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MERGENT

by FTSE Russell

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FEBRUARY 2018

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Banking Europe

A company and industry analysis

ICB code 8300

Key Points

Current Environment – Key Points

- European banks' performances declined over the last six months amid the low rate environment, with the European Central Bank (ECB) maintaining its benchmark interest rate at 0.0% on January 25, 2018.
- European banks still struggled with high levels of NPL, which affected bank profitability.
- Some global banks planned to expand their Eurozone businesses before Brexit, when Britain leaves the EU and the free-trade zone in March 2019.
- The US Federal Reserve cited Deutsche Bank in February 2018 for manipulating the market illegally, claiming that bank staff were aware that their actions were illegal.
- Banking stocks showed no significant gains in the second half of 2017, falling behind those of other industries and dragging down European markets.
- M&A among European banks fell from 95 deals in 2015 to 73 in 2016 and 57 in the first nine months of 2017, according to financial markets platform Dealogic.

Industry Profile – Key Points

- The Eurozone's banking system is the biggest among all regions globally and generates about 6.5% of the EU's annual GDP, with assets of €45.5 trillion (US\$59.5 trillion)
- The number of credit institutions in Europe has continued to decline since 2009 and in 2016 the figure dropped by 6% to 6,596 credit institutions from the previous year according to the European Banking Federation (EBF).
- As of June 30, 2017, Europe's largest financial institution was HSBC (LSE: HSBA), with assets of US\$2,492.44 billion followed by BNP Paribas (PAR: BNP) with US\$2,447.84 billion and Credit Agricole Group (PAR: ACA) was third with assets of US\$1,989.22 billion.
- Germany's KfW came top of Global Finance's list of 50 Safest European Banks in 2017, followed by Zuecher Kantonalbank and Landwirtschaftliche Rentenbank.

Market Trends and Outlook – Key Points

- The UK Government is using banks and building societies to detect and take action against illegal immigrants to persuade them to leave voluntarily.
- European banks have held back cash bonuses due to political uncertainty with traders are preparing for lower bonuses amid lower bank revenues and volatility.
- Barclays cut its bonus accrual by 25% in the third quarter of 2017, with Credit Suisse warning staff not to anticipate large pay rises.
- European banking watchdogs are allowing Fintech firms more entry to the banking sector as they implement the second Payment Services Directive (PSD2) but banks are delaying implementation.
- Moody's Investor Service expects European banks to be stable in 2018 as the sector receives support from steady economic growth across the region, with bank profitability expected to remain steady as credit growth surges across the region.

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Publisher Jonathan Worrall

Director John Pedernales

Managing editor Peter O'Shea

Research Analyst Salhazreeni Azua

Website http://www.mergentarchives.com/ http://www.mergentindustryreports.com/

Customer Service 1800 342 5647 or 704 559 7601 email: customerservice@mergent.com

Sales Enquiries For sales inquiries contact your local Mergent Representative

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Current Environment

Sector Overview

European banks' performances declined over the last six months amid a prolonged low interest rate environment. The European Central Bank (ECB) maintained its benchmark interest rate at 0.0% on January 25, 2018, with the marginal lending rate remaining at 0.25% and deposit rate at -0.4%.

Profitability remained a challenge but improved slightly thanks to more confident sentiment, with return on equity (RoE) yp by 130 basis points from a year earlier to 7% on June 30, 2017, according to the European Banking Authority (EBA). The level of recovery differed in different countries depending on the nature of their home markets, the types of underlying collateral and strength of creditors' rights. A number of banks concentrated on cleaning their balance sheets by selling off or lessening non-performing loans (NPL).

Many banks still struggled with high levels of NPL, despite a 5.5% improvement in the aggregate NPL ratio in the second quarter of 2017, compared with 6.5% a year earlier. Prolonged high NPL levels affected profitability, keeping capital in unproductive assets and lowering lending capacity. European banks must intensify their efforts to combat the problems by creating credible NPL strategies and improving the efficiency of secondary markets for distressed assets, collateral enforcement and insolvency and restructuring frameworks. Banking supervisors advised banks to take advantage of the economic current upswing to clean up their finances.

Nevertheless, European banks continued to recover and further strengthen their capital levels

with a Common Equity Tier 1 (CET1) ratio of 14.3% in the second quarter of 2017, a 70-basis point rose from a year earlier, according to the EBA. Major Eurozone banks, including those in Italy and France, saw positive results that surpassed analysts' expectations due to reduced costs and a strengthening economy.

Some global banks planned to expand their Eurozone businesses before Brexit, when Britain leaves the EU and the free-trade zone in March 2019. After that, banks operating in London, including non-UK banks that had been using London as their base to do business in Europe, will lose their automatic right to do business in the EU.

There are 12 banks with well defined plans to expand their Eurozone business; eight of them having applied for licenses to relocate from London and the other four signaling plans to significantly intensify their activities in the 19-member Eurozone, of which Britain is not a member. Banks wishing to continue their operations in Britain also need to apply for licenses through the UK banking supervisor, the Prudential Regulatory Authority.

