The Financial Sector

10 years after the crisis

Polar Capital Global Financials Team

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Executive summary

- Balance sheets in excellent shape
- Regulatory regime has reduced risk appetite/improved quality
- Investors overstating risks driven by 2007-08 experience
- Interest rate trends providing earnings support
- Structural and cyclical positioning is stronger than assumed
- Loan growth could accelerate
- Expect technology and M&A to provide catalyst for efficiencies
- Constantly evolving opportunities in fintech/emerging markets
- Valuations are exceptionally low
- Strong capital and dividends support valuations

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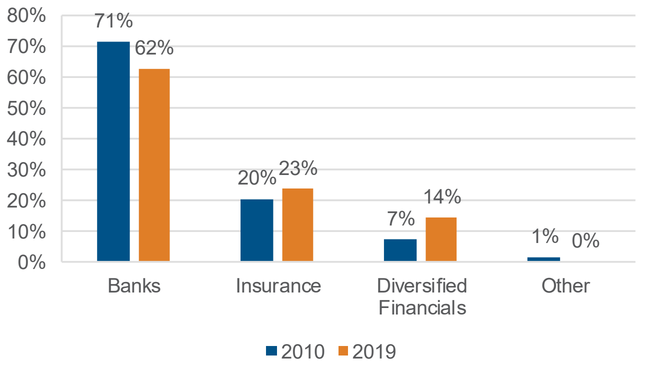
Where we came from

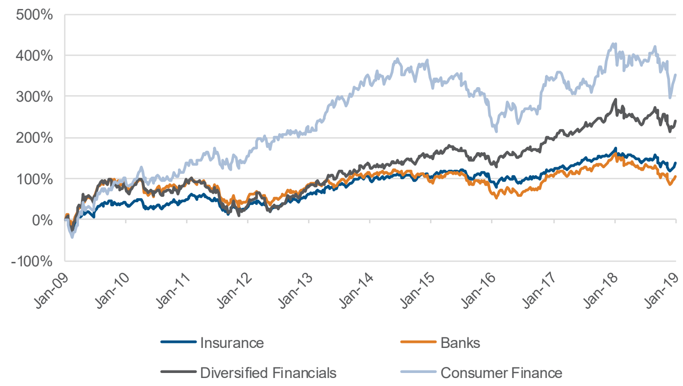
It is 10 years since the financial sector reached a low point following the global financial crisis and we thought now might be a good time to revisit some of the issues and focus on the outlook for the sector over the next 10 years. At a time when 'late cycle' fears have come to the fore, it is also worth assessing whether the sector will suffer in the same manner should the macro environment deteriorate. We make no apologies for our focus on the banking sector (by which we would include both commercial and investment banks) since not only does that remain the largest proportion of the financials sector (chart 1) but equally it has been the key laggard in terms of performance (chart 2) and its recovery remains a critical determinant for the full recovery in the sector. Added to which it is the sub-sector currently experiencing material structural changes which will provide opportunities for investors going forward. Much of the information we have included has a strong bias to US banks that reflects not only their better disclosure but also easier cross-comparisons compared to other regions (for example, relative to the universal models espoused by the European banks which makes cross-comparisons more difficult).

Chart 1: Financials sub-segment breakdown



Source: MSCI, January 2019.

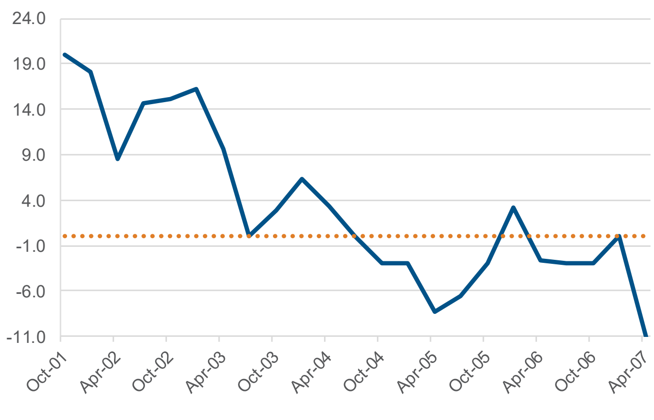
Chart 2: Sub-sector 10-year performance



Source: Bloomberg, 21 January 2019.

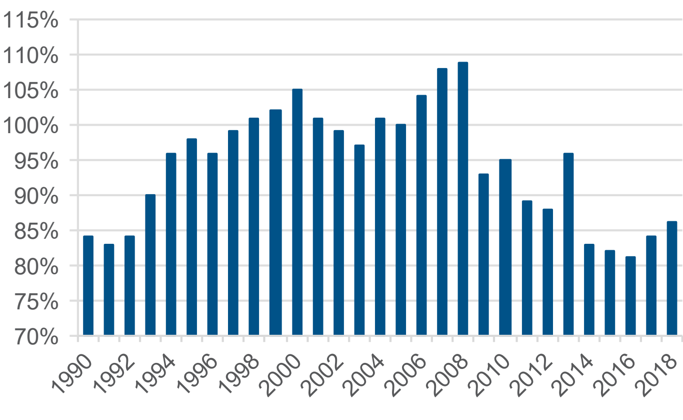
A review of some of the issues precipitating the financial crisis would highlight a period of lax underwriting standards (as shown in chart 3 and equally in evidence via high levels of loan growth), a shift to wholesale funding models since deposit growth lagged loan growth (evidenced by the sharp rise in the loan/deposit ratio – chart 4) and the growth in securitisation resulting in a lack of transparency and failure to see where risks were building up in the sector. Add to this a 'relaxed' regulatory regime (most specifically in terms of capital) and a high degree of inter-connection between financial institutions, it is not surprising with the benefit of hindsight to see a crisis coming. We will take a look at whether some of these issues are rearing their heads again and so justifying why investors are allocating a material discount to the sector.

Chart 3: Net % US banks tightening loan standards



Source: Federal Reserve Bank of St Louis, January 2019.

Chart 4: US bank loan/deposit ratios



Source: Credit Suisse, January 2019 – 'Prepare for the Great Divide 2019 Outlook'.

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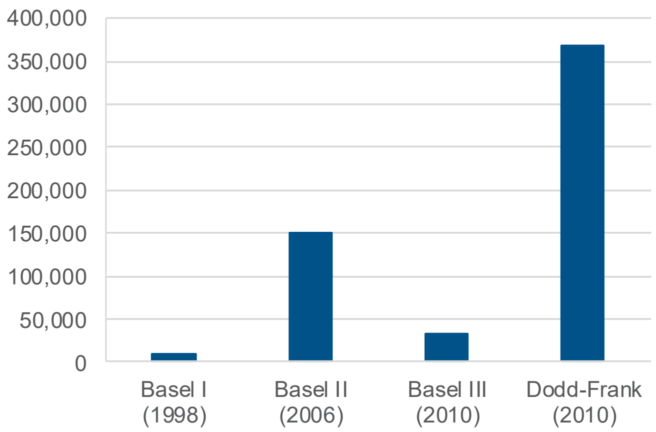
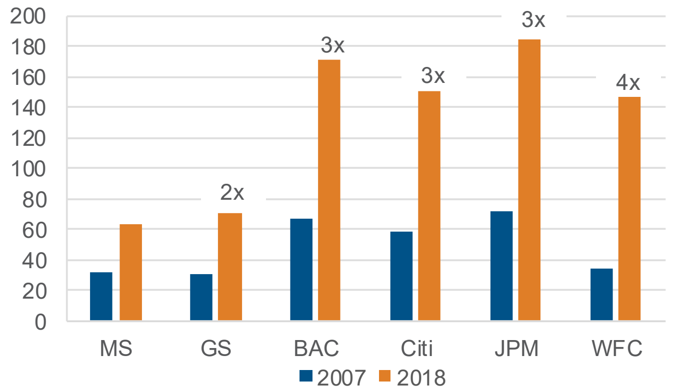
The scale of the financial crisis resulted in a concerted effort by governments and regulators to intervene in the banking sector through the dramatic tightening of regulations (most importantly in terms of capital requirements – see charts 5, 6 and 13), a recapitalisation of the banking sector either through private or public means and attempts to change both managements and cultures within banks after a period where there was little accountability for ultimate risk. Not all countries approached the issues in the same way and arguably the US dealt with its problems earlier and so recovered earlier (although it could be said the lower importance of the banking sector as a provider of corporate credit and more developed capital markets allowed it to take such an approach). Cultures within investment banks have changed although maybe not as materially as regulators would have preferred since remuneration continues to be volume driven.

