarily corporate) derivatives are exempt from clearing and margining requirements, but since most are uncollateralised they would be heavily affected by CVA VaR capital charges under Basel 3. However the EU is currently proposing a further exemption for corporates from these rules – it is unclear as yet if / how this will be addressed globally.

Exhibit 9

Revenue impact of OTC transformation

Decline in S&T revenue - 2015E & 2018E, $bn



Source: Oliver Wyman analysis

Exhibit 10

Revenue pools affected by OTC reforms

Product type	2012 Revenue $bn	Impacts
CCP cleared OTC	20-25	Margin erosion Volume pressure
Margined (IA) OTC	15-25	Volume decline
End user OTC	20-25	Possible volume decline
Non-IA OTC	10-20	None
Listed, cash and financing	110	Volume growth
Total S&T	**192**	**$5-10bn decline**

Key: Affected by regulation   Potentially affected by regulation

Source: Oliver Wyman analysis

Volume reductions more important than margin erosion
The key driver of our bull / bear range is the extent of migration of client trades away from OTC derivative structures, driven by increased margin costs and limited (or even no) ability to rehypothecate. We have anchored our base case estimates in a 5-20% volume reduction across different product and client types. The impact is heaviest in uncleared margined product where the incremental funding costs for both dealers and clients are the largest. It is lowest in corporate derivatives where the proposed exemption would remove this effect from EU banks, and where the lack of viable substitute products means the scope for passing on the cost is the highest.

The impact on margins of the migration to SEF / OTF platforms is likely to be more evolutionary in our base case, and limited to the $20-25bn standardised derivatives revenue pool. We expect incremental change to the current RFQ-based system of electronic execution rather than a more radical shift to an exchange-like execution structure. The market is anticipating adjustments to some of the key US proposals (minimum number of quotes required, block trade thresholds, post trade reporting timelines), and it looks unlikely that Europe will be more aggressive. That notwithstanding, we do anticipate continued margin pressure on standardised (cleared) swaps as they electronify and execution becomes increasingly price-driven. Trading styles will change as liquidity clusters around standardised contracts, with fewer arbitrage opportunities within the curve and more quasi-algo automated trading and monetisation of client flows. This, along with increasing value to clients in speed, reliability and breadth of access means technology becomes an important competitive differentiator.

Exhibit 11
Regulatory overview

Product type	Regulation	Key requirements	Timing	Products affected	Impact drivers
CCP cleared OTC	• US: Dodd-Frank • EU: EMIR, MiFIR, MiFID II	• Mandatory CCP-clearing for standardised OTC contracts • SEF / OTF execution	• US: 2013 • EU: 2014	• Interest rate swaps • CDS • Equity swaps	• Electronic trading • Funding costs
Margined (IA) OTC	• BCBS / IOSCO proposals	• Initial margin (IA) requirement on non-CCP cleared OTC	• Phased over 2015-19	• Structured OTC (credit, rates, equities) • FX options • OTC commodities	• Initial margin funding costs
End user exemptions: OTC	• US: Dodd-Frank • EU: EMIR, MiFIR, MiFID II • Basel III	• End-user exemptions from clearing and margin requirement • Corporates, pension funds, public bodies	• 2013-15	• All OTC derivatives	• CVA VaR RWA (if not exempted)
Non-IA OTC	• BCBS / IOSCO proposals	• Exemptions from IA requirement - FX forwards and swaps - Net exposure and gross notional thresholds	• n/a	• All OTC derivatives (non-standardised)	• Margin exemptions

Source: Oliver Wyman analysis

We conducted a survey of institutional investors in March 2013 to assess the level of readiness and expected impact on user behavior of OTC regulatory reform. Respondents included hedge funds, asset managers, insurers, pension funds and SWFs.

Key takeaways are:

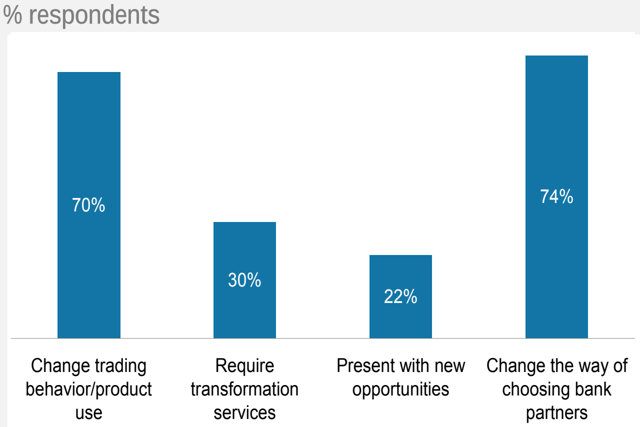
1) **Phasing of client clearing suggests that the major impact will not be felt until 2015.** Around 60% of respondents expect to be clearing 100% of eligible trades by 2015, but varied levels of preparedness suggest some risks to execution. Only around 40% considered themselves fully or very prepared.

2) **Impact on client behavior will be profound.** Critically, around 70% of institutional investors we polled said they thought the reforms would materially change their trading behavior and how they choose bank partners.

Exhibit 12

Changes to trading behavior and dealer selection

% respondents



Source: Morgan Stanley Research

3) **Client margining requirements will rise significantly and costs will be only partially passed on.** More than 50% of respondents expect a significant increase in initial margin requirements (around 25% expect a marginal increase). Only around 40% expect to pass on the additional costs, of whom only half expect to fully pass on costs.

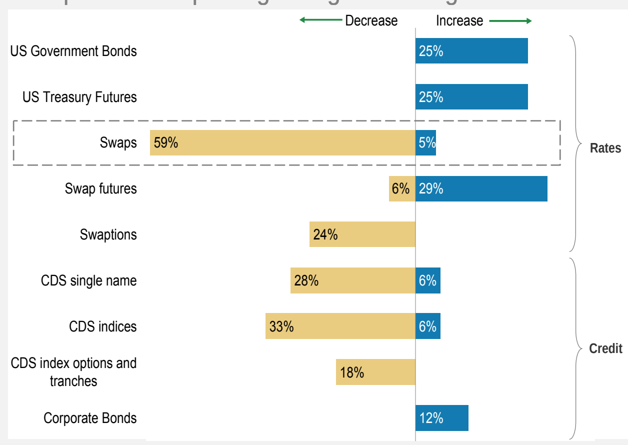
4) **Margining costs expected to reduce OTC trading volumes materially.** Around 45% of respondents expect margining costs to result in a reduced level of activity, as well as typically reducing the size of trade and frequency of trade. 8% expect volumes to decline by greater than 20%, 12% expect volumes to decline by 10-20% and 27% expect volumes to decline by 1-9%.

5) **IR swaps hurt the most; government bonds, futures and swap futures benefit most.** Around 60% of respondents expect a reduction in volumes of swaps, with associated increases expected in US Treasuries, US Treasury futures and swap futures.

Exhibit 13

OTC swaps hurt the most; US Treasuries, UST futures and swap futures to benefit

% respondents expecting change in trading volume



Source: Morgan Stanley Research

6) **Client clearing mandates concentrated among brokers.** Around 70% of buy-side firms had only completed on-boarding with one clearing member to date. However, around 65% ultimately plan to clear with 2-4 clearing brokers.

7) **Need for collateral optimisation services but only limited appetite for re-use.** 40% of buy-side respondents are currently performing collateral optimisation on a piecemeal basis. Only around 10% plan to permit re-hypothecation on margin posted and around 50% are not willing to lend securities (30% undecided).

8) **Interest in transforming collateral is greatest in corporate bonds and equities.** Around 30% of respondents said they would require transformation services. These respondents indicated that they were most interested in transforming corporate bonds (~25%), equities (~25%) and agency MBS (~20%).

9) **OTC SEF execution to be more price-driven.** Around 60% of respondents expect to become more price-driven when selecting executing dealers under SEFs.

Capital and funding costs will drive new competitive dynamics

Current proposals imply a material increase in the combined capital and funding costs for dealers executing derivative trades. By way of illustration the capital and funding cost of an example interest rate swap contract increases by 1.5x under client clearing under current proposed rules, and by 3-5x under uncleared initial margining rules. Navigating capital and funding costs are therefore critical concerns driving the new competitive dynamics.

Clearing increases the importance of depth over breadth in client relationships. Under current proposals the clearing broker bears capital costs from its exposures to the central counterparty clearing house (CCP) and the client, while the executing broker bears the funding costs of posting margin to cover its own exposure to the CCP. The key question the industry is now grappling with is how to achieve payback on the extensive capital and operational costs of clearing. We don't believe that a model in which clearing is given away for free or at nominal cost is viable given these costs, and have seen the industry moving away from this model over the last 12-18 months. However, it also remains unlikely that clearing will become a high RoE business on a standalone basis. Banks have two broad avenues to pursue in delivering payback on the clearing proposition:

- Driving links between clearing, collateral optimisation, and collateral financing / transformation; or
- Positioning clearing as a prime-like service to drive deeper relationships, targeting benefits in increased execution flow, acting as SEF-aggregators and delivering execution services to connect to SEF / OTFs on behalf of clients.