The sector continued to be rife with scandals and fines involving the region's major banks, with Deutsche Bank being cited again, after paying US\$220 million to dozens of US states in October 2017 because of the Libor rate fixing scandal. The US Federal Reserve cited Deutsche Bank in February 2018 for manipulating the market illegally and claimed that bank staff were aware that their actions were illegal.

It claimed that Deutsche Bank Securities' traders sought to manipulate the benchmark rate for annual swap transactions, ISDAfix, for at least five years to May 2012, the investigation disclosed. The Commodity Futures Trading Commission said this enabled them to gain advantage from the firm's positions on cash-settled options on interest-rate swaps. Deutsche Bank agreed to pay US\$70 million in settlement but neither admitted nor denied the accusation, saying that it had cooperated with the US Commodity Futures Trading Commission's (CFTC) investigation.

Deutsche Bank reported a €497 million (US\$618.6 million) loss in 2017, mainly due to a plunge in investment banking coupled with tax changes in the US. The result was worse than analysts' expectations and was the bank's third consecutive annual loss.

Sector Performance

Banking stocks showed no significant gains in the second half of 2017, falling behind those of other industries and dragging down European markets. A positive performance in the third quarter of 2017 was not enough to offset an overall subdued performance during the review period, with only a few firms' shares trading above the flat line.

European shares recorded their biggest weekly loss in more than a year in the first week of February 2018, following Deutsche Bank's disappointing results, which dragged down the banking sector. The FTSE 100, which includes Britain's biggest listed companies, closed at 7,157 on February 6, 2018, 146 points, or 2.42%, down.

Deutsche Bank's stock price dropped by more than 10% to \leq 13.11 (US \leq 16.32) on February 7, 2017, from \leq 14.82 (US \leq 18.44) on February 1, after the disclosure of its 2017 annual results, with reported revenue at a seven-year record low.

Company	Country	Ticker	Share Price on Jan 26, 2018	Share Price on July 25, 2017	Rise / Fall %	
Banco Santander SA	Spain	BM: SAN	€6.06	€5.81	4.3	
Barclays Plc	UK	LSE: BARC	£210.00	£209.70	0.1	
BBVA SA	Spain	BM: BBVA	€7.63	€7.67	-0.5	
BNP Paribas SA	France	PAR: BNP	€68.28	€65.17	4.8	
Commerzbank AG	Germany	FSE: CBK	€13.71	€10.84	26.5	
Credit Agricole SA	France	PAR: ACA	€15.42	€14.85	3.8	
Credit Suisse Group AG	Switzerland	NYSE: CS	US\$19.98	US\$15.01	33.1	
Deutsche Bank AG	Germany	FSE: DBK	€15.70	€16.32	-3.8	
HSBC Holdings Plc	UK	LSE: HSBA	£770.60	£756.30	0.1	
Lloyds Banking Group Plc	UK	LSE: LLOY	£71.26	£69.00	3.3	
Royal Bank of Scotland Plc	UK	LSE: RBS	£301.60	£251.20	20.1	
UBS AG	Switzerland	SWX: UBSG	€19.36	€17.27	12.1	
Average Rise / Fall %					8.7	

Table 1: Performances of Leading European Banks in Six Months

Source: Mergent analysis, 2018

Leading European banks' share prices rose by an average 8.7% in the six-month period, with those of most of the banks showing no significant movement.

Leading Players

BNP Paribas SA (PAR: BNP)

France's largest bank BNP Paribas provides financial services in 74 countries and employs more than 192,092 people, 145,963 of them in Europe. Its revenues totaled $\leq 10,394$ million (US\$12,936.4 million) in the third quarter of 2017, 1.8% down from a year earlier, due to unfavorable foreign exchange, while gross operating income fell by 3.3% to $\leq 3,261$ million (US\$4,058.6 million).

BNP Paribas' retail banking and service revenues totaled €3,918 million (US\$4,876.3 million) in the third quarter of 2017, a 0.1% year-on-year decline, with 6% growth in loans and 8% in deposits more than offset by low interest rates. The bank's fully-loaded Basel III CET1 ratio was 11.8% on September 30, 2017, 10 basis points up from June 30, thanks to strong capital generation.

Barclays Plc (LSE: BARC)

Barclays, Britain's second biggest bank by assets, reported a pretax profit of £3,448 million (US\$4,870.6 million) in the first nine months of 2017, up 19% from a year earlier. The increase was due to an 8% reduction in operating expenses, partly offset by a 2% decline in income.

Barclay's fully loaded CRD IV CET1 ratio rose to 13.1% in September 2017, from 12.4% in December 2016, driven by organic capital generation due to continuing operations and advantages from the proportional consolidation of Barclays Africa Group Ltd (BAGL). The result was slightly offset by adverse movements in reserves.

Credit Suisse Group AG (NYSE: CS)

Founded in 1856, Credit Suisse Group AG operates in 50 countries globally, employs 46,720 people

from more than 150 nations, and had total assets of CHF788,690 million (US\$840396.5 million) as of September 30, 2017.