Chart 5: Bank regulation - words per act



Source: Bank of International Settlements, The Library of Congress, ICB, FSA.

Chart 6: Tangible common equity 2018 vs 2007



Source: Company Annual Reports, 2007 & 2018.

It is worth remembering the financial crisis was not the only crisis faced by the sector over the past 10 years. European banks, though clearly impacted by the financial crisis, have subsequently had to weather long-term structural problems within the eurozone (the failure of the Italian economy to remain competitive within the euro, Greece tinkering with its budget deficit data and subsequent collapse, and the rise in gearing in southern Europe overall) which delayed their full recovery – arguably many of these issues remain only partially resolved today.

Banks also weathered other pressures during this period, with the collapse in the oil price (after a period of rapid growth in lending to the energy sector) probably the most impressive. Even Texan banks managed to see only a few quarters of impact on their performance, although again maybe helped by the rapid subsequent recovery in oil prices. More recently Turkey has been a concern.

The point we are trying to make is that the sector has been tested a number of times since the financial crisis and came through those periods in good shape. Increasingly, some of the more specific risks have only affected banks focused in that country or sector rather than the broader banking sector. Could it be that changes in regulations have helped limit systemic risks?

The sector today

Ultimately, the banking sector reflects the macro environment within which it operates and the 10 years following the crisis have been a decade of low inflation, very low interest rates, quantitative easing and relatively lacklustre GDP growth (certainly until the Trump administration turbocharged the US economy with tax cuts). This has manifested itself in the banking sector with a sharp fall in margins (chart 7) arguably primarily because of the loss in earnings from cheap deposit bases. Encouragingly, margins have been on a path of recovery for US banks since 2015 and have continued to accelerate with interest rate rises. But it remains surprising how gloomy investors are with regard to this trend which is maybe a reflection of the slow pace of recovery (although we would argue there could very well be further benefits ahead on the back of a steepening yield curve). European banks have also seen similar trends although the pace of recovery has been much more muted since their interest rates have yet to rise.

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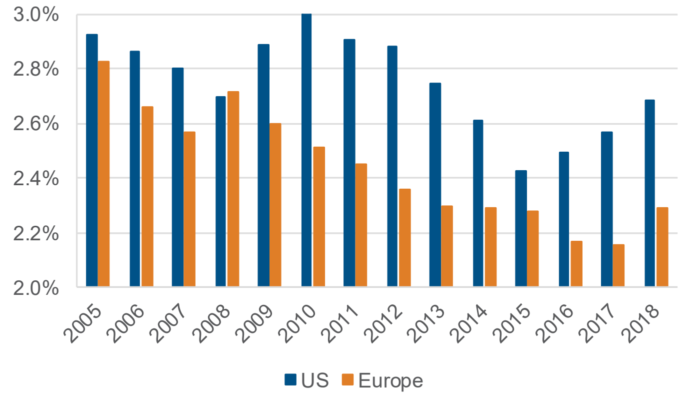
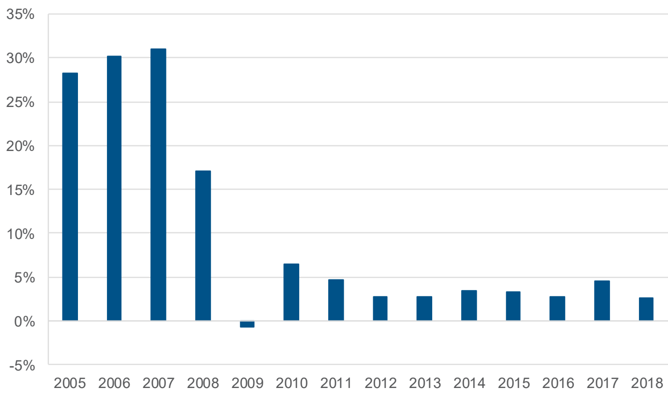
The picture with regard to loan growth has been less impressive (chart 8) although investors are missing the silver lining in terms of risks should the macro environment deteriorate. Negative or marginal rates of loan growth are a combination of both less demand for credit during an era of deleveraging, less appetite from banks to lend to certain sectors and regulatory restrictions on such lending and critically, and perhaps consequently, a sharp loss of market share in providing finance by the banking sector (which we will deal with later).

Chart 7: US & Europe bank net interest margins



Source: Polar Capital/Company Annual Reports, 2005-2018.

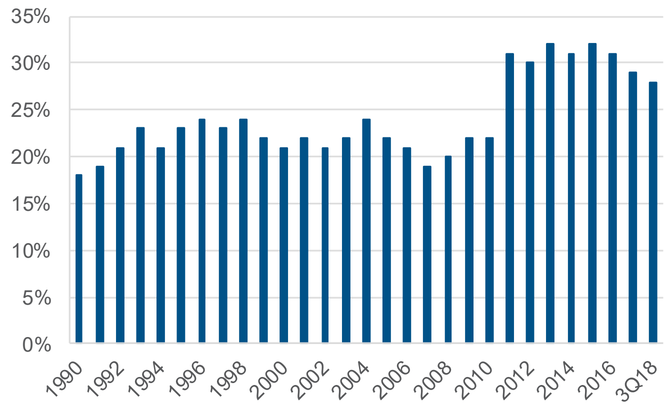
Chart 8: European bank loan growth Y/Y



Source: Polar Capital/Company Annual Reports, 2005-2018.

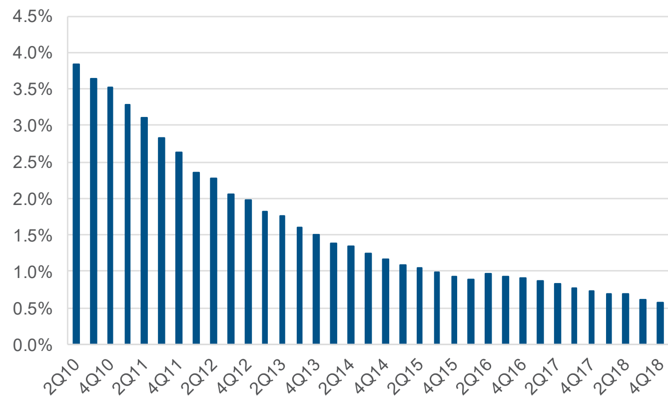
Not only have revenue streams been negatively affected by macro events, costs have equally taken a hit. The regulatory burden and associated costs on financial services businesses have risen exponentially, partly offsetting the very positive and rapid development of lower cost means of distribution. More critically balance sheets have also been impacted. We have highlighted the sharp falls in loan/deposit ratios (chart 4), added to which the mix of those deposits changed with a shift to non-interest-bearing deposits (chart 9) since depositors saw only marginal benefit from interest-earning deposits during a period of such low interest rates. Some of these benefits are now receding as interest rates rise. The other balance sheet change has been the rise in capital driven by regulatory changes on capital levels (chart 6). Less noted is that capital regulations also had a material impact on the types of business/lending activity banks actually wanted to pursue since capital requirements for certain types of businesses rose sharply making them uneconomic to offer. This helped push some of the riskier segments of corporate finance into the bond and private loan markets.