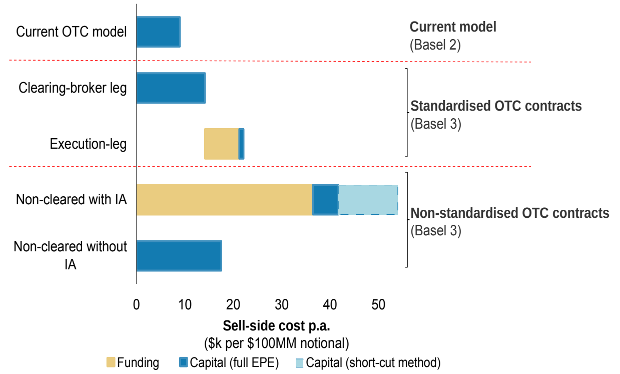
In general, this will favour global scale players able to achieve payback across a broad waterfront of products and services. However, as the leading globals lack bandwidth or appetite to clear the whole market, opportunities will remain for smaller dealers, particularly with local institutional clients seeking a clearing relationship with a local bank.

In uncleared bilateral markets the high margining and capital costs are the key concerns. Pricing idiosyncrasies will arise as margin requirements are a function of the existing netting set. There will be opportunities for banks able to devise innovative structures to deliver risk management solutions that effectively navigate these constraints, and in particular for banks able to offer solutions to optimise client margin requirements, since this is a critical concern for clients.

Exhibit 14

Institutional swaps: Increasing credit risk and funding costs

Cost to dealer of providing alternative forms of IRS trade (5yr)



Source: Oliver Wyman analysis
Notes: Based on 12% cost of capital and A-rated counterparty, using internal model approach. Default fund exposure estimated using 50% CCP risk weight: RWA requirement for client-exposure in CCP-cleared trade based on 5-day MPOR.
Under current B3 'shortcut method', benefits of posting margin are not recognised in exposure calculation – capital and funding costs become additive.
Residual exposure in full EPE re-modeling assumed to be 30% of 'individual amount' posted - driven by correlation between value of collateral posted and trade value (wrong-way risk).
Funding cost estimated using spread of FTP rate over OIS rate.

Sharper participation choices, underscoring regionalisation

More broadly, the reforms raise the bar for participation in a market as new capabilities are required, driving up infrastructure costs. For example, many banks will have to upgrade risk management engines in order to effectively capture the capital-saving benefit of posting initial margin. Failing to have this capability in place (and using the 'short cut method') would drive a 20-50% higher cost on uncleared margined derivatives. Similarly, many banks must invest in upgrades and improvements to their collateral management technology and operating models. And of course there are the operational and financial costs of connecting to a CCP.

These participation choices have an increasingly strong regional dimension:

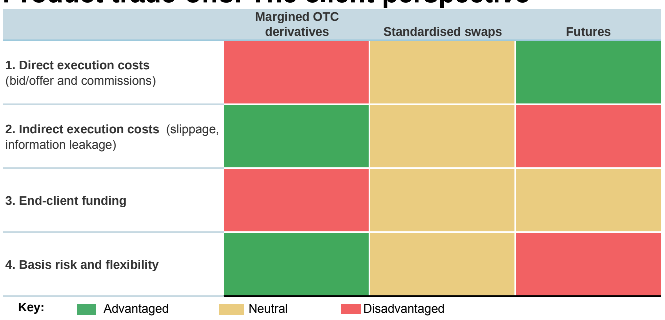
- The CCP landscape will differ by region, with inter-operability limited in the foreseeable future.
- Netting benefits for dealers will be at the legal entity level (typically local) and focused by CCP, not at the global level.

New trade-offs among institutional clients, with some offsetting growth

Investors will face a new set of trade-offs between standardised OTC, margined bilateral OTC and futures. We anticipate some pick-up in share of hedging flow as investors substitute away from OTC products, although we see some natural limits to this effect:

Exhibit 15

Product trade-offs: The client perspective



Source: Oliver Wyman analysis

- Current margin advantage of futures is likely to be eroded under proposed new rules that establish an equivalent margin period of risk for CCP-cleared OTC and exchange-traded contracts.
- While 'direct' execution costs may shrink in exchange-like environments, this is offset by increased 'indirect' costs of execution, in particular price slippage. This is particularly important for large orders, where the bulk of the value lies.
- Liquidity remains limited in futures – needs a tipping point and we don't see the impetus for this in the near term.
- OTC instruments remain more flexible, minimising basis risk for end clients.

Government bond and other cash securities are also likely to see growth as investors switch into these instruments.

$1.4trn of extra collateral needed by 2018 requiring new market solutions

The proposed introduction of Initial Amounts (IA) implies an increase in collateral demand of $0.7trn by 2018, on top of the incremental $0.7trn on cleared swaps in our base case. New timelines enable a gradual implementation of IA rules starting from 2015, so a long-term collateral squeeze is now more likely than a near term de-stabilising 'crunch'. Challenges for the industry are manifold:

- Increasing the robustness of current collateral systems to handle the increased number of portfolios and industrialised third-party custodial arrangements.
- Managing the data quality, both upstream from CSAs and client metadata, to downstream feeds of client-specific CSA terms into CVA desks and pricing engines.
- The formation of an industry reference model (and its accompanying data standards and governance model) with the calculation of IA – without its existence, hundreds of firm-specific VaR models could paralyze trading from unresolved disputes.
- A new operational paradigm for dispute resolution, both legal and process based, given that it will move beyond valuations to a risk model basis.

This change is also driving a fundamental shift of focus onto management of liquidity risk, rather than on-balance sheet counterparty credit risk. The second order impacts of such a large increase in collateral levels on bank balance sheets is only just beginning to be understood.

We see a range of expected outcomes of $1.5-2.2trn around our 2018 estimates, with much dependent on industry-level solutions to mitigate the increases.

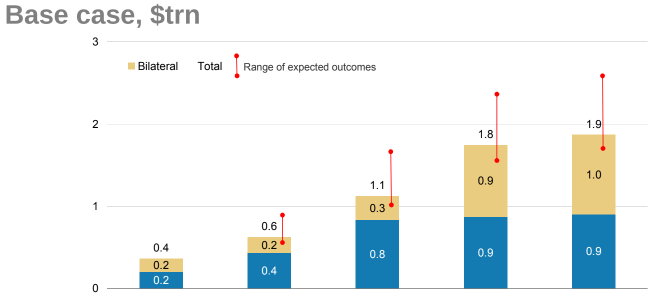
- Market participants need to converge upon the use of regulatory approved risk models for margin calculations to avoid posting punitive levels of collateral based on the standardised schedule.
- The use of exposure-based exemptions could be optimised via strategic management of individual counterparty exposures.
- The level of re-hypothecation of initial margin allowed in the final rules and investor appetite will sway the impact on cost of funding.

Many of the key levers that enable the industry to control the aggregate collateral demand require a co-ordinated effort across dealers, buy-side and infrastructure providers. Delivering against these solutions will be challenging as the cost-benefit incentives are skewed across market participants:

Exhibit 16

Future collateral requirements[1] for OTC derivatives

Base case, $trn



	2012	2013	2015	2018	2020
Incremental collateral need vs 2012 ($TN)	-	+0.25	+0.75	+1.4	+1.5
Collateral as % of unencumbered assets (dealers only)	4%	5%	8%	11%	12%

1. Excludes potential collateral re-use (re-hypothecation), and excludes netting across assets classes Source: Oliver Wyman analysis, BCBS / IOSCO QIS

- Dealers to drive for solutions that limit the impact on existing OTC model.
- ‘Collateral rich’ buy-side clients likely to favour transparency and operational independence.
- Competing interests among infrastructure providers as they target potential new revenue streams.

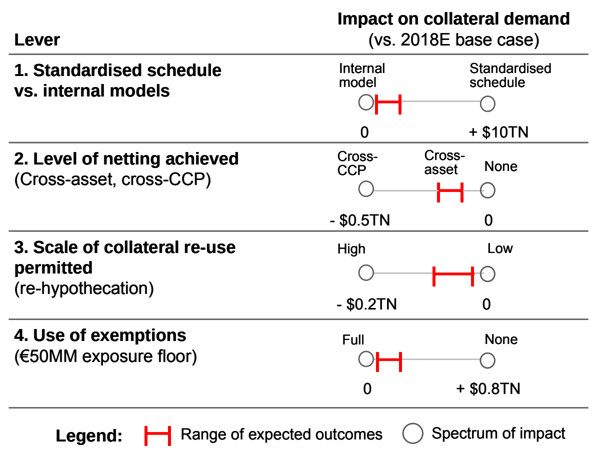
The demand for OTC post-trade services will generate a revenue opportunity of $5-8bn; global custodians and sell-side are well-positioned to take ~80%

We see this as a $5-8bn opportunity in clearing and collateral services by 2018, with the spoils divided between those sell-side providers and market infrastructure players best able to adapt. Sell-side and global custodians are well positioned to capture a large share (~80%) due to balance sheet and risk taking capabilities. Market infrastructure providers are well placed to fulfill central utility roles, but we expect revenue share to concentrate among 3-5 CCPs and 2-3 international central securities depositories (ICSDs). We see five key battlegrounds:

1. CCPs / exchanges offering OTC clearing platforms: We expect the revenue opportunity to be limited by the utility approach and level of competition (~$1bn; ~5% of total post-trade revenues).
2. The collateral management opportunity, driven by a demand for additional visibility and mobility. ICSDs and custodians will seek to complement traditional businesses; dealers and prime brokers will also seek to play a role. The revenue opportunity is dependent on a final solution but we expect a gradual ramp-up over 2014-18.
3. Client clearing as an anchor product for derivatives franchises for the sell-side. Standalone revenue opportunity likely to be relatively small compared to overall global custodian / sell-side revenue pools. Strong collateral transformation capabilities will be a key differentiator, operational excellence a requirement.
4. Collateral transformation: upgrade trades required to ‘eligibilise’ collateral for margin. Level of demand will be dependent on range of collateral accepted by CCPs and margin platforms. Likely to be an attractive add-on service to (client) clearing; the key competitive differentiator will be ability / client confidence to maintain transformation service in periods of stress.
5. Outright margin lending as a pure banking / balance sheet business. Revenue upside restricted to those able to commit balance sheet and risk capacity.