Credit Suisse's net revenues were CHF4,972 million (US\$5298 million) in the third quarter of 2017, 8% down from CHF5,396 million (US\$5749.8 million) a year earlier, mainly due to lower net revenues from Swiss universal bank and global markets and increased negative net revenues from its strategic resolution unit. These were offset partly by net revenue growth in international wealth management. The bank's Basel II CET1 ratio fell by ten basis points to 14.0%.

Lloyds Banking Group Plc (LSE: LLOY)

Founded on June 3, 1765, in Birmingham, England, Lloyds is one of the UK's major banks, offering a broad range of banking and financial services, and focusing on its personal and commercial customers. Euromoney Awards for Excellence has named Lloyds the Best Bank in Western Europe and the World's Best Bank for Diversity and Inclusion in 2017.

Lloyds' total income in the nine months to September 30, 2017, was £13,893 million (US\$19,625.3 million), 6% up from a year earlier, due to net interest and other income growth. There were also solid increases in net interest income, including £186 million (US\$262.7 million) from credit card firm MBNA, purchased by Lloyds in June 2017, as well as stable other income. Its net interest income was up 6% to £9,117 million (US\$12,878.7 million), with net interest margin rising by 13 basis points to 2.85%, partially offset by a 1% decline in average interest-earning assets.

The bank's underlying profit rose to £6,567 million (US\$9,276.5 million) in the first nine months of 2017, up by 8% from a year earlier, amid higher income.

Mergers and Acquisitions

Cross-border bank M&A activity in Europe was not vigorous in the fragmented industry over the

last six months. The region's regulators have been encouraging banks to consolidate for years.

M&A among European banks fell from 95 deals in 2015 to 73 in 2016 and 57 in the first nine months of 2017, according to financial markets platform Dealogic. The number might pick up in 2018 as banks take steps to reinforce their balance sheets or rearrange their business models.

Regulator argue that cross-border M&A could result in more diverse lenders able to resist economic pressures better. However, new regulations could also stimulate more deals as the increase in capital requirements for European banks will be hard on smaller banks that are not well known in the market, potentially making them a target for acquisition in the overbanked Europe sector.

There were a few notable deals however. The European Commission approved Banco Santander's acquisition of Banco Popular Español SA on August 8, 2017. The approval, under the EU Merger Regulation, followed its previous approval of the resolution scheme of Banco Popular on June 7, 2017. Santander purchased Banco Popular for a symbolic fee of ≤ 1 (US ≤ 1.4126) in an overnight auction to rescue Banco Popular from collapsing.



Industry Profile

Industry Size and Value

The Eurozone's banking system is the biggest among all regions globally, with consolidated assets three times those of the US system. The sector creates approximately 6.5% of the EU's annual GDP, has assets of \leq 45.5 trillion (US\$59.5 trillion). The number of credit institutions in Europe keep declining since 2009 and in 2016 the figure dropped by 6% to 6,596 credit institutions from the previous year according to the European Banking Federation (EBF).

Almost all countries in the EU experienced a decline in the number of credit institutions over the last few years, with the largest reductions in the Netherlands by 113 units followed by Germany (72 units) and Austria (63 units), according to the European Central Bank (ECB). Meanwhile, Slovakia was the only country that recorded an increase in the number of credit institutions by two units.

The number of bank branches in the EU banking sector has also seen continuous declines since 2008. The number of branches totaled 189,270 in 2016, down 4.6% from 198,391 in 2015 according to data from EBF. In line with this, the number of bank staff is also declining since the ECB's data sequences started in 1997. The EU five biggest economies remained to be the five countries with the biggest number of employees in the banking sector, which represents about 68% of the total staff employed.

Europe's largest financial institution as of June 30, 2017, was HSBC (LSE: HSBA), with assets of US\$2,492.44 billion. BNP Paribas (PAR: BNP)

Rank	Banking Group	Country
1	KfW	Germany
2	Zuecher Kantonalbank	Switzerland
3	Landwirtschaftliche Rentenbank	Germany
4	L-Bank	Germany
5	Bank Nederlanse Gemeenten	Netherlands
6	Nederlandse Waterschapsbank N.V.	Netherlands
7	NRW.BANK	Germany
8	Banque et Caisse d'Epargne de l'Etat	Luxembourg
9	Caisse des Depots et Consignations (CDC)	France
10	DZ Bank	Germany

Table 2: Top Ten Safest European Banks in 2017 (Rating as of July 31, 2017)

Source: Global Finance's $\rm 26^{th}$ annual World's Safest Banks ranking

Rank	Banking Group	Country	Market Capitalization(billion)
1	HSBC Holdings	UK	£150.66
2	Banco Santander	Spain	€88.38
3	Lloyds Banking Group	UK	£48.56
4	BNP Paribas	France	€78.20
5	UBS	Switzerland	US\$72.05
6	Banco Bilbao Vizcaya Argentaria (BBVA)	Spain	€47.50
7	Barclays	UK	£34.74
8	Royal Bank of Scotland Group	UK	£32.96
9	ING Group	Netherlands	US\$71.99
10	Intesa Sanpaolo	Italy	€46.09

Table 3: Top Ten European Banks Measured by Market Capitalization (as of December 2017)

Source: Bankers Almanac World and Country Bank Rankings

followed with US\$2,447.84 billion and Credit Agricole Group (PAR: ACA) was third with assets totaling US\$1,989.22 billion. The largest investment banks' illiquid assets totaled more than half of their combined shareholders' equity in 2016. At the end of June 2016, Deutsche Bank, Credit Suisse Group (SWX: CSGN) and Barclays Plc's (LSE: BARC) combined Level 3 assets totaled US\$102.5 billion.