Chart 9: US banks non-interest bearing deposits as % of total deposits



Source: Credit Suisse, January 2019 – 'Prepare for the Great Divide 2019 Outlook'.

Chart 10: Trends in US non-performing loans/ loans



Source: Polar Capital, January 2019.

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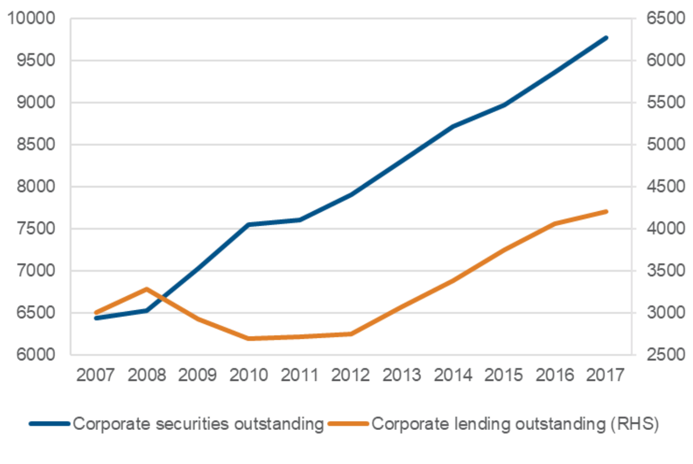
Often ignored is the remarkable improvement in the quality of bank loan books over the past 10 years (chart 10). Current levels of non-performing loans are at multi-year lows and have barely budged even with rising interest rates and pressures from markets, commodities and greater volatility in macro performance. We accept that very low interest rates and a reasonable macro picture have provided a very benign environment, but this view tends to miss the point that there is consistently little evidence of a deterioration. Again, the assumption today is that this trend will turn soon and so expect a material deterioration in asset quality ahead. But this assumption views the financial crisis as a 'normal' level of deterioration when it clearly was not.

Approximately seven or eight years ago the word fintech came into our vocabulary and it is remarkable how much of our time is now taken up with this issue. The dramatic technological change during this period, coupled with a financial sector in the throes of crisis, resulted in unprecedented structural change. We have already noted the evolution from branch-based distribution to smartphone or other digital means, but equally there has been an explosion of financial technology models focusing on a huge variety of areas ranging from payments to risk management, platform distribution, wealth management etc. Consequently, there have been worries of a dramatic loss of share by the banking sector akin to that seen by traditional retailers to the likes of Amazon even though there is very little evidence that this has happened – estimates suggest fintech might be 4% of the credit market and its importance varies between countries and product segments. These are issues we barely touched on 10 years ago and today they are a key driver of the outlook for the sector. We will cover them in greater depth later in this note.

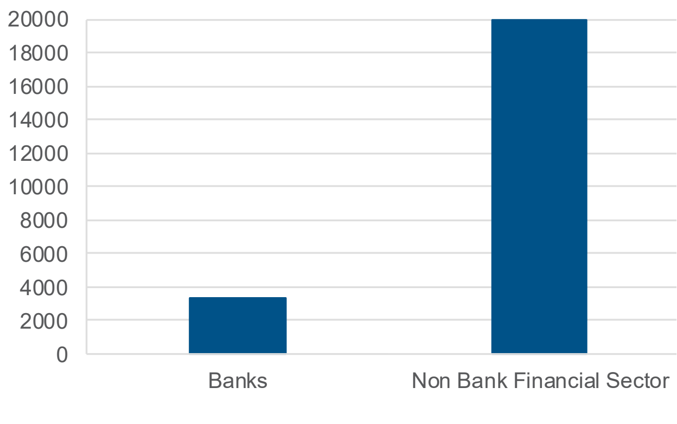
An era of easy, low-cost money and tight new regulations on bank activities in higher-risk segments of corporate finance has resulted in a huge boom in non-bank financing (both the bond market, public loan markets and private sources of finance with a particular bias to the most risky types of borrowers) and this has been at the expense of the banking sector (charts 11 and 12). It is estimated that the proportion of financing from non-banks in the US now accounts for 42% of commercial lending (from 39% in 2009, although the shift to non-bank finance started prior to the financial crisis). This is often ignored and has been a much more dramatic loss of share than due to fintech and ultimately might reflect a broader shift to private equity markets during this period. Though clearly this is a loss of market share, we would argue that this issue will ultimately be the driver of the sector rerating, since investors have assumed risks are on the banks' balance sheets while in reality they are elsewhere. As interest rates rise and access to non-deposit funding tightens, we could very well see a return in market share to the banking sector providing a boost to loan growth. There is some debate on this issue (since the growth in private equity has maybe shifted some financing away from the banking sector) but we would argue this is less structural and more about cyclical trends and the levels of interest rates. Deposit-driven models are likely to be more in ascendancy going forward which is positive for the banking sector.

Chart 11: Corporate securities v corporate loan growth (US)



Source: SIFMA/Federal Reserve, 24 August 2018. **Note:** corporate securities includes CDOs, corporate lending includes C&I and CRE loans.

Chart 12: Euro area: growth in assets, last 10 years (€bn)



Source: ECB, November 2018.

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The opportunities and risks ahead

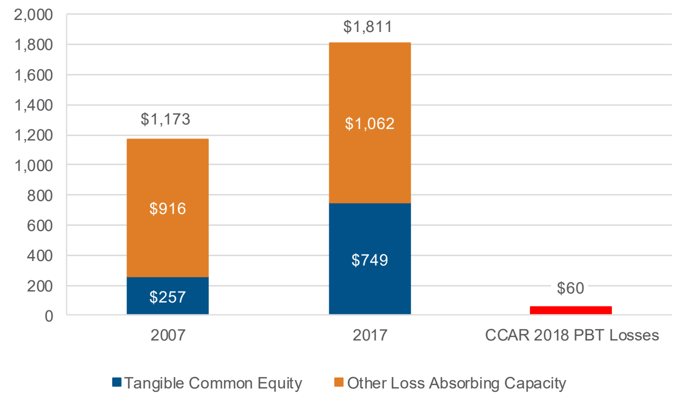
The starting point of any assessment of future opportunities and risks remains the macro environment we are operating in. We accept that sooner or later we will experience a slowdown, the severity of which is anyone's guess, but what does it mean for the banking sector? Equally, we are regularly hearing that one of the reasons why the sector continues to lag is that the banks are overearning for a late cycle environment, in other words expect to see a material deterioration in asset quality over the next few years since the current benign environment (chart 10) cannot last. However, even this assumption needs to be challenged since ultimately it depends on the scale of deterioration that matters not marginal changes in levels of non-performing loans. We would note that when looking at US banks, other than the relatively small impact of the dot.com bubble bursting, non-performing loans fell from 1991, the previous time there was a major financial downturn, and did not reach a low point until 2007. This cycle of low non-performing loans could clearly last a few more years than currently expected.

1. Investors are overestimating risks

The key opportunity of the sector, is that investors are overestimating risks based on the financial crisis experience. This was a severe crisis but no two downturns are the same and the consequent nature of the recovery and build-up in risks would not suggest a similar scale of downturn next time. Added to which we have shown clearly that balance sheets for the banking sector are in good shape and do not look similar to the period in the run up to 2007-08. Funding structures remain more deposit-biased, capital is materially stronger (chart 6) and attitudes to risk have changed in view of the tougher regulatory environment. There has also been very little new lending undertaken as banks have lost market share to other providers of risky finance which may be a reflection of regulators not wanting the higher-risk types of lending to return to retail deposit-taking institutions. Banks are involved in arranging some of these loans but, as JPMorgan recently noted, in 2007 there was over $450bn of underwritten leveraged debt on bank balance sheets that had not been syndicated while today's figures is close to $80bn.