Exhibit 17

Drivers of aggregate collateral demand



Source: Oliver Wyman analysis

Exhibit 18

OTC post trade revenue pool map (2018E, $bn)

	CCPs	CSDs	Margin utilities	Global custodians	Sell-side/ PBs	Buy-side	Total
CCP clearing							~1
Collateral mgmt.							0.2 - 0.4
Client clearing							2.5 – 5
Collateral transformation							0.8 - 1.0
Margin lending							0.5 - 0.7
Total	~1	~0.1	~0.1	1 - 1.5	3 - 5	~0.1	5 - 8

1. CCPs /exchanges building OTC clearing platforms across the globe

2. Collateral mgmt. providing visibility and mobility services to enable optimisation – opportunity driven by margin requirements for non-cleared derivatives

3. Client clearing as an anchor product for derivatives franchises

4. Collateral transformation; upgrade trades required to ‘eligibilize’ collateral for margin

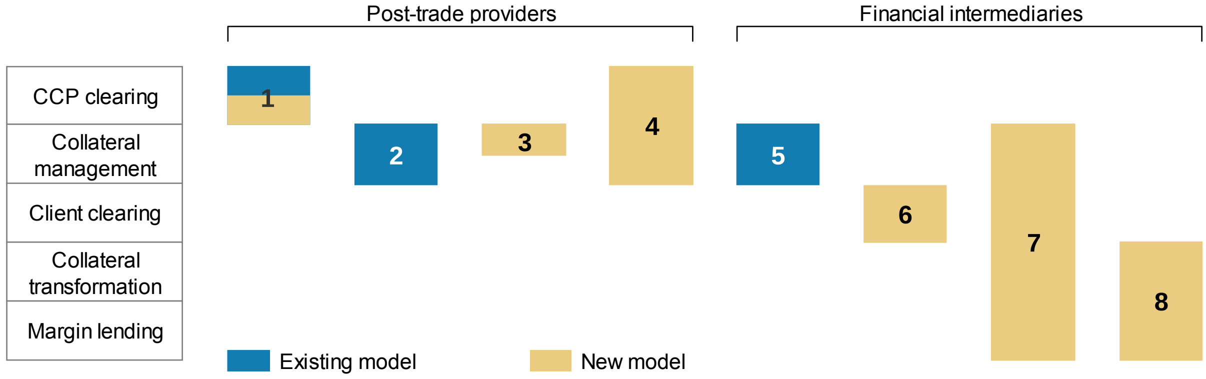
5. Outright **margin lending** as a pure banking / balance sheet business

Key – size of revenue opportunity: High Medium Low

Source: Oliver Wyman analysis

Exhibit 19

Post-trade service models: old and new



Source: Oliver Wyman analysis

We see a range of existing and new models emerging with more integrated offerings complementing specialists. More integrated models countering collateral fragmentation tend to be better positioned and likely winners. Whereas sell-side / global custodians already have moved to integrated offerings given their prime services capabilities, market infrastructure players are only starting to move. A number of specialist initiatives focusing on margining and collateral services are beginning to emerge, but most are still at a conceptual stage.

1. **OTC CCPs:** CCPs around the world are currently building and ramping up OTC clearing platforms – we expect only a few to dominate.

2. **Tri-party ICSD offerings:** Larger ICSDs have long established tri-party collateral management models, and are currently building out offerings as well as establishing alliances and bridges to other actors.

3. **Margin utilities:** There are various initiatives in a very early conceptual stage in the market to establish utilities for margin calculation, processing and netting for non-cleared OTC derivatives.

4. **Integrated OTC infrastructure:** We expect closer integration of clearing with collateral management for non-cleared derivatives given substantial processing and margining efficiencies of combined offerings – but players only just starting to move in this direction.

5. **Tri-party custodian offerings:** Global custodians have been actively pushing tri-party collateral management services for a while – a natural extension to the incumbent operating model.

6. **Clearing broker:** Sell-side and custodians have recently added OTC clearing services and are preparing to ramp up volumes as client clearing kicks in – key test is how scalable solutions prove to be and the economic viability of a standalone clearing model.

7. **Integrated OTC broker:** Several players are developing integrated prime services, offering OTC clearing combined with collateral provision as a natural extension of listed and further prime brokerage activities. Operational delivery is complex and scale will be required to win the key mandate – expect a small number of winners to succeed.

8. **Collateral specialist:** There are early stage initiatives for banks and buy-side to build additional collateral provision services – key challenge is establishing critical mass to enable efficient functioning.

2.2 Structural and cyclical shifts in revenue pools

We are cautiously optimistic on the revenue outlook for the industry. We see a number of structural growth drivers linked to deleveraging and capital markets deepening. Disintermediation in Europe is a multi-year opportunity as regulators shrink Europe's supersized banks and squeeze them out of long-dated lending, while capital market deepening continues in Asia. The function of the industry in quickly recycling illiquid risk will remain vital, though fewer firms will have the risk appetite to play this role. While we see cyclical growth for equities, we believe the business now looks less geared to the upside than in prior up-cycles.

We are cautiously optimistic on the revenue outlook for the industry

Our base case is for revenues to remain broadly flat through 2013, with a cyclical upside in equities, ECM and advisory gaining momentum through the medium term as macroeconomic threats subside.

2012 saw two key main effects driving the overall pool up by $20bn over the year:

- Rebounds from 2011 losses across credit-linked products and Eurozone sovereign crisis effects, combined with tail winds from central bank action (LTRO, Fed mortgage purchases).
- Underperformance in volatility-linked businesses (swaps, FX, commodities and equities).

For 2013 we anticipate revenues to remain flat driven by three separate effects:

- Normalisation of some rebound effects in credit and securitised products, and LTRO effects in rates;
- Growth in FX and commodities driven by an improved macroeconomic outlook, volatility, and demand for hedging.
- Stuttering growth in equities and a release of some banking revenues foregone in H2 2012.

Looking out to 2015 we assume a base case revenue CAGR of 3-4%, with cyclical and structural growth of $20-25bn weighing against regulatory headwinds from OTC reform of $5-10bn. This places industry revenues close to 2010 levels, but still $20-25bn below 2006 levels despite GDP growth of 4-5% p.a. over the period.

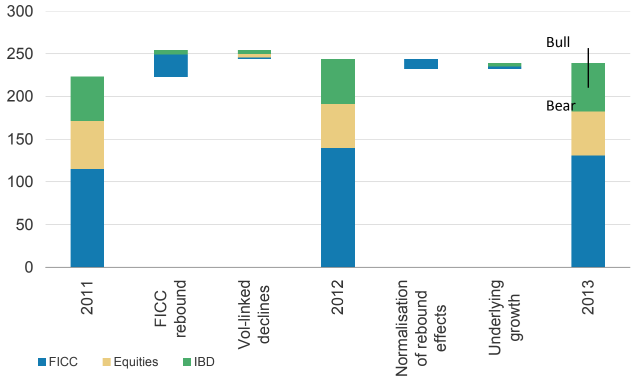
Exhibit 20

Historical and forecast wholesale industry revenue pools

1993-2015E, $bn

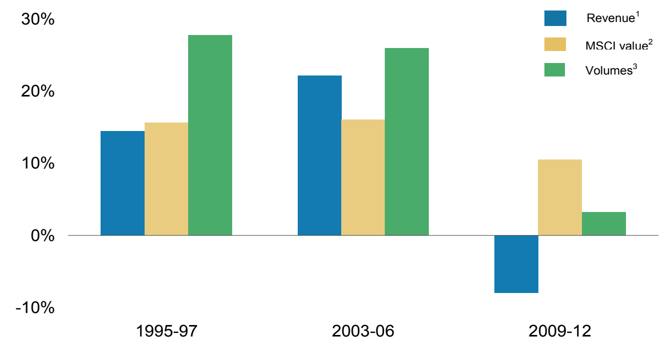
Source: Oliver Wyman analysis

Exhibit 21
Revenue evolution
2011-13E, $bn



Sources: Oliver Wyman analysis

Exhibit 22
Weak volumes and revenues in equities despite index recovery
CAGR in recovery phase



1. Revenues: Total market wide equities sales and revenues in $ terms
2. MSCI value: Value of the MSCI equity index
3. Volumes: Value of shares traded across key global stock exchanges
Sources: WEF, MSCI, Oliver Wyman analysis

Cyclical upside in equities, but less geared than prior cycles

A key question is the extent and timing of the revenue recovery in equities. In recent historical up-cycles equity revenues have tracked or outperformed growth in index values and traded volumes. The 1995-97 up-cycle saw revenues broadly track index growth. The 2003-06 up-cycle was boosted by the explosion in hedge fund leverage and structured products, with revenue growth outstripping index growth. 2009-12 by contrast saw valuations increase 11% but revenues fall 8% as volumes failed to recover, and volatility and capital pressures increased.