The number of EU banking staff has steadily declined since 2009, and by the end of 2014 totaled 2,889,320, a 2.5% year-on-year drop, according to the European Banking Federation (EBF). The average number of inhabitants per bank employee increased by 2.6% to 175.4 in 2014, from 171 in 2013. The number of bank branches dropped by 3.6% to 204,317, from 211,861 the previous year, bringing to 34,150 the number of closures since 2009.

Germany's KfW (OTC: KFW) came top of Global Finance's list of 50 Safest European Banks in 2016, and five German banks were among the top ten. Banks were evaluated by long-term foreign currency ratings by Moody's, Standard & Poor's, and Fitch before being included in the list.

Industry Highlights

The exit of the UK from the EU could see Europe's financial center shift from London. Uncertainty about the country's access to the EU single market

and free movement of workers are the main reasons that some banks are considering relocating from the UK.

In addition, European banks have reduced their exposure to Britain since the Brexit vote, withdrawing €350 billion (US\$435.61 billion) of UKrelated assets from their balance sheets over 12 months, representing 17% of UK related assets in the region. The banks' move is one of their measures to defend themselves from any possible threat of potential losses if the UK exit from EU stimulate uncertainty over financial contracts.

Banks in the 27 other EU countries reduced their total assets that was bind to the UK, worth from €1.94 trillion (US\$2.41 trillion) to €1.59 trillion (US\$1.98 trillion) during the referendum from June 2016 to June 2017, according to official EU data reported on November 24, 2017. Banks' liabilities also fell during the same time, falling by 19.8% to €1.34 trillion (US\$1.67 trillion) from €1.67 trillion (US\$2.08 trillion).

Policy and Regulatory Environment

During the 2008 crisis, governments realized that systemic bank failure would affect huge numbers of people with pension funds and individual deposits. Governments also realized that protecting the real economy required huge injections of public money. To protect the financial system, the EU and several individual governments established commissions to evaluate what structural reforms were needed.

In 2012, the European Commission (EC) formed a High-Level Expert Group to examine possible banking reforms. The group's report, published in October 2012, focused on five suggestions: mandatory separation of proprietary trading and other high-risk trading, disaster management, amendments to the use of bail-in instruments to settle debts, toughening of capital requirements and increasing bank governance and control.

One of those measures was the Payment Services Directive (PSD1), adopted in 2007, in order to create a safer and more innovative payment services across the EU by providing legal foundation for an EU single market for payment. As the banking sector develops and embraces new technologies, banks and service providers are coming up with a range of new payment services.

As a result, the Commission proposed to review PSD1 in 2013 to modernize it to take into consideration of the new types of payment services. These new services were previously unregulated, and they offer easier and more convenience payment alternative compared to traditional banking, and often cheaper. Many customers prefer to use new payment methods, making further regulation necessary. The Revised Payment Service Directive (PSD2) came into force on January 13, 2018 will facilitate innovation, competition and efficiency in EU payments. By the implementation of the PSD2, banks are required to give access of their clients' account and data to their rival firms if only the clients permit to do so.

The EU has implemented Basel III to toughen the resilience of the European banking sector. Basel III is a complete set of reform measures aimed at improving banks' ability to absorb financial and economic shocks, enhance risk management and toughen banks' transparency and disclosures. Developed by the Basel Committee, it was approved by the G20 countries in November 2010 and adopted by the EU in 2013. Its provisions are being implemented gradually up to 2019.

Intensification of regulation and supervision of European banks since the financial crisis has been positive for bank fundamentals. Basel III rules have helped to boost banks' quantity and quality of capital and help them take on more risk.

However, the rules have put further pressure on weaker banks as many of them have been required to increase their capital reserves. Although requiring banks to maintain higher levels of capital will limit the amount of money they can lend, it will make them more able to withstand future crises.



Environmental and Social Governance

Although it would not seem to have a significant effect on environmental sustainability, the European banking industry has intensified its efforts over the last year in respect to environmental and social governance. The EU is considering reducing capital charges for banks' green investments to bolster the green economy and combat climate change, the European Commission's (EC) Vice President Valdis Dombrovskis told the One Planet summit in France on December 12, 2017.

This hopes to support the green economy, help the EU to achieve its climate change targets and reduce carbon emissions. The EU was due to present its plans, including climate change financing, in March 2017, aiming to achieve a 40% reduction in carbon emissions by 2030, and forecasts that Europe will need €18 billion (US\$22.40 billion) in additional annual investment to achieve that target.