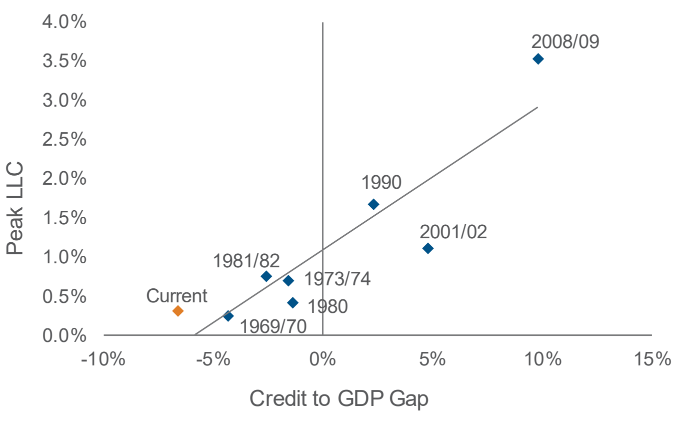
Even though today there is some discussion and evidence of relaxing some regulations and lending standards, the overall environment remains much stricter than in 2007-08 and changes are likely to be beneficial to smaller and less important players. Yet valuations, in particular in Europe, are reflecting a severe crisis scenario and we suspect this is because investors are focusing on the most recent financial crisis as their yardstick (chart 14). It also suggests that maybe the sector needs to show proof they can contend with the impact of a shallow downturn on their balance sheets before investors will believe they can weather a downturn better.

Chart 13: US banks loss absorbing capacity relative to CCAR losses ($bn)



Source: Credit Suisse, January 2019 – 'Prepare for the Great Divide 2019 Outlook'.

Chart 14: US implied peak LLC in next downturn



Source: Autonomous, 3 January 2019.

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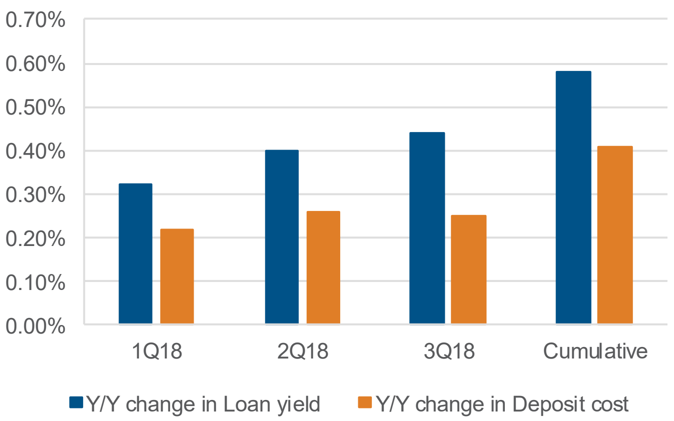
2. Earnings will continue to grow strongly

Other than overall macro growth, the other driver of sentiment towards banks from a top-down perspective remains trends in interest rates. Rising rates in the US have already fed into rising margins, but the relationship with interest rates is much more complicated. The steepness of the yield curve and the manipulations through quantitative easing or tightening can also have an impact but more broadly investors should not lose sight of the fact that margins have been rising for the past four years and this has fed into improved returns on assets (chart 15, below shows loan yields rising faster than deposit costs for Bank of America).

Furthermore, we are sometimes confused as to why investors focus entirely on top-line growth as the driver of earnings growth in the banking sector since ultimately the sector is about sustainable risk-adjusted returns – top line growth in the form of volume growth can be an indicator of a rapid accumulation in risk.

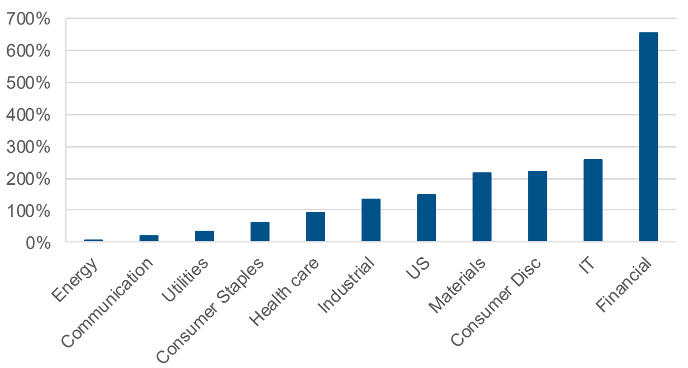
Chart 16 shows this has been the fastest growing sector in terms of earnings since the stocks bottomed out in 2009. However, we accept that concerns may be focused on the sustainability of earnings growth since banks will not repeat this level of growth as loan loss provisions will not fall sharply. Asset quality improvements may be coming to an end but volume growth (loan growth) may well accelerate in the current environment, margins could continue to widen and costs efficiencies could accelerate (see section on the benefits of technology). Consensus EPS growth for US financials is 14% in 2019 (supported by buybacks), only marginally below the 15% forecast for MSCI US, even though the sector trades at a material discount.

Chart 15: Bank of America loan yields



Source: Bank of America, 3Q18 10Q.

Chart 16: Growth in US EPS 2009 - 2018



Source: Bloomberg, 21 January 2019.

3. Investors are too gloomy on their structural positioning

All too often we find the debate as to the future of banking implying that ultimately the sector will go the route of retailing or other industries which have been severely disrupted. This sort of coverage makes great headlines and fintech companies are very eager to promise dramatic levels of disruption, but the reality has been very different. We started looking at some of these new models a number of years ago and in those early days it was difficult to truly assess what the impact was going to be but today it is becoming clearer (chart 18). Many of these new entrants have essentially joined up with the banking sector since it proved too difficult to gain customers on their own models. Barely a day goes by without some fintech model being acquired by the banking sector and at its core banks are helped by their control not only of deposit bases but also the customer relationship and the reluctance of customers to move to other models despite governments increasingly giving them the tools to do so.

We are certainly not implying that some banking revenues (most likely fee income from areas such as payments, remittance and trade finance) will not be disrupted. A good example is remittance provider TransferWise whose cost of doing a transaction is 10% of the cost for a traditional bank. The overall debate has moved on and the banks remain very much centre stage in terms of client retention. In addition, banks have considerable firepower in terms of technology spending (chart 17) and that firepower is being increasingly focused on client activity rather than transaction costs and security (PNC recently noted 37% of technology spending in 2012 was client-facing; today it is 60%). Banking is not the same as retailing in that it is a highly regulated service which at its core is providing security for people's savings and consequently customer relationships tend to be more long-term in nature. Furthermore, there is nothing to stop banks offering new digital services to copy new players, and they have been very adept at doing this.

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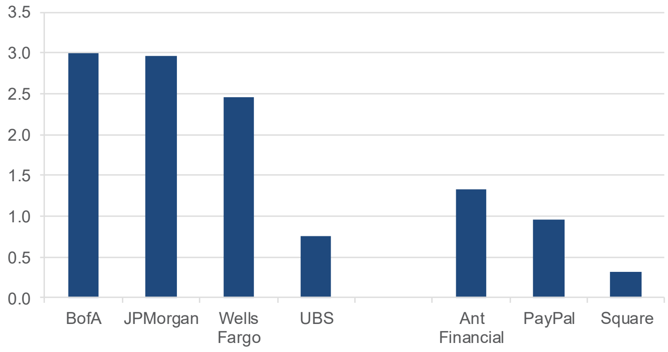
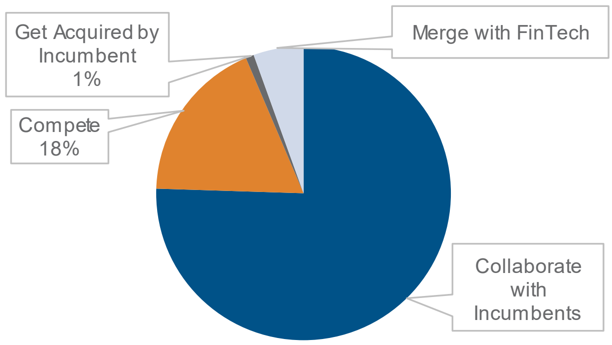
Chart 17: The leading US banks can compete on R&D spending with newer players ($bns)



Source: Company data, Autonomous Research estimates, July 2018.