We believe in part this reflects cyclical concerns as investors have stayed on the sidelines amidst economic uncertainty. We would therefore expect this pattern to in part reverse when macroeconomic conditions genuinely improve. 2013 to date has however confirmed the enduring fragility of the recovery.

There are also structural headwinds for the industry that lead us to believe the cyclical upside may be more muted than in prior up-cycles. Pressure is most intense in the cash business where we are particularly concerned about the impact of the shift towards passive investment strategies and the impact this has on traditional brokerage income. For instance, we estimate that index mutual funds and ETFs have moved from 2% of mutual fund AUM in the US in 1995 to ~16% in 2012. The quality of revenues has also declined with institutions favouring flow products through electronic channels. Electronic execution now accounts for 40% of total cash revenues compared to 25% in 2006-07. At the same time a combination of shifting client demand and regulatory pressure is driving derivatives towards lower margin simpler structures, and lower risk capacity in trading books.

Our base case is for flat revenues in 2013 (with a bear / bull of $49bn / $53bn), meaning continued pressure on equities franchises. We expect ~8% annual growth out to 2015 to hit $65bn, although the timing and extent of the recovery remains uncertain – we put a bear / bull of $47bn / $70bn around our 2015 base case.

Secular growth from deleveraging and credit intermediation

We see a number of structural growth drivers linked to deleveraging and capital markets deepening. Disintermediation in Europe is a multi-year opportunity as regulators shrink Europe's supersized banks and squeeze them out of long-dated lending, while capital market deepening continues in Asia. The function of the industry in quickly shifting illiquid risk is vital, though fewer firms will have the risk appetite to play this role.

A specific opportunity is the deepening of the European Debt Capital Markets (DCM).
The substitution of syndicated term loans for DCM has largely played out among Northern European large corporates. The next wave of growth is achievable by attracting mid-sized corporates that were previously reliant on bilateral bank loans to the bond market, and extending this story into Southern Europe. There are twice as many 'mid-sized' corporates in Europe compared to the US, but the penetration of corporates active in DCM is 1.5-2.0x greater in the US and the DCM share of long-term debt is 50% greater in the US than in Europe. While some differences in corporate finance structure remain across Europe and the US, we see a structural opportunity for $100-200bn of additional DCM issuance in Europe, or a total

revenue opportunity of $0.5-1.0bn including issuer and investor multipliers. Globals and locals will battle for the opportunity.

We also see continued structural deepening of capital markets in Asia. Asia ex Japan accounted for 17% of global DCM in 2012, compared to 5% in 2007 and 10% in 2009-10, having grown ~45% in 2012. Structural growth drivers remain: corporates are in good health, demographic changes and the development of social safety net are leading to natural demand for long-duration yielding assets to match long term pension / project liabilities, and governments keen to shift social financing away from bank lending. There are challenges, however, particularly for global banks: secondary liquidity remains limited, primary margins are tight, rating agency coverage is low and issuance is now ~75% in local currency.

The restructuring of the banking sector in Europe will continue to present opportunities for wholesale banks able to deliver innovative solutions and joined-up coverage. Client demand from tier 2-3 banks will remain strong as they continue to delever and reshape portfolios, restructure liabilities and manage to liquidity needs post LTRO. There are also early moves into direct illiquid investments by insurers, creating additional risk management needs.

Secondary market intermediation in credit products will continue to be a source of value. Capital pressure and loss experiences over recent years have forced many banks to cut inventory and some to more significantly pull back from areas of credit trading. Although new electronic and direct peer-to-peer trading approaches continue to be advanced, we see only limited scope for these to replace dealer-based execution given the structure of the markets. Conversely, pressures on market liquidity are likely to drive up the price of dealing in credit to end users, and shift competitive dynamics among sell-side providers. This will place a premium on the breadth of the distribution channel – to match supply and demand, recycle inventory rapidly and to better diversify risks; and on vertical integration across primary and secondary within sub-sections of the market (sectors, currencies, etc).

Exhibit 23

Structural growth in EU mid-sized corporates DCM

Profile of corporate DCM issuers, $bn

Corporate size	% of corp. active in DCM		Average debt per corp. ($bn)		DCM % of corp. LT debt profile	
(by revenue p.a.)	EU	US	EU	US	EU	US
<$0.5bn	<5%	5-10%	<0.05	<0.05	<30%	<30%
$0.5-5bn	30-40%	50-60%	~0.4	~0.5	40-50%	~70%
$5-20bn	70-80%	90-100%	~2.5	~3.5	~60%	~80%
$20bn +	100%	100%	~12	~9	~70%	~90%

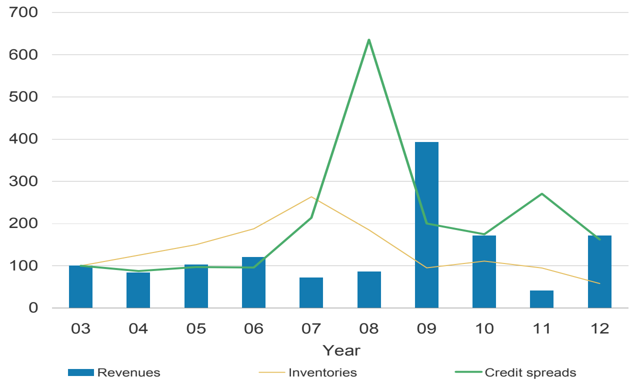
Structural opportunity in Europe

Source: Dealogic, Capital IQ, Orbis, Oliver Wyman analysis

Exhibit 24

US corporate credit: Credit spreads, inventory and revenues

Index 2003 = 100



Sources: Oliver Wyman analysis

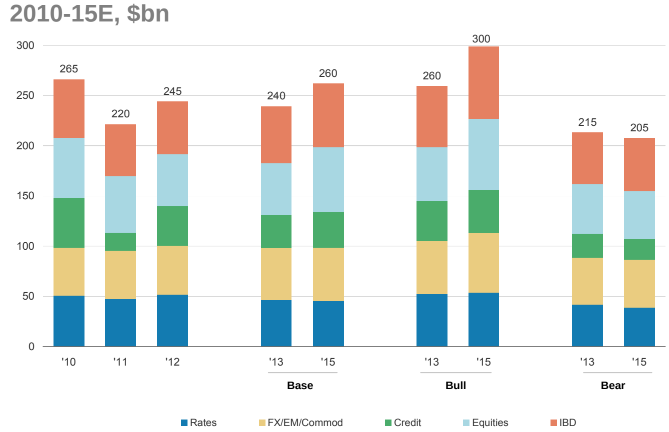
Macro risks remain key

The macro outlook remains highly uncertain and tail risk concerns from the Eurozone crisis have continued in 2013. Our base case assumes continued gradual and slow recovery, and gradual narrowing of tail risks. The bear case would see a more disorderly unwind of central bank support, with rising interest rates and negative impacts on the real economy and confidence. This scenario would be negative for equities, IBD and credit, suppressing activity and driving inventory losses, with some positives for rates and FX. Our bull case would see a more rapid economic recovery, with stronger results in ECM and advisory as pent up capacity is released after multiple years of subdued performance, and in equities trading as momentum gathers in markets.

Exhibit 25

Forecast revenue pool scenarios

2010-15E, $bn



Source: Oliver Wyman analysis

Exhibit 26

Base / bull / bear scenarios for macroeconomics factors

	Base case	Bull case	Bear case
Macro climate	• Improving outlook providing increasing support for equities markets and hedging products • Central banks maintaining systemic support across US and Europe • 2012 growth pockets see moderation of growth without reversal of fortunes	• Equities markets rebound sets in after multiple years of contraction • Gradual withdrawal of central bank support tempers inflation while not crippling the industry • Banking buoyed by release of backlog from 2011-12 and continued movement out of bank financing	• Inflationary pressures force CBs to withdraw LTRO and US mortgage buying • Bond prices fall as interest rates rise and liquidity drained from the market • Medium term growth in G10 <2% and EM <5% p.a. undermining growth • Equities down as corporate profits and investment fall
Regulation	• Impact of regulation spread over multiple years, banks continue concerted program of mitigation • Impact of OTC reforms on volumes and margins at the lower end of the range	• Banks absorb regulatory burden as top line grows and mitigation plans executed • OTC reforms have limited impact on volumes and margins • Additional B3 capital raised through retained earnings	• Dislocation of the market with subsidiarisation • Sharp contraction in volumes post-OTC reforms • Downturn putting banks in the cross-hairs of regulators • Collateral requirements have significant impact on the bottom line
2013 underlying	**$240bn 0 to -5%**	**$260bn +5 to +10%**	**$215bn ~ -10%**