Barclays' Environmental Approach

Barclays Plc together with TC Bank (TSX: TD) have created new financial products designed to help the development of a more sustainable economy, following similar moves by ING (AMS: INGA) and Triodos. Barclays Corporate Banking has launched a suite of specially customized green finance products such as Green Loans, Green Asset Finance and Green Innovation Finance. These products will help clients fund more sustainability projects in the UK and around the world.

The products were devised after Barclay's realized the need to support companies of all sizes and across a range of industries to fulfill their sustainability ambitions. Demand for financial support for sustainability initiatives is increasing as businesses become more aware of the many commercial benefits of supporting sustainability and helping to reach the Paris Climate Agreement's targets.

Supporting low-carbon solutions can help prevent costs rises and diminished revenue potential, and meet regulatory requirements, while helping businesses prevent reputational risk and boosting their environmental credentials.

BNP Paribas and UNEP Collaborate on Climate Goals

French lender BNP Paribas and the United Nations Environment Program (UNEP) have begun collaborating on a Sustainable Finance Facilities initiative to raise capital for sustainable economic growth in emerging countries. The collaboration, signed at the One Planet Summit, aims to raise US\$10 billion by 2025. It is the first collaboration between companies, investors and civil society organizations, and is supported by national governments.

It will identify commercial projects that have noticeable effects on the environment and society,

and support smallholder projects associated with sustainability efforts, such as renewable energy and water access, responsible agriculture, and agroforestry. The collaboration will direct private sector finance to these projects through thirdparty global investors and green loans.

The projects will help build climate resistance and fulfill water, energy and food security targets in the United Nations Development Program's (UNDP) sustainable development goals, aiming to ease poverty, protect the planet and promote peace and prosperity. BNP Paribas and UNEP's partnership will focus on fighting climate change and its effects, and expects participation from various parties, including stakeholders, local communities and others in combating climate change issues.

ESG Ratings

FTSE Russell has developed ESG Ratings as a way to measure a company's risk and performance across a variety of Environmental, Social and Governance (ESG) areas. A risk relative scoring method is used, where a company's exposure to each theme influences indicator applicability and weighting rather than taking a generic or sector only approach. The ESG Ratings and data model allows investors to understand a company's exposure to, and management of, ESG issues in multiple dimensions. Selected ESG ratings for leading companies in the sector are below.

Company	Country	Market Cap USD(m)	ICB Subsector	ESG Rating
HSBC Hldgs	United Kingdom	215,234	Banks	4.2
Banco Santander	Spain	116,966	Banks	4.3
BNP Paribas	France	90,002	Banks	4.2
ING Group CVA	Netherlands	77,455	Banks	4.0
Lloyds Banking Group	United Kingdom	70,963	Banks	4.0
UBS Group AG	Switzerland	70,828	Banks	4.5
Banco Bilbao Vizcaya	Spain	62,484	Banks	3.8
Intesa Sanpaolo	Italy	52,855	Banks	4.2
Credit Suisse Group	Switzerland	49,552	Banks	4.2
Sberbank	Russia	49,386	Banks	3.0
Unicredit	Italy	48,845	Banks	4.3
Barclays	United Kingdom	48,313	Banks	4.3
Societe Generale	France	42,495	Banks	4.0
Nordea Bank AB	Sweden	39,074	Banks	4.4
Deutsche Bank	Germany	34,070	Banks	3.9
Standard Chartered	United Kingdom	30,938	Banks	3.9
Danske Bank A/S	Denmark	28,248	Banks	4.0
Swedbank AB Series A	Sweden	26,655	Banks	4.1
KBC Group	Belgium	26,506	Banks	3.6

Table 4: ESG Ratings of Leading Banks

Source: FTSE Russell



Market Trends & Outlook

UK Banks Checking on Illegal Immigrants

The UK Government is using banks and building societies to detect and take action against illegal immigrants, one of several measures in the Immigration Act 2016 to persuade them to leave voluntarily.

Banks checked account holders in January 2018 as the Government requires banks and building societies to determine immigration status when opening a current account. The new measures require them to check all active accounts quarterly against details of known illegal migrants held by anti-fraud organization Credit Industry Fraud Avoidance System (CIFAS).

There are 70 million accounts to check each quarter and the Home Office expects to identify 6,000 visa overstayers, failed asylum seekers and foreign national offenders facing deportation in the first year. Banks must inform the Home Office of any illegal migrant account holders and will be instructed to take action, including closing the account. The authorities will freeze identified accounts to encourage voluntary departure, but funds in the accounts will be secured.

However, there are concerns that banks could mistakenly freeze thousands of legitimate accounts and there is little effective appeal against account closure and those affected are unlikely to have funds to obtain legal advice. The Home Office said that banks are not obliged to contact account holders to request additional documentary evidence for the check and legitimate clients with limited access to money or those with a single bank account may not be able to pay mortgages or other debts.