Chart 18: Primary objectives - fintech firms 2017



Source: World FinTech Report Survey, Capgemini, Linkedin, Efma & MaRS, 2017.

4. Huge potential to reduce costs through technology and M&A

Investors completely ignore the benefits which may accrue to incumbents in terms of reduced wage and branch costs in the years ahead (partly because in recent years it has been offset by rapidly rising compliance costs although we suspect much of that has already happened). We are currently seeing the enormous benefits of technology in terms of reducing the cost of distribution of financial services with mobile phone transactions increasing exponentially and from very low levels only a few years ago (rising to $721bn in 2017 v $53bn in 2010). The per transaction cost for a bank for a mobile transaction is $0.08, just 2% of the cost of a branch transaction. The shift to cloud computing offers the potential for banks to reduce infrastructure costs by >30% while Morgan Stanley have estimated banks can reduce their cost/income ratios by 9% from upgrading legacy core systems. Benefits from technology will also accrue in terms of risk and credit assessment (it is not the preserve of fintech models using algorithms alone) and marketing.

Finally, the political environment for the sector has gradually become less toxic in many markets after years of high fines for various misdemeanours. Things do move on and today we rarely talk about the huge litigation and other fines that banks had to pay after the global financial crisis. Though bankers have few political friends, more broadly there is a growing recognition that you cannot put the banking sector in too tight a straitjacket and the technology sector is benefiting from regulatory arbitrage (ie they are functioning with much lighter regulations). China is a good example of how this can change with a raft of new measures to limit the growth of digital platform models of lending which has had a huge impact on their growth. Expect more regulations ahead for fintech models to bring them more into line with other financial sectors. It has not helped the technology sector in that they are rapidly losing political friends because of data breaches and issues over control of customer data.

All this does raise the issue that if technology is helping reduce branch networks (the number of branches in the US have fallen by 10% since 2000), why have we not seen a dramatic fall in cost structures. We have spent a considerable amount of time looking at the issue of costs and what we found is a clear benefit in those countries which are the most digitised (see chart 19 on Swedbank). However, our analysis of cost structures in the US and Europe has shown that there is not always a strong correlation between branch and headcount reduction and improved efficiency as the benefits at some banks have been eroded by higher costs associated with compliance/customer redress or fewer staff but on higher salaries (as IT engineers replace branch staff). The most successful banks at improving efficiency (Swedbank and DNB) have combined a high level of branch reduction (by 60% and 80% respectively since 2008) and a high level of IT spend as a proportion of total costs. Both banks operate in some of the most advanced digital economies allowing them to effectively distribute products through digital channels and automate processes leading to a material reduction in headcount (>30% since 2008).

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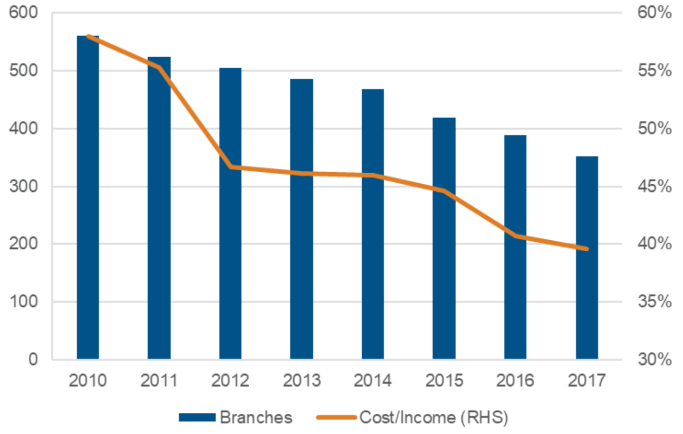
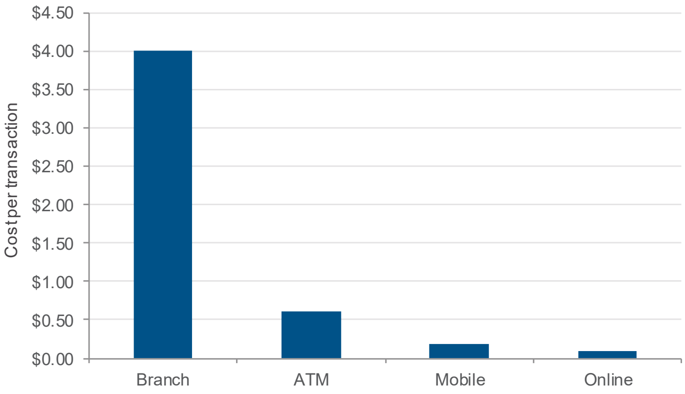
Chart 19: Swedbank - branches v cost/income



Source: Swedbank, 2017.

Chart 20: Banks can reduce costs by promoting mobile



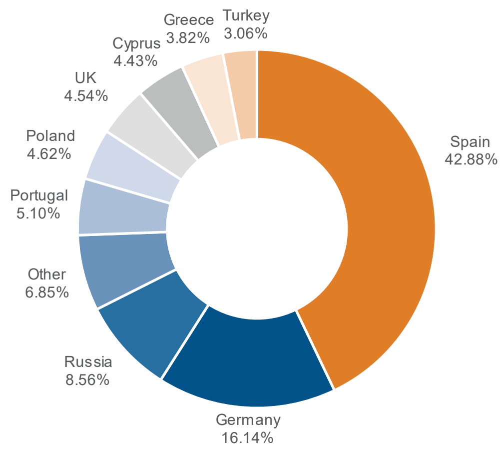
Source: CEB TowerGroup, November 2014.

The global financial crisis put a stop on possible banking M&A transactions partly because of a wish to preserve capital on the part of banks but, more importantly, because of tough regulatory scrutiny of transactions. This was driven by a reluctance to see banks get any bigger since the inter-connection between major banks and their increasing size relative to the overall economy was viewed as a major contributor to governments having to bail out banks during the crisis (since banks were regarded as being too big to fail). The regulators in the US have more recently made it clear that they would take a more amenable view to further consolidation although this is probably likely to exclude the very largest banks. Other sub-sectors (such as non-life insurance) have been major beneficiaries of consolidation and we expect to see many more transactions within the banking sector. Not only does this reflect the fact that there remain too many banks (over 5,000 in the US), but also the costs associated with regulatory compliance and technology investment will become prohibitive for most smaller banks. Added to which the lack of organic growth (weak loan growth) will focus management attention on acquisitions and ongoing pressure on certain fee incomes will limit the ability to cross-subsidise. As chart 21 shows, the US is most interesting in this regard since much consolidation has already happened in Europe.

Chart 21: Bank market share fragmentation

Source: Credit Suisse, January 2019 'Prepare for the Great Divide 2019 Outlook'.

Chart 22: European bank M&A since 2011 by target country



Source: The Banker, http://www.thebanker.com/Banker-Data/Bank-Trends/Spain-dominates-European-bank-M-A?ct=true, 2018.