Source: Oliver Wyman analysis

Exhibit 27

FICC revenues: 2012-13 base case

	2012 (vs. 2011)	**2012 performance drivers**	**2013** (vs. 2012)	**2013 performance drivers**
Rates	$52bn ~ +10%	• Rebound in European sovereigns with ECB intervention, tightened spreads and mark-to-market uplift • LTRO providing support for swaps, increasing two way flow	$47bn ~ -10%	• Stable interest environment limiting demand for hedging products • Allocation of funds out of low yielding products into credit / equities • Modest headwinds from OTC reform starting to impact revenues over the year
FX	$15bn -5% to -10%	• Low volatility reducing demand for hedging products • Subdued growth in global trade (+3% y-o-y)	$17bn +5% to +10%	• Increase in currency volatility on the back of uncertainty over central bank mandates (BoJ, BoE) • Growth in trade (esp. in China and wider Asia) boosting corporate demand
Emerging markets	$25bn ~ +10%	• Rebound in CEEMEA after weak 2011, positive overflow from stabilisation of Eurozone • China underperforming with fear of heavy landing, offset by strong performance in SE Asia	$25bn 0 to +5%	• Positive outlook for Russia / China GDP • Debt markets continue to deepen as investors seek yield not found in G10 • Void left by some global banks to be filled by local offerings, especially in flow
Credit and securitisation	$39bn ~ +100%	• Strong rebound in m-t-m positions • Agency RMBS supported by asset buying from the Fed from Q3 • Increased investor appetite for yield prompting cash inflows and increase in issuance	$33bn ~ -15%	• Downturn in securitisation reflecting normalisation after 2012 rebound • Modest adjustment of HY, with spread over IG rising to more normal levels • Increased client demand providing support as economy picks up and appetite for LBOs and associated CLOs recovers
Commodities	$9bn 0 to -5%	• Reduced client flows with low volatility and weak GDP outlook suppressing demand for hedging • Oil experiencing declines (very low volatility); some recovery in P&G but remains weak • Agriculture a relative bright spot	$10bn +5% to +10%	• Macroeconomic recovery (notably in China and other emerging economies) to increase demand and hedging opportunities • Expected oil volatility recovery • Opportunities around NA energy investments (production, infrastructure etc)
FICC	**$140bn**		**$131bn**	

Source: Oliver Wyman analysis

Exhibit 28

Equity revenues: 2012-13 base case

	2012 (vs. 2011)	**2012 performance drivers**	**2013** (vs. 2012)	**2013 performance drivers**
Cash and prop	$22bn -10 to 15%	• Volumes and volatility significantly down, H1 particularly bad • ECB intervention and US fed bond buying injected some life into system at the end of the year • Prop teams continue to be shuttered off as Volcker rules kick in	$22bn ~0%	• Rise in global stock markets to provide increasing support over the year • Modest increase in ETF funds reflecting increasing bullishness on equity outlooks • Global stock markets (esp Europe) remaining sensitive to downside risks • Pressure on remaining prop units remains
Derivatives	$16bn 0 to -5%	• Client volumes reduced, trading conditions remain difficult • Some m-t-m losses in Q2 but overall less impact than 2011	$16bn 0 to +5%	• Reduction in m-t-m losses as indices broadly positive for the year • Increasing volatility as markets pick up increasing demand for hedging • Continued regulatory pressure supporting ETD revenues
Prime	$14bn 0 to -5%	• Listed derivatives down as risk appetite remained low until Q4 • Relative bright spot with strong client volumes and banks deploying liquidity to prime clients • Increase in balances and increasing AuM, leverage remains tight • Normalisation in synthetics after strong 2011	$14bn 0 to +5%	• Growth in prime balances reflecting wider increases in HF AuM to $25trn • HF leverage increasing after remaining static since the crisis • Margins under pressure as supply side capacity remains high
Equities	**$52bn**		**$52bn**	

Source: Oliver Wyman analysis

Exhibit 29

IBD revenues: 2012-13 base case

	2012 (vs. 2011)	**2012 performance drivers**	**2013** (vs. 2012)	**2013 performance drivers**
DCM	$22bn +25 to +30%	• Corporate issuance up to lock in low yields and investors seeking returns • Equity buy backs also providing growth to system • Muted lending from banks pushing corporates into DCM • Asian banks capturing share as local investor pool grows	$23bn 0 to +5%	• Mixed story across issuer segments and geographies • Leveraged finance boom in the US beginning to lose steam, FIG, IG and Public cannot narrow the fee pool • Longer term structural shift in Europe with corporates (esp HY) moving away from bank financing
ECM	$15bn -15 to -20%	• Recession in the Eurozone and stuttering growth in China / US in H1 constrained market • Weak post-IPO performance undermined market appetite for large deals	$16bn +5 to 10%	• Backlog of IPOs to flow out, esp from PE firms as markets improve • Structural shifts in the market (ABOs and blocks) eroding margins • Asia normalising in wake of 2009-10 IPO boom • Europe rebounding after multiple years of contraction (2011 30% of 07 revenues)
M&A	$16bn -5 to -10%	• Corporates retaining cash balances economic uncertainty remains • Shareholder activism pressing corporates to increase dividends	$17bn +5 to +10%	• Strong fundamentals (economic growth and cash balances) and momentum from Q4 2012 in the US • Pressure for corporates to put cash balances to use and pipeline backlog to come to market • Potential for supply side shifts in the FIG space as banks shed assets
IBD	**$53bn**		**$56bn**	

Source: Oliver Wyman analysis

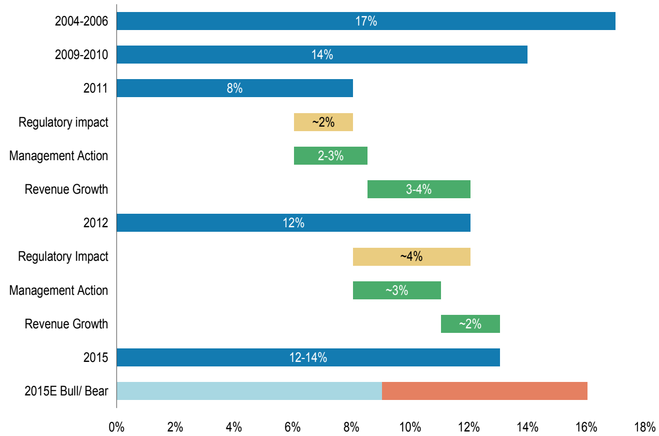
Chapter 3: Returns and Industry Structure

3.1 Operational gearing – the fixed cost structure challenge

Many banks have started to embrace our "Decision Time" thesis of last year – but attention must shift from financial resources towards managing the operational gearing of the business. We've seen significant capacity reduction to help enhance returns in 2012, but the industry must find a further ~3% points of RoE through further rationalisation to deliver greater economies of scale and scope. The greatest progress to date has been on RWAs where we have seen a ~25% decrease but there has been much less progress on cost where we have only seen a 4% reduction. Business line dynamics have shifted materially as a result, returning FICC to reasonable returns and pressuring IBD and equities.

Exhibit 30

RoE evolution 2011-12 and 2012-15E



Source: Oliver Wyman analysis

Operational gearing is now the driving force of portfolio rationalisation.
2012 saw RoE increase to ~12%, driven by restructuring, RWA discipline and a rebound in revenues led by FICC. However, continued uncertainty over the timing and extent of the recovery, combined with the RoE drag from OTC reform and Balkanisation, means that the need for further restructuring remains intense. Strategic 'participation' choices on geographic and product footprint have generated savings in front office compensation costs and RWAs, but progress on pulling out the infrastructure costs has been slow, as the complexity embedded over the last decade proves extremely difficult to unwind, and new regulations and compliance costs continue to push up fixed costs. Addressing this operational gearing must now be the driving force behind the next wave of portfolio rationalisation and operating model changes that will be required to support returns in the 12-14% range.

Further rationalisation is required to support returns.
Revenue growth contributed 3-4% of RoE improvement in 2012, but continued uncertainty over the timing and extent of the recovery means banks cannot rely on an improving revenue environment to drive returns. We anticipate only modest revenue growth out to 2015, contributing ~2% of RoE uplift in our base case, and continue to see a wide bull / bear. Furthermore, potential for growth in 2013 looks limited, intensifying the pressure on returns in the near term as some of the positive revenue effects embedded in 2012 returns normalise (notably rebound effects in govies / credit, impact of the Fed's mortgage purchase programs in securitisation).

Management action delivered a 2-3% point improvement in returns in 2012, absorbing ~2% points of regulatory drag as sharply reducing Basel 3 RWAs moved capital ratios towards target levels. But as the headwinds to RoE from Basel 3 solvency and liquidity recede, banks must now address the growing challenges of Balkanisation and the impending transformation of OTC markets. We see an aggregate further regulatory drag on RoE of ~4% points in the 2015 time horizon. Banks must deliver a further ~3% point RoE improvement from further business restructuring and tough decisions to hit the 12-14% returns window. However we estimate about half of this is already in flight from decisions made in 2012 and early 2013 that are yet to flow through to returns as cost and RWAs come out and market share redistributes.

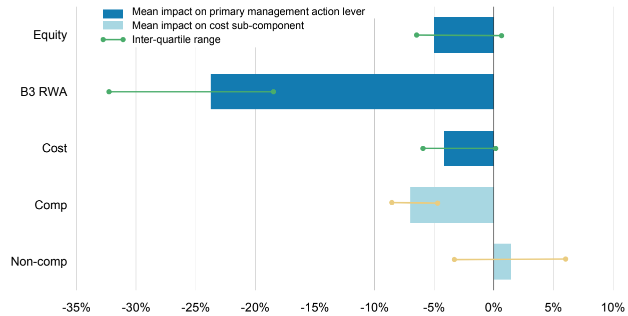
Restructuring progress has been strongest on RWAs, weakest on infrastructure cost.
Banks have met or exceeded targets for RWA reduction as they have accelerated business line exits and disposal of legacy assets. They have also driven tighter management of RWAs through the organisation by monitoring RWA limits and return metrics at a more granular business level. Industry-wide RWAs have come down ~20% on a Basel 2.5 basis and ~25% on a Basel 3 basis over 2011-12. We anticipate a further 20-30% reduction over 2013-14 as these programs continue.