European Banks Anticipate Low Bonuses

European banks have held back cash due to political uncertainty and this indicates lower bonuses for bankers throughout Europe. Traders are preparing for lower bonuses as 2017 bank revenues were weak compared with those of US peers due to low volatility. Recruiters are also notifying candidates of the high possibility that banks will not be giving bonuses in upcoming months.

Barclays cut its bonus accrual by 25% in the third quarter of 2017, with the chief executive officer of the Corporate and Investment division, Tim Throsby, pointing out that it will reduce the bonus pool at the securities unit. He told staff that he was enhancing divisions between those who get raises and those who do not to promote more "competitive zeal" in the unit.

Credit Suisse has also warned staff not to anticipate any large pay rises because the bank is just recovering after two years of restructuring. During the first nine months of 2017, the average pay in the bank's Global Markets and Investment Banking division fell by 10% to CHF160,000 (US\$170,534.4) and in the Capital Markets division by 7% to CHF290,000 (US\$309,093.6). However, Deutsche Bank said that bonuses for 2017 will be given as normal, after an almost 80% fall in its 2016 bonus pool, making 2017 bonuses decidedly larger than in 2016. The profit generated by the bank's corporate and investment division in the first nine months of 2017 dropped by 25% from a year earlier. The bank has spent large sums on hiring staff, including directors and managing directors. Deutsche has delayed its 2017 bonus announcement until March 2018, repeating the delay in 2017.

Lowering or delaying bonuses discourages employees and leads them to look for new opportunities. It will also make it hard for banks to hire because candidates or jobseekers are likely to stay away from banks that defer or reduce bonuses.

However, bonuses might eventually be higher in the UK as Bank of England Governor Mark Carney said that the EU cap on bonuses at double a banker's salary could be lifted after Brexit in March 2019.

European Banks Delay Fintech

European banking watchdogs are allowing Fintech firms more entry to the banking sector as they implement the second Payment Services Directive (PSD2) that will start a new era of open banking. British regulators have introduced Open Banking in the UK. Fintech firms were supposed to start entering mainstream banking in January 2018 but have become frustrated as banks are delaying implementation.

Six out of nine British banks that should be applying the new rules have asked for an extension to the deadline, which overlaps the introduction of Europe's PSD2. Some Fintech firms have to put their own plans on hold or scrapped them altogether due to the delay. Banks have asked for extensions ranging from a couple of weeks to a year for digitizing some or all of their customer data. Only Lloyds Banking Group (LSE: LLOY), Danske Bank UK (Danske) and Allied Irish Banks (LSE: AIBG) have all the technology needed to share all of their customers' data by the deadline. Those seeking extension include The Royal Bank of Scotland (LSE: RBS), HSBC (LSE: HSBA), Barclays (BARC.L), Santander UK (LSE: SAN), Bank of Ireland (LSE: BIRG) and Nationwide Building Society (LSE: POB). Implementation costs, plus added competition from Fintech firms, could cost banks between 6% and 10% of revenues, making implementation delays inevitable.

The biggest banks could lose more than £1 billion (US\$1.4126 billion) in aggregate profits by 2023, according to the Bank of England. Banks also need extra time to ensure the security of data sharing technology. A lack of competition before the new policy favored the big banks, another reason that they slow to implement new Fintech rules.

The new rules not only provide opportunities for Fintech but also make it easier to apply new technology and hasten the spread of online banking, but they also increase the risk of cyberattacks. They mean that more people will have access to customer data, which increases the risk of cyber-criminals gaining unauthorized access to bank systems. About 55% of banks foresee rising operational risk in 2018, according to a European Banking Association (EBA) report, up from 43% in 2016 and 35% in 2015.

In Europe, 98.2 million people fell victim to cybercrime in 2017, losing €23.3 billion (US\$29 billion), with 3.4 million falling victim in the Netherlands, a study by security company Symantec found. A global cyber-attack struck leading French bank BNP Paribas in late June 2017, blocking some staff computers. The attack started in Russia and Ukraine and expanded to France. Italy's UniCredit was also hit by cyber-attacks in June and July 2017, following previous attacks in September and October 2016. Hackers obtained biographical and loan data from 400,000 customers in the attack.

Symantec concludes that people overestimate their knowledge of digital security. The average cybercrime victim uses multiple devices such as computers, smartphones, smart watches and other smart household appliances. Many of them use the same password for multiple accounts, making it easy for hackers to enter other accounts if they obtain a user's details at one site.

The annual cost of cybercrime for financial institutions is higher than for other industries, averaging US\$16.5 million, according to the global research institution, Ponemon Institute, and they have strengthened the security of their data systems and critical client information.

One of France's largest lenders, Credit Agricole SA, spends €100 million (US\$124.46 million) on cybersecurity every year. UK-based HSBC has joined global big banks such as JPMorgan Chase (NYSE: JPM) and American Express (NYSE: AXP) in jointly investing US\$40 million in cybersecurity company Menlo Security.

Market Outlook

Moody's Investor Service expects European banks to be stable in 2018 as the sector receives support from steady economic growth across the region. Loan quality is improving gradually and this will continue as economies recover. However, banks with high levels of non-performing loans (NPL) are hindering the reduction of problem loan provisions.