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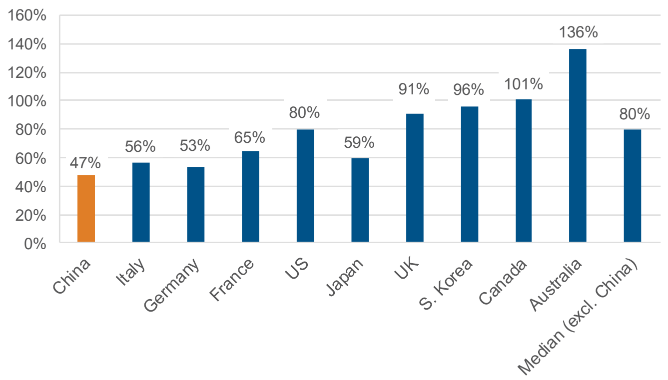
5. Emerging markets offer highly profitable franchises with excellent growth prospects

The nature of the global financials markets (with the largest and most liquid being in the US and other developed markets) means that the sector naturally has a strong bias to developed markets. We have generally run our funds on a global basis to take advantage of a huge range of opportunities within emerging markets or countries where the level of evolution of financial services remains at an earlier stage. In many of these countries, banks are not only growing fast but are highly profitable, providing balance sheets of excellent quality which have been tested in view of the more volatile macro conditions. As middle classes grow in these markets, they make greater use of financial services and we have seen a dramatic shift in bank loan books from corporate lending to retail borrowing. Essentially banks in such markets are a play on domestic consumption. Added to this, the lack of wholesale funding has meant the banking sector is much more dominant (and often owns the insurance sector) while cautious regulators have limited the impact of new entrants (few new banking licences have been issued even though domestic economies have grown exponentially over the past 20 years).

2018	Revenues/Assets	ROA	ROE	Loan Growth	Equity/Assets	Loans/Deposits
	(%)	(%)	(%)	(%)	(%)	(%)
Developed Markets	2.53%	0.66%	9.08%	1.70%	6.70%	85.50%
Emerging Markets	4.69%	1.45%	13.50%	9.60%	10.70%	90.50%

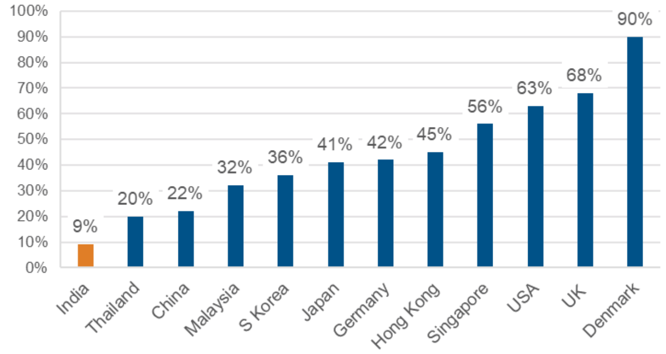
Source: Polar Capital.

Chart 23: Household debt to GDP



Source: CLSA, OECD, 2016.

Chart 24: Mortgages as % of GDP



Source: European Mortgage Federation, HOFINET and HDFC estimates for India, 2017.

In many cases the advantages of technology in emerging market financial services are being implemented much more quickly by the major incumbents than in developed markets, denting the impact of new fintech players and also seeing the cost advantages feed through at an earlier stage. The simple reality is that they are less invested in historic IT systems and the country's overall financial infrastructure is much less evolved, making it more open to new means of distribution. It is not surprising that some of the most interesting fintech opportunities for investment are in markets such as China and India as highlighted in chart 25 and 26.

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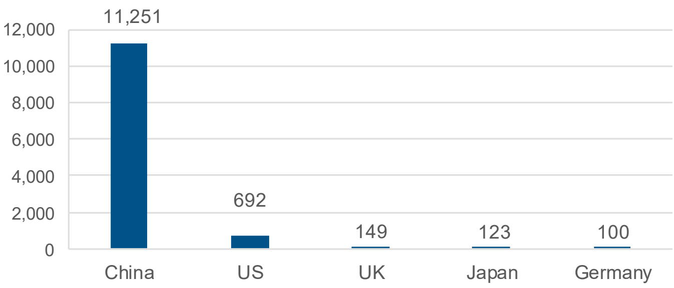
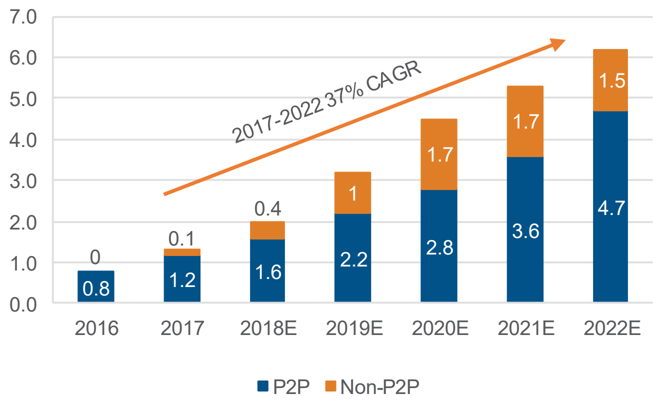
Chart 25: World's top ePayment markets (US$bn)



Source: CLSA, iresearch, Statista, eMarketer, 2016.

Chart 26: Growth in China fintech lending (rmb trn)

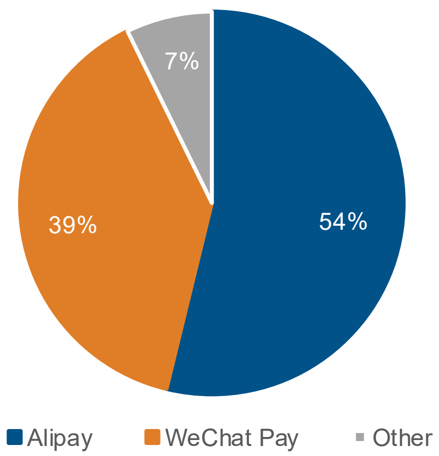


Source: WDZJ, NIFA, Macquarie Research, November 2017.

6. Broadening range of investable stocks

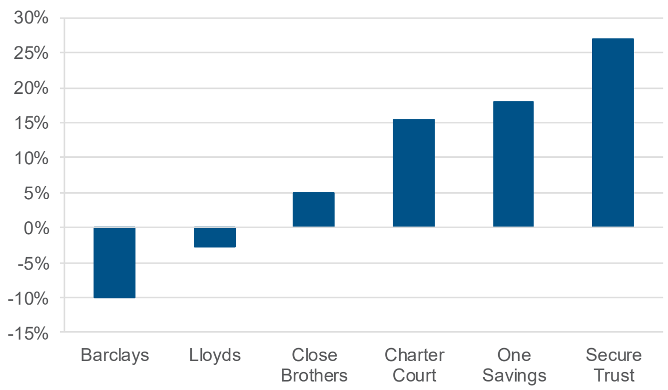
The financial sector is in a state of flux. As a manager of financials funds, the change in the sector's structural make-up is one of the most exciting prospects ahead. As we have argued already, it is not as simple as fintech models replacing traditional banking models as was once perceived. Benefits are coming to incumbents, some new entrants will succeed (witness Ant Financial in China as a money market fund manager), but equally changes in regulatory structures are providing opportunities (a good example is the exiting of major banks from professional buy-to-let lending in the UK allowing a plethora of smaller banks to enter this business - see chart 28). This results in banks which are growing fast albeit potentially too focused on one area of lending rather than the diversified model of major banks. We could write an entire note just focusing on the growth in fintech but for the sake of brevity we will focus on a few areas.

Chart 27: Market share of China's $5.9trn mobile payments market



Source: China Third-Party Mobile Payments Market Quarterly Monitoring Report 2018.

Chart 28: UK bank loan growth (2018)



Source: Polar Capital and Bloomberg, October 2018.