By contrast, progress on costs has been more limited. Compensation was cut further at the majority of banks in 2012, in spite of the revenue recovery, driving compensation to revenue ratios down. By contrast spending on infrastructure was marginally up, albeit with significant variance across banks. Most institutions have tackled the more immediate opportunities in infrastructure – what remains are harder

Exhibit 31

Progress on cutting RWAs but rising non-comp costs

2011-12, %



Source: Oliver Wyman analysis

opportunities in infrastructure – what remains are harder business model changes to adapt to the new front office realities and structural work on the operating model itself.

3.2 Business line dynamics have shifted materially as a result, pressuring IBD and equities

In Equities persistently low client volumes, the shift to electronic trading channels and higher fixed platform costs have left all but the best equities franchises under water. In banking, the issues are concentrated in Europe and Asia, where most banks are simply not generating sufficient income to cover the platform costs. By contrast, faster reaction on RWAs in Fixed Income has improved its economics substantially. That said, structural concerns remain and many banks have further to go in re-shaping the FICC franchise to establish a sustainable profitable core. Regional dynamics are shifting too, favouring those with deep footprints in the US.

Equities is the area with the biggest capacity challenges now. Persistently low revenues and stubbornly high costs mean that equities is the area with the biggest capacity challenges at this point in time. Returns for the industry were sub-hurdle in 2012, with derivatives and prime no longer sufficient to offset the scale of the losses in cash equities. Strategic retrenchment to date has been at the margins or by small players, with announced exits in 2012 releasing only 2-3% of market share for consolidation. Value capture is increasingly skewed towards the largest banks who have been consolidating share. Since 2009 the top 5 banks have taken 3-4% of market share (measured in revenue terms); the next 5 have lost 2-3%, mainly in the cash and institutional businesses.

We see a need for further strategic retrenchment by marginal businesses. Banks must seize the moment to drive through structural reforms to the operating model. Areas requiring attention are:

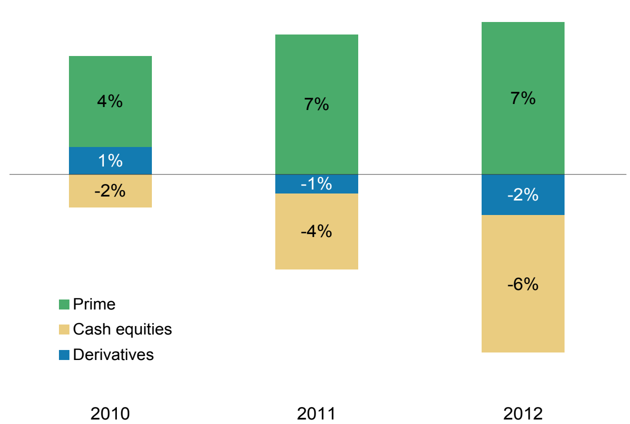
- Simplification of the client sales channel, stripping out duplication in the cash and delta one space;
- Challenging the traditional research model and innovating around charging and distribution;
- Innovating around the liquidity model and associated pricing structures;
- Rationalising the footprint and changing the approach to local market access; and
- Eliminating redundant operational and IT infrastructure (especially in the flow institutional businesses).

By contrast hard work on Fixed Income has improved its economics, although structural concerns remain. In contrast to equities, we believe investors now undervalue the quality of FICC earnings. The core FICC franchise delivered solid returns industry-wide in 2012, supported by RWA release, cost discipline and the revenue rebound. Strategic retrenchment is only just starting to play out with 3-5% of market share to be released in 2013-14 from announced exits over 2012 and 1Q 2013. The linkage between size and profitability is also far weaker than in equities or IBD, driven by the heterogeneous nature of fixed income markets, and the importance of the corporate franchise. Advantaged players are considering selective investments to capitalise on the improving environment and shifting competitive landscape.

Exhibit 32

Derivatives and prime no longer able to subsidise cash equities

Industry economic profit as % of revenue



Source: Oliver Wyman proprietary data and analysis

However, FICC remains the epicentre of much of the remaining regulatory pressures and the revenue environment looks set to deteriorate in 2013. While continued RWA reduction in both the core and legacy businesses will help, further work on reshaping the business will be required to maintain returns at 2012 levels through the transition to Basel 3 RWAs. There are a number of banks for whom the path to acceptable returns in FICC remains unclear, and tough decisions will be required.

Too much optionality built up in the banking platforms. The investment banking franchise remains underwater for most banks in Europe and Asia once the full costs of coverage and lending are loaded in. While the leading corporate finance houses have sufficient scale in the US and globally to deliver attractive returns, for many banks this equation is no longer working. Furthermore, the cross-subsidy of the banking platform from FICC businesses generating outsized returns is no longer viable given how hard that business is now being squeezed to reach acceptable returns. The problem has been compounded as banks have maintained capacity in anticipation of a capital-light revenue lift that has not come.

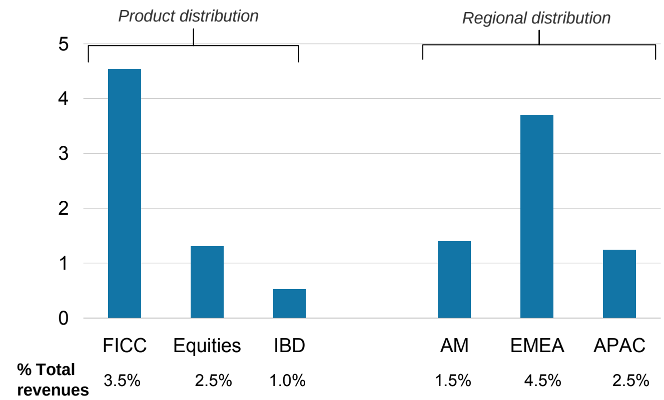
Some banks have started to take action to cut back resources, and we see a need for significant further restructuring:

- Starker participation choices between the corporate CEO-led strategic agenda, where value is driven by content excellence and capital markets distribution power, and the CFO and Treasurer-led agenda, where value is increasingly linked to the ability to link financing, hedging and transaction services capabilities.
- More discipline in measuring and managing the profitability of the business – cutting through the complex web of revenue shares and double counts.
- A more selective and coordinated approach to client targeting, particularly across countries.
- Delayering the coverage structure – both thinning country / sector / product matrices within the investment bank, and more fundamentally integrating the corporate bank and the transaction bank where relevant.

Exhibit 33

Market share is being released

Value of revenue pools sacrificed by banks through publically disclosed withdrawals in 2012, $bn



Source: Oliver Wyman analysis

Regional dynamics are shifting too, favouring those with a deep footprint in the US. Structural and cyclical factors continue to favour the Americas over Europe and Asia as a driver of profit. We estimate that not only did the Americas increase from 44% to 47% of global revenues over 2011-12, this revenue is also more profitable: we estimate that the Americas accounted for 55-60% of global industry profits in 2012 (Exhibit 4).

Sticky costs and complexity are part of the problem: Europe and Asia suffer from fragmented markets that drive duplicative cost structures, particularly in the client sales and coverage functions, but also in the supporting operational stack which is often splintered across multiple hubs / markets. There are also structural factors at play, in particular ad-valorem pricing structures that make equities suffer more in the down-cycles, and lower margins in corporate finance markets. We have seen banks start to take action to withdraw capacity – narrowing the ambition outside the home market within Europe, and a more critical view of the value of the 'growth option' in Asia – but more is required.

3.3 The industry can and should do more on multi-year strategic cost reduction

Banks must now tackle long-standing challenges to move the needle on the infrastructure cost base through structural work on the operating model itself. Delivering on this will require dedicated senior attention to ensure programme delivery and to lock in gains through better governance structures and more standardised processes. We believe there will be interesting opportunities for market infrastructure players to mutualise elements of the cost base – potentially saving the industry $1.5-3bn in cost, an improvement on industry RoE of up to 0.5%.

We see significant untapped potential to pull out complexity and cost across the platform
Banks must now tackle long-standing challenges to move the dial on an increasingly sticky cost base. Most banks have been through a number of rounds of cost management including actions such as expense control, organisational delayering and compensation adjustments. Some have achieved structural changes in the cost base through front-to-back steps such as consolidating and simplifying sales and trading constructs and re-calibrating the support cost base accordingly. Fewer have achieved sustainable savings in the cost base through more radical actions to optimise the operating model itself through steps such as:

- Radically simplifying the operational landscape and processing environment, e.g. standardisation and consolidation processing into core hubs;
- Rationalising unnecessary technology assets and simplification in IT application architecture;
- Driving synergies between FICC and equities back to front, around clearing and electronic infrastructure;
- Integrating securities services and markets businesses to remove duplication and deliver synergies;
- Consolidating operations into centers of excellence;
- Systematic role 'purification' across overlapping activities in Operations, Finance and Risk;
- Pushing the boundaries on cross-business utilities and shared services; and / or
- Greater use of third parties to generate greater cost variabilisation.

Delivering on this will require dedicated senior attention to ensure programme delivery, to embed the change required and to lock in gains through better governance structures and organisational mobilisation to address the cultural and fatigue issues that can impede the success and speed of delivery of a major change such as this.

Banks will also have to take a closer look at their spend on "reg reform". In our estimates the majority of the increase in cost base for the last three years in risk, compliance, tech and ops has been driven primarily by regulatory programs, both in terms of local regulators raising the bar on risk management, and to satisfy new requirements stemming from programs such as DFA and EMIR / MIFID 2. However, banks will need to be mindful of how to transition these resources into Business as Usual and right-size them according to the decreased scale of recent years.