Eurozone banks' profitability is expected to remain steady as credit growth surges across the region, offsetting pressure on net interest margins, due to persistent low interest rates, asset re-pricing and fierce competition. However, their profits are still low compared to global standards.

Weak cost efficiency has led banks to simplify operations by investing in digitization and increasing branch closures. They will continue to develop technology, but this will require heavy investment and will take time. As banks turn digital, Fintech firms and giant tech firms such as Apple and Amazon are making their way into the industry, but Standard & Poor's (S&P) rating agency projects that they will not pose a threat to big banks in the short term. However, long term, tech giants' products such as Apple Pay, Google Pay and Samsung Pay could affect banks' payment systems business. These possible threats are expected to materialize faster in Europe due to PSD2 sin the EU and Open Banking in the UK.

Europe's economy is expected to continue to recover this year and gain growth momentum despite concerns about the global economy. The European Banking Federation (EBF) forecasts that Eurozone GDP will grow by 1.9% in 2018, with bank consolidation expected to continue, especially in fragmented systems such as those of Austria, Germany and Italy.



France

Sector Overview

France's banking system is solid and steady and is responding better to low interest rates better than many of its Eurozone rivals such as Germany and Italy, due to its healthier balance sheets and more sustainable business models. The economy has benefited in recent months from the rebound in its main trade partners' economies, and the election of President Emmanuel Macron has increased business and consumer confidence.

There are four French banks among the top nine European banks according to The Banker magazine's latest July 2017 list. In addition, French banks outperform their peers in other European countries on green-related issues, according to the new ranking by investment NGO ShareAction.

A high proportion, 99%, of the population has a bank account and there were 364 banks with 37,261 branches (549 per one million inhabitants) and 58,480 automated teller machines (ATMs) in France in 2016, according to the European Central Bank (ECB). Banks contributed 2.5% to total added value according to French National Institute of Statistics and Economic Studies (Insee) 2016 and were the leading private sector employers with 370,300 staff, or 2.3% of country's workforce in 2016, according to the French Banking Federation (FBF).

EU banks, including those in France, must implement the EU regulator's new capital requirements that will lead to a capital increase of more than 15% over ten years. France has concerns about raised capital ratios, with the Minister of Economy and Finance, Bruno Le Maire saying the country did not want any further increment and would oppose to the new rules, after a meeting of EU finance ministers in Luxembourg in October 2017.

The Government is concerned that the changes will harm banks' growth and put them at a disadvantage with their US counterparts. However, the head of the Bank of France believes French banks will be able to cover the increased capital needs under new international rules while maintaining earnings.

Anticipating a move of banks and financial institutions out of London following Brexit, France has intensified its efforts to attract banks and make Paris the main financial center in Europe. Prime Minister Édouard Philippe presented a proposal on the subject on July 7, 2017, advocating the abolition of the highest bracket of a payroll tax levied on each salaried employee and nullifying a plan to raise the tax on financial transactions by 0.3%.

Leading Banks

Credit Agricole SA (PAR: ACA)

Credit Agricole SA is one of France's leading financial service groups, with 11,100 branches worldwide, 140,000 employees and 27 million retail customers in France.

Its net income was $\leq 1,066$ million (US\$1.326.7 million) in the third quarter of 2017, a 42.8% drop from the solid performance a year earlier. Earnings per share fell by 6.4% to ≤ 0.31 (US\$0.39) with a Common Equity Tier 1 ratio of 12%. The integration of pioneer investments costs and costs of acquiring three Italian banks also contributed to the fall.

However, Credit Agricole SA had positive results for the first nine months of 2017, with an 8% increase in underlying revenues to $\leq 13,962$ million (US17,377.1 million), due to improvements in all business lines.

Société Générale SA (PAR: GLE)

Société Générale is one of France's largest financial service groups, with more than 148,000 workers in 76 countries and more than 30 million customers worldwide. Its net banking income fell to \leq 5.90 billion (US\$7.34 billion) in the third quarter of 2017, down 1.8% from \leq 6.01 billion (US\$7.48 billion) a year earlier, due to a 14.7% drop in global banking and investor solutions' revenue because of a low volatility level and a 6.6% fall in French retail banking amid an ongoing low interest rate environment.

Net international retail banking and financial services income increased by 3.8% to €1.988 billion (US\$2.474 billion), thanks to solid commercial momentum in all businesses and regions. Its Basel III Common Equity Tier 1 ratio was 11.7% at the end of September 2017, compared to 11.4% a year earlier.

Market Outlook

Moody's Investors Services maintained its stable outlook for France's banking sector, saying that an improving economy and high confidence in President Emmanuel Macron's reforms will support healthy loan quality; it is forecasting that banks' creditworthiness will evolve over the next 12 months. Interest rates remain low and this may cause pressure on bank earnings while boosting credit demand, with lending increasing in all segments, excluding the public sector.