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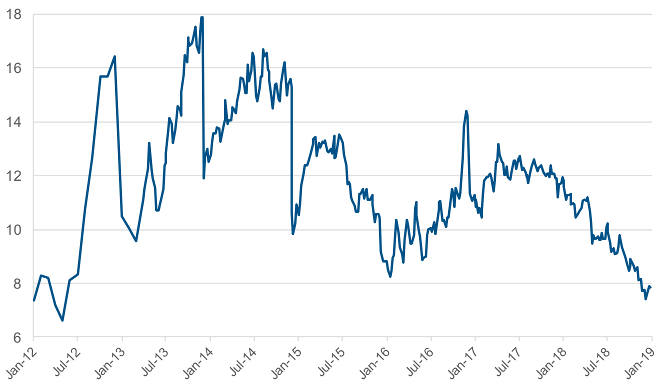
For further information, please contact your Polar Capital representative

Our thinking has always focused on transaction banking as the area which will come under greater pressure for banks. The material cost advantage of new digital models and large volume flows means this is an area where they are more likely to succeed. One such area susceptible to disruption is the current SWIFT correspondent banking model for cross-border payments which is relatively slow (3-5 days), expensive (£15-45 per transaction), requires manual entry (raising error risk) and lacks transparency. Innovative fintech alternatives through companies like Ripple (based on distributed ledger technology) and Earthport (hub and spoke model) offer the ability to transfer payments internationally at a fraction of the cost, at a negligible error rate (versus 4% under SWIFT), are fully compliant and traceable. However, fintech balance sheet models (taking of deposits and making loans) will suffer from the fact that prime customers will gravitate to incumbents (since they can get low-priced loans) and so second tier players will end up with worse asset quality. Meanwhile they will also be reliant on wholesale markets for funding which can be volatile and expensive. Consequently the benefits of lower costs can be offset quickly by lower margins and higher provision costs. However, in some areas (such as consumer loans), fintech models have become very material players in terms of market share. In the first half of 2018 it is estimated that they accounted for 13% of new lending in China (likely to have reduced materially subsequently because of new regulations).

7. Compelling valuations

The starting point is that the largest sector globally (within which the largest sub-sector globally is banks) has not only materially lagged markets but is now on exceptionally low valuations and this is an excellent buying opportunity. We accept that valuations alone are not enough for a sector to outperform but during a period where much of the market looks overstretched and with little evidence of material fundamental pressures ahead, the valuations attached to the banking sector look extremely low compared to historical levels. European banks are particularly attractive and at crisis levels although the correction of US banks last year has also pushed that sector to attractive levels. Much of this reflects a perception of balance sheet risk driven by memories of the global financial crisis and with little relevance to the reality of the balance sheets we see today or the risks inherent in those balance sheets. Ultimately, banks are in the business of writing risks so their valuations will reflect perceptions of future risks based on macro cycles, but just as investors can underestimate risks (as was the case prior to the global financial crisis), they can also overestimate those risks.

Chart 29: European banks price/earnings



Source: Bloomberg, 21 January 2019.

Chart 30: US banks price/earnings

Source: Bloomberg, 21 January 2019.

US banks have materially outperformed their European and Asian competitors (see chart 32) and though we view the entire sector as offering value, the most interesting opportunities on this basis are arguably in Europe. However, there are some notable differences between the sectors and one of the opportunities of investing in banks is that each country's macro cycle may differ. US banks recovered more quickly primarily because decisions were taken to recapitalise them at an earlier stage, they benefited from a flood of deposits exiting money market funds, and their underlying levels of profitability have always been better than European banks (with their valuations consequently reflecting that). Added to this the macro environment has been much weaker in Europe and the added pressure of the euro crisis further delayed bank recovery. Today we still view unresolved issues of how the euro is structured as continuing to place a discount on European banks and that evidence of a stronger economy will be necessary for a full recovery in the sector. Having said that, in view of changes to balance sheets it seems excessive to value dominant European banking franchises at such low valuations. On a relative basis to the broader market (chart 31), European

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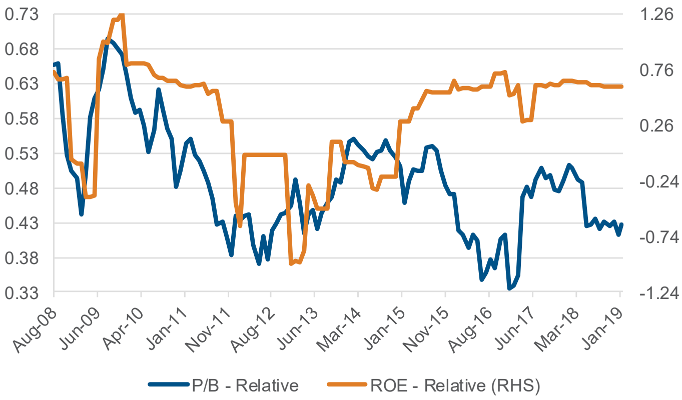
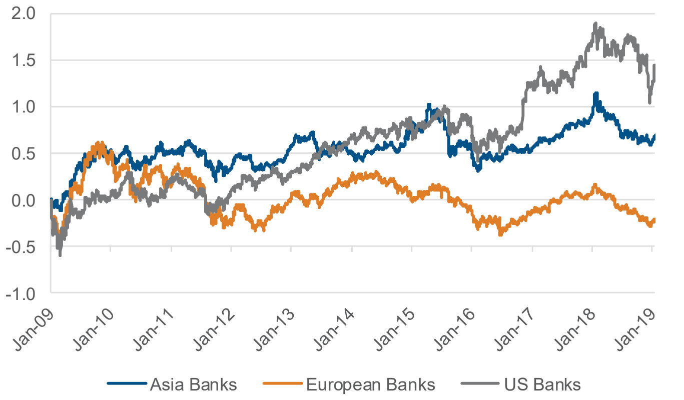
bank ROEs have recovered to their 2008 levels but their discount to the market has widened by 25%. We suspect the current elevated level of political risk in the region has contributed to this valuation disconnect.

Chart 31: European bank relative P/B & ROE



Source: Bloomberg, 25 January 2019.

Chart 32: MSCI Bank indices - Asia, US, Europe

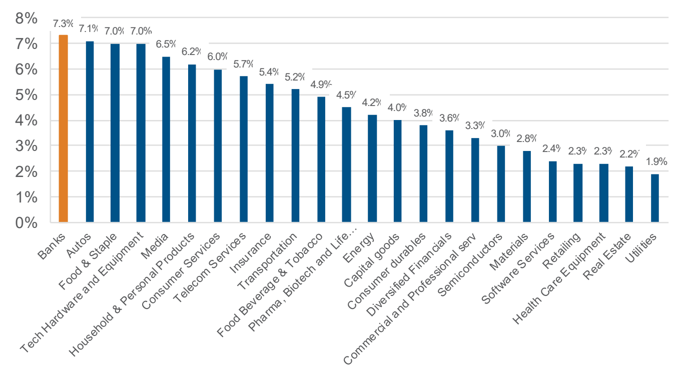


Source: Bloomberg, 25 January 2019.