Exhibit 34

Four cost levers

Nature of levers	Costs at stake[1]	Typical revenue consequence	Scope of action to date
A. Tactical efforts: targeting of discretionary spend, under-performance and re-adjustment of comp structures	3-6%	<1%	
B. Front office & function organisational efficiency: streamlining sales and trading constructs	5-10%	Limited	
C. Front to back alignment: cascading the changes in front office across the support / infrastructure models to drive efficiency	5-10%+	Limited	
D. Operating model optimisation: Right-sizing to market conditions, radically simplifying operational landscape	10-15%+	Limited impact on service quality	

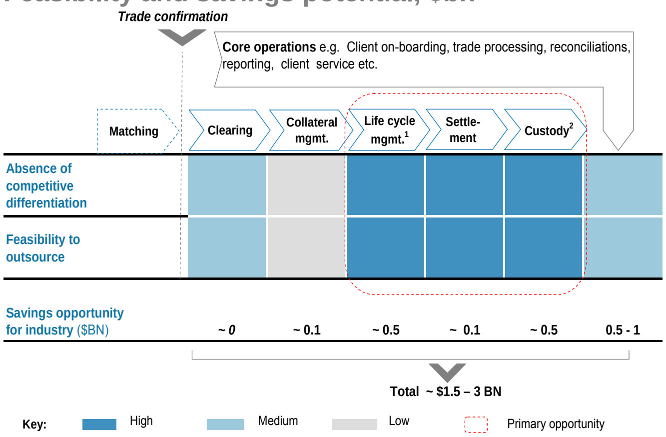
Key: Good progress Limited progress

1. Range for affected banks
Source: Oliver Wyman analysis

Exhibit 35

Sell-side mutualisation opportunity

Feasibility and savings potential, $bn



1. Corporate actions, exercise and assignments, close outs, dividend processing
2. End to end custody cost base (global and sub-custodians)
3. Savings net of fees paid to utility for services
Source: Oliver Wyman analysis, public financial data and proprietary data

New opportunities from cost mutualisation

We believe there will be interesting opportunities for market infrastructure players to mutualise elements of the bank cost base – potentially pulling out $1.5-3bn in cost structure. The net savings from this could drive an improvement in industry RoE of ~+0.5%, driven by both headcount reduction within operations groups and reduction in capex / maintenance expenditure for supporting IT systems. The opportunity lies in those processes that both feature limited competitive differentiation for dealers and are sufficiently standardised to be delivered by an external party. Within the core operational functions we see lifecycle management, settlement and custody functions as areas with high potential for mutualisation structures.

Another area ripe for mutualisation is account on-boarding. The current process is onerous; involving large amounts of document / data collection, suitability assessments, know-your-customer / anti-money-laundering checks and annual reviews across multiple products, geographies and legal entities. Additional complexity exists due to banks often having different processes and approaches across different business lines e.g. markets, custody, payments and cash management. This complexity is set to be compounded by the effect of the incoming External Business Conduct rules for Dodd-Frank (Title 7) heightening standards of due diligence and suitability reviews. Many of these activities could be more efficiently and effectively processed by a central party, alleviating multiple reconciliations, enhancing data quality and streamlining the document collection process. Both dealers and their clients would benefit from a smoother, more efficient process.

Successful execution will require a coordinated effort by an industry majority, galvanised by the prospect of shared benefits. The key challenges to overcome are the competing interests of potential service delivery providers, the ability to unify operating model differences and initial spend commitment required. Furthermore, dealers are struggling to assess, identify and quantify cost savings linked to the outsourcing of specific functions due to difficulties in isolating these.

Banks can draw lessons from other industries in cost management, where management are more deeply steeped in the techniques of operational – rather than financial – efficiency. In the Automotive industry, for example, we have witnessed aggressive savings in operating costs being achieved through:

- *Pushing standardisation of platforms across the operational process chain servicing a customer segment*
- *Creating modules of activities that can be deployed consistently across customer segments*

This means more discipline around the levels of customisation and creation of 'cottage industries' and is critically reliant on effective front-to-back management. The benefits realised through these types of initiatives include:

- *Cost reduction – sharing components to reap economies of scale in manufacturing / processing*
- *Reduced investments – minimising development costs and the associated tooling / retooling needed*
- *Decreased lead times – modular approach shortens development cycles and accelerates time to market for products*
- *Improvement in quality – standardisation decreases the number of defects / fails*

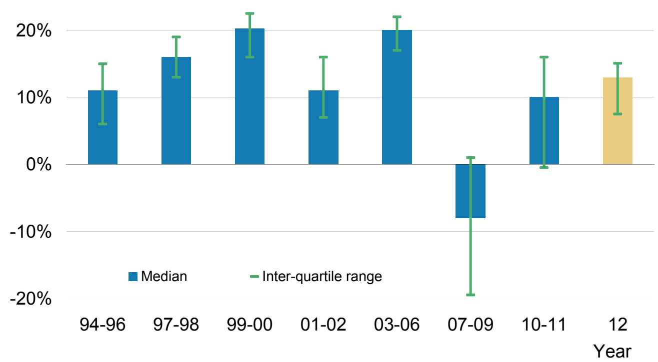
3.4 Industry structure, winners and losers

Industry restructuring is in full swing now, and the shape and structure is starting to respond to these challenges. Sources of value in the business are shifting, driving new paradigms around economies of scale and scope with new winning models emerging. Our analysis suggests that returns for the winners could be up to 3-4% points higher than the average and up to 8% points higher than the losers. Banks are pursuing increasingly divergent paths, implying different challenges and risks.

Exhibit 36

Spread of returns

RoE (%)



Source: Oliver Wyman analysis

The spread of returns will remain wide

Persistently low revenues and stubbornly high costs mean that the spread of returns will stay wide as banks pursue increasingly divergent paths, with starkly different regulatory and strategic risks. The spread of returns narrowed in 2012, but remains high relative to historical levels. The differential impact of subsidiarisation, OTC reform, and operating leverage are all high. Some firms will feel the impact much more severely than others. Our analysis suggests that returns for the winners could be 3-4% points higher than the average and up to 8% points higher than the losers.

The challenges of scale, scope and operational gearing are most acute for mid-sized players, where the retrenchment and restructuring process is still only just beginning and these platforms are not yet mature enough, particularly in scale dependent businesses (e.g. equities). Revenue concentration among the top 15 global banks is at similar levels in 2012 as it was in 2006. The distribution of profit, however, is far more sharply skewed towards the largest players. Interestingly, the smaller players within this group fare somewhat better than the middle group, with some successfully operating regional and / or more specialist models (others remain pressured).

Winners from OTC reform will be those able to deliver operational excellence, funding and integrated solutions to defend the existing execution franchise and to capture the offsetting revenue streams in clearing and collateral optimisation / financing. These offerings must be appropriately scaled to the target franchise – we see viable roles for focused regional models as well as for global players targeting premium service offerings for the largest accounts. The losers will be those making sizeable infrastructure investments but failing to attract flows or position effectively around the new opportunities, or those simply failing to put in place adequate responses.

The impacts of subsidiarisation are uneven. European banks face the twin challenge of the US FBO proposals which are a headwind in a key market, and the need to navigate domestic efforts to ring-fence retail banking. The wider challenges of multi-jurisdictional subsidiarisation impact all banks operating a global model, and particularly those with broad but thin international footprints.

Scale, scope and shape

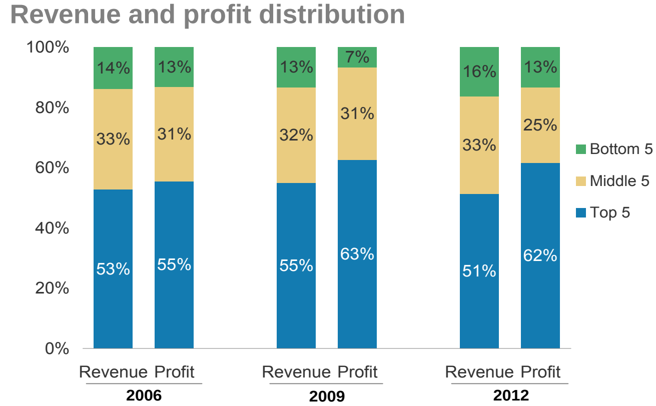
The process of restructuring must focus on driving economies of scale and scope around three key considerations:

- Re-positioning around new sources of value
- Building profitable market share in chosen areas
- Managing the shape of the business portfolio

Exhibit 37

Squeezed in the middle

Revenue and profit distribution



Source: Company information

Sources of value in the business are shifting with implications for winning models. Value now centres on:

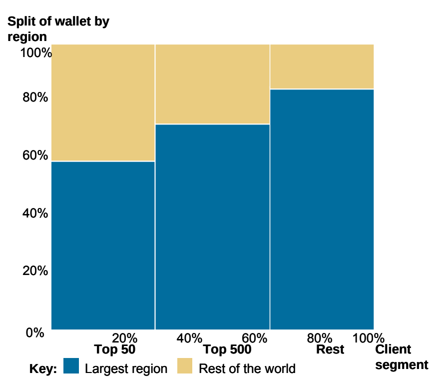
- At-scale financial intermediation in flow markets
- Expansion in to post-trade / infrastructure and transaction banking business
- Credit market intermediation
- True corporate and FIG content / advisory capabilities
- Leveraging group linkages to wealth and commercial banking

The right kind of market share

As banks reshape their businesses they must decide what level of service is appropriate to be offered to which clients, and what products and services clients will be willing to pay for at sufficient scale to justify their cost base. Most investment banks have thousands of clients, but derive ~80% of their client revenues from just 500-800 names. We estimate that a third of industry-wide client revenues with buy-side accounts are generated by the top 50 clients. Profitability skews are even sharper, as many clients systematically squeeze their dealers for financial resources, price, quality of infrastructure delivery and premium services (e.g. research), while concentrating spend with the top 3-4 dealers. Winning the race to be one of the top dealers for the largest global clients can generate attractive economics – but losing the race is costly. Alternative strategies targeting more specialist roles with large accounts, or focused on smaller clients must be matched against an appropriate product and service platform.

Exhibit 38

We estimate a third of industry wide sales to buy-side accounts are generated by the top 50 clients



Source: Oliver Wyman analysis

There is an important regional dimension to this. We estimate that 70-75% of sales to buy-side clients are concentrated in a client's largest region. Even for the largest global clients, where non-home region sales make up 30-50% of sales, many of the larger buy-side firms are moving to a more regional trading model. For smaller clients the wallet is highly concentrated regionally, with 80-95% of sales in the home region.

Banks will also need better MIS and a client-driven management mentality to succeed. Very few dealers today, however, have infrastructure and governance in place that can provide an effective and realistic view of client profitability to support dynamic client-led strategies. Dealers will need to update their approaches to reflect the new reality of client economics, in particular with more sophistication around costs of execution, and the use of financial resources (especially funding). Dealers will also need to improve their client metadata, both because of regulatory requirements but also to understand their activity from a legal entity and client hierarchy perspective. This is the foundation on which dealers need to build a client governance model that regularly reviews and decides on resource allocation, monitors client wallet performance, collectively improves and monitors the client experience, and feeds strategic decision-making.

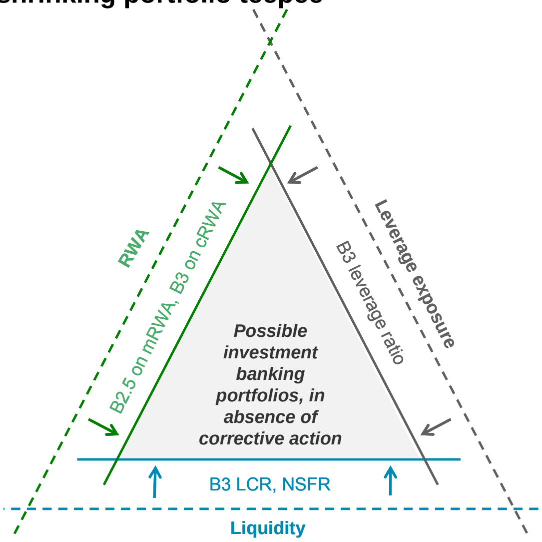
Shape matters in a multi-constrained world

Progress on restructuring FICC means RWAs are no longer the overwhelmingly dominant constraint. Banks must manage financial resources in a multi-constrained world across leverage, liquidity and risk-based capital. This means the shape of the business portfolio is also a critical consideration as businesses rationalise. For example, there are capital benefits from combining businesses, such as credit, that are RWA-constrained with businesses, such as prime, that are leverage ratio constrained. There are also implications for earnings volatility. Many businesses naturally offset each other – for instance rates / FX revenues have historically been negatively correlated to equities revenues.

Managing across multiple external regulatory constraints – as well as internal economic and risk-based views – is increasingly a source of competitive advantage. Driving the information and incentive structures down to the level at which decisions are taken in the business requires considerable investment in management information and governance processes. This, in turn, risks adding to the infrastructure cost base unless management can at the same time re-engineer the existing functions.

Exhibit 39

The shrinking portfolio teepee



mRWA = Market risk weighted assets
cRWA = Credit risk weighted assets
Source: Oliver Wyman analysis

Winners and losers

The gains for the winners from market share consolidation are only just beginning to accrue. For those able to consolidate market share around areas of true scale while reducing the cost and complexity of the platform, the rewards could be high. At the same time, increased operational gearing, combined with multiple regulatory challenges to navigate, means the risks of failure for this approach are high.

Among the mid-sized banks we see substantial further value to be unlocked through strategic refocusing around areas of product excellence and / or regional depth. Capital release and cost reduction have to be delivered along lines that protect or enhance economies of scope. Strategic risks are the size and stickiness of the infrastructure cost base and the inherent volatility of a less broad product base and risk envelope.

Many larger domestic and smaller regional players are at a difficult cross-roads, particularly in Europe. The proposed corporate CVA VaR exclusion is a vital lifeline, and deleverage and the deepening of debt capital markets in Europe heightens the strategic importance of institutional distribution capabilities. However, the economics remain under pressure for many banks, and more needs to be done to focus the franchise around areas of genuine advantage, particularly outside of the home market(s).

Market infrastructure players are in a battle to grasp new opportunities as the existing businesses remain under pressure. OTC reform presents new opportunities but in many cases these are smaller than hoped and will not fully recover lost execution revenues. The advantaged will be those with a first mover edge or differentiating capabilities as second movers in collateral solutions and back-office outsourcing. The former – typically the emerging large, vertically or horizontally integrated groups – will seek to integrate services, keep systems costs down for the sell-side and leverage their global scale to deliver value-added services such as cross-asset netting. The latter will seek to differentiate around local clearing and / or collateral pools, integrated OTC brokerage models, or through innovation in areas such as non-cleared derivatives or outsourcing / mutualisation.

Exhibit 40

Regulatory watch-points

	Remaining RoE impact (base case)	Level of uncertainty	New developments	Remaining risks and uncertainties
Solvency and Liquidity	<1%	Low	• Progress on RWAs • Moderation to liquidity and capital rules	• CVA VaR
Structural reform	2-3%	Medium	• New proposals; US FBO, Liikanen etc. • Drive towards Balkanisation	• Finalisation of new proposals • Scope of budding subsidiarisation reforms
OTC Reform	~1%	Low	• New margining rule • Phased implementation	• Behavioural impacts in markets • Perimeter of regulatory applicability
Conduct, EU FTT and other	<0.5%	High	• Establishment of conduct bodies • FTT gathering momentum / initial implementations	• Scope of conduct reforms • FTT scope and implementation

Source: Oliver Wyman analysis

Multiple risks remain – we put a 9-16% bear / bull around our base case RoE

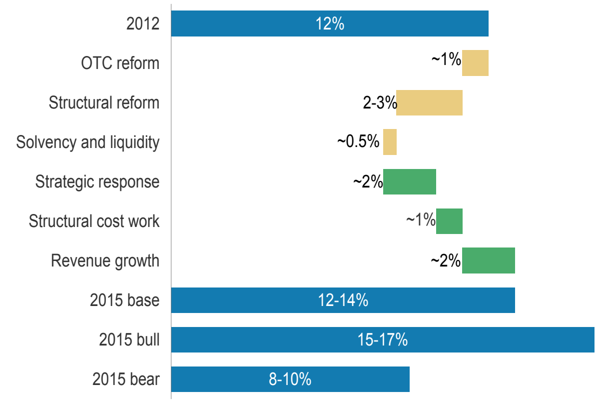
We see three key risks to our base case – execution, markets and regulation.

With so much to do, management execution will be key in determining winners and losers. Banks are facing an unprecedented agenda of cutting structural costs, repositioning business strategy, responding to regulatory reform and compliance, and restructuring local entities. In many cases, a rethinking of the business model and process is required, breaking ranks with conventional wisdom and making bold moves. Deeper thought on incentive structures will be needed to get costs down and address cultural change. In an industry much more focused on client service, banks will have to decide faster where they provide differentiated enough service to achieve more favourable pricing.

Regulatory tail risk is narrowing, but still some vital 'swing factors'. We estimate that a further ~2% regulatory drag on RoE was absorbed in 2012 as the industry moved towards Basel 3 solvency targets, meaning 60% of regulatory costs have now been realised. Shifts have taken place or look likely on both funding and capital and the industry and regulators are converging around a common agenda, with the one key remaining area of uncertainty being the approach to corporate CVA VaR. OTC derivative reform will have an impact, but the boundaries are now becoming clearer. On the other hand we see increased risks from subsidiarisation and conduct risk, where the final state of regulation is less clearly defined. The banking system will seek to adjust over time as necessary, but the range of possible outcomes is still wide. The Financial Transaction Tax could potentially have a high impact on the affected banks, but there is much uncertainty about the outcome.

Exhibit 41

Future evolution of industry RoE



Source: Oliver Wyman analysis

It goes without saying that the revenue outlook will be critical. Our base case has cautious optimism and recovery although we also have broad book ends depending on investor and issuer confidence, sovereign risk scenario and wider economic recovery.

Conclusions

Industry restructuring and adaptation is in full swing as firms start to make tougher choices on where they want to compete to deliver attractive economics and serve their target client base. Despite absorbing a significant slug of regulatory change, the industry improved returns to ~12% in 2012, albeit helped by positive credit conditions.

There is much still to do. Profound structural shifts are taking hold, in particular as regulatory Balkanisation and OTC reform reshape the industry. Navigating these challenges, delivering economies of scale and scope, and positioning for growth will be the key challenges over the next three years. Those firms able to do so will offer attractive returns to shareholders, and deliver sustainable benefits to their clients and employees.

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