8. Do not forget the dividend support

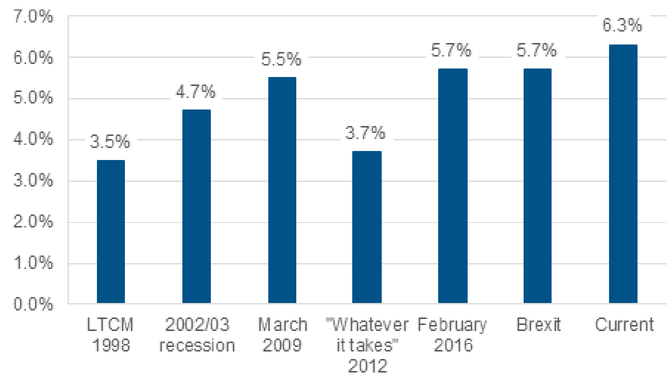
Underpinning our favourable view on the sector is the attractive dividend yield. Capital positions are strong and balance sheets risks are materially lower so the sustainability of that dividend yield looks much more secure than investors may be perceiving. The regulatory framework is now essentially set and so the only genuine risk we see to dividends is an acceleration of loan growth (which in itself would not be perceived as a negative by the market) leading to higher levels of retentions to fund that growth. For European banks, surplus capital positions are building while regulatory clarity and the long lead-in time for Basel IV (full implementation by 2027) is resulting in increasing amounts of capital being returned to shareholders. The relative dividend yield (at 1.5x the market level) is in line with the highs reached in 2016 and 2008 and the absolute yield of 6.3% is above where the sector has bottomed in the past (chart 34).

Chart 33: 2018 Capital return expectations (US)



Source: Barclays Research, 29 June 2018.

Chart 34: European bank dividend yields



Source: Autonomous Research, 3 January 2019.

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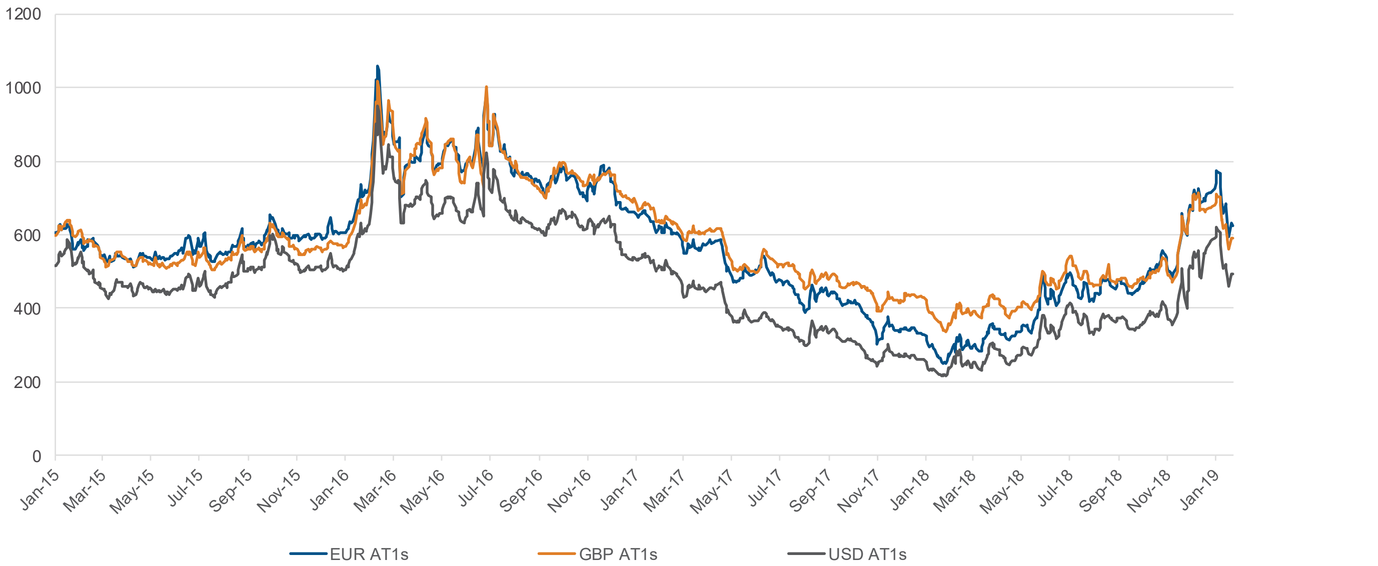
What could go wrong?

No two financial crises are the same and so it is always difficult to predict where the problems might be in the future but as a rule of thumb prior to a crisis we tend to see extended and very cheap wholesale funding markets, a sharp rise in asset prices (usually extended property markets) and risks which are hidden and difficult to assess (ie assets are off-balance sheets or in a complicated structure). A change in the macro or interest rate environment results in a reassessment and precipitates the crisis. In emerging markets, crises tend to be more about macro events (eg a collapse in the oil price or exports) or a collapse in access to overseas funding (again reflective of too lax access to foreign currency external funding). Reinhart and Rogoff in their study of 66 countries over 800 years (This time is different, 2010) have shown that while the 'this time is different' syndrome persists among policymakers and investors, in reality there are common themes (financial liberalisation, a housing boom, financial innovation and capital inflows) that can be identified ahead of financial crises.

Some of these issues are apparent in current markets, including low interest rates providing wholesale funding to ever higher risky assets (sometimes referred to as the 'flight to yield', although capital market liquidity has already tightened), extended property markets (which have already started to fall in major global cities) and risks which are more difficult to assess (such as the development of private finance markets). However, we have seen many quarters of rising rates and a number of quarters of falling property prices, yet bank balance sheets have shown hardly any stress at all. US banks have seen rising deposit costs but not seen a sharp rise in their loan/deposit ratios which does not suggest strain in access to funding, just a rising cost of funding. Non-performing loans continue to fall (as long as unemployment remains low we will not see a sharp rise in consumer or mortgage loan defaults) and even in areas such as commercial real estate lending, there are few examples of strain. We suspect that the very gradual rise in interest rates has also helped since usually this enables corporates to adjust to a new environment over a period of time.

That is not to say we are not worried about certain risks and non-bank financing is top of our list of potential sources of a crisis. There has been a significant increase in leveraged loan issuance over the past few years. We are concerned about the weakness in loan documentation and the use of adjusted earnings numbers to justify valuations but critically banks' exposure is substantially lower today than it was in the run-up to the global financial crisis ($80bn v $450bn) so they are far better positioned to weather volatility in these markets. There is growing evidence that the default experience in non-bank financing is beginning to deteriorate and that many of the worst risks are in the non-bank sector. For example, in US SNC credits (similar to syndicated loans), non-banks account for 22% of outstanding loan balances but 62% of criticised loans. Our main concern is that should non-bank financing experience problems, to what extent will this impact the banking sector. There has already been some repricing of credit risks (chart 35) in the second half of last year although the beginning of this year saw an improvement in risk perceptions, and we do sometimes wonder whether these risks are already so well flagged that their deterioration will not surprise and markets/banks will adjust ahead of time.

Chart 35: European AT1 spreads



Source: Bloomberg, 23 January 2019.

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Risks can also emanate from certain geographical regions which had become too reliant on offshore liquidity (the usual driver of emerging market crises) or are heavily indebted. Again, there are certain areas which spring to mind including China and southern Europe but in both cases it is debatable whether liquidity would dry up since China has access to huge domestic savings while the Europeans have already proven they are happy to provide funding for countries in distress. In both cases structural issues remain unresolved so these could precipitate a crisis. Cybercrime is a growing risk for the sector with analysis by Accenture finding that the annualised cost of cybercrime for financial service companies has increased over 40% in the past three years while the average number of breaches per company has tripled over the past five years, to 125 in 2017. As the industry rapidly digitises and as the sophistication of cyberattacks increases, the effectiveness of cyber defences will become increasingly important as a factor in franchise value and customer trust.

We believe the banking sector is well placed to weather any pressures and investors are assuming the worst without any reference to the risks on their balance sheets. Ultimately we may have to go through a downturn for investors to finally believe it so, bizarrely, a slowdown may be the catalyst for the recovery in the sector. With valuations at such low levels and the sector remaining the largest globally, we suspect the buying opportunity will not remain open for long as many underweight investors scramble for a position.

Polar Capital Global Financials Team
February 2019

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