Bank liquidity and funding, which have grown over the past two years, are expected to remain at current levels as the net stable funding ratio came into effect in January 2018. Profits will likely stabilize or fall slightly due to the deterioration of retail banking margins, increasing regulatory fees and restructuring costs. However, elections in April and May 2018 may cause financial sector uncertainties as France's dominant role in the EU could change.

Even so, the European Central Bank raised its latest growth forecasts for 2018-2019 to 1.8%, from 1.6%, as the country's economic growth has exceeded expectations due to business and household investment.



Germany

Sector Overview

Germany's banking sector remained resilient over the last six months, with the banks, having continually raised their capital since 2010, holding adequate reserves and savings banks in a much better position than before the financial crisis. However, profitability remained low and increasingly came under pressure due to very low interest rates, as business models are highly geared to interest income. The costs of complying with new regulations and supervision, and high cost structures hampered profit growth.

Germany is over-banked and this has led to continuous consolidation and low profit margins. There are more banks proportional to the population than many other developed countries, 1,800 - about 1,000 more than in any other European country - with assets totaling ξ 7,836 billion (US\$9,752.7 billion) in 2016.

Private banks control 30% of the market, with Deutsche Bank and Commerzbank, which dominate the sector, holding total assets of \in 2,010.9 billion (US\$2,502.8 billion) as of September 30, 2017. Publicly owned savings banks, partly associated with local governments, carry out 50% of publicly-owned banking transactions and cooperative banks the remainder.

There has been an influx of foreign banks into Germany because of Brexodus, the exit of individuals and corporations from the UK due to Brexit. Businesses that are near to local markets are likely to relocate to Frankfurt and this will boost Germany's financial system. German banks see the influx as an opportunity to regenerate the industry and improve their lobbying leverage. The Association of German Banks (BdB) expects to become the international lobby in Europe, with the group considering merging with the Foreign Bankers Association (VAB).

Leading Banks

Deutsche Bank AG (FSE: DBK)

Frankfurt-based Deutsche Bank AG provides financial services around the world, including the Asia-Pacific and Latin America, and had 2,434 branches globally as of September 30, 2017.

Its net income was €649 million (US\$807.7 million) in the third quarter of 2017, up 133%, more than double that of a year earlier, amid cost reductions. Restructuring and severance costs were lower, as were litigation charges, with the bank successfully resolving a number of litigation matters, largely within existing provisions.

Its Common Equity Tier 1 capital ratio remained strong at 13.8% but was slightly down from 14.1% the previous quarter. Its provision for credit losses fell by 44% to \leq 184 million (US \leq 229 million), demonstrating wide-ranging growth in corporate and investment banking and solid credit quality in the private and commercial segment.

Commerzbank AG (FSE: CBK)

Germany's second largest lender Commerzbank AG, founded in 1870, operates in 50 countries and had 1,000 branches and 49,222 staff as of September 30, 2017. It serves more than 18 million private customers and about 60,000 corporate clients. Its operating profit was $\leq 1,144$ million (US\$1,423.8 million) in the third quarter of 2017, up 7.7% from a year earlier, while its operating profit per share was up 7.1% to ≤ 0.91 (US\$1.13).

Its assets totaled \leq 489.9 billion (US\$609.7 billion) on September 30, 2017, down 2% from the end of 2016. Commerzbank's loan loss provisions declined to \leq 530 million (US\$659.6 million) in the nine months of 2017, \leq 80 million (US\$99.6 million) down from a year earlier, with corporate clients in particular requiring lower provisioning. Its Common Equity Tier 1 ratio had increased to 14.6% as at September 30, 2017, from 13.9% at year-end 2016, due to a decline in risk-weighted assets.

Market Outlook

Moody's Investors Service has kept its stable outlook for Germany's banking sector due to an improved operating environment as the economy grows. Banks' asset quality is expected to remain steady and domestic retail and corporate loans will continue their healthy performances in an encouraging operating environment.

Nevertheless, the low interest rate and high cost base will stress banks' earnings and Moody's expects the European Central Bank to keep the rates low in 2018.



Italy

Sector Overview

Italy's banking industry continued to suffer from a high number of problem loans during the six-month review period and banks struggled to increase loan provision coverage. Non-performing loans (NPL) totaled ≤ 172.8 billion (US\$215.1 billion) in August 2017, down14% than ≤ 200.9 billion (US\$250.0 billion) a year earlier, according to the Finance Ministry. Nevertheless, the total was still high and will be harmful to the economy if maintained at that level, despite banks' loan provisions, according to the European Systemic Risk Board (ESRB).

The European Central Bank (ECB) announced proposals in October 2017 to solve Europe's bad loan problem. They would require banks to cover new unsecured non-performing loans completely within two years and secured loans within seven years. Italian banks would be among the most affected by the proposals, which would put pressure on mid-tier banks' balance sheets.

Collateralized lending to risky small and mediumsized enterprises is a big part of many banks' businesses. Mid-tier banks, including Banco BPM, BPER Banca and Credito Valtelinese, which have gross NPL ratios above 20%, have seen their share prices drop since the annoucement.

Bigger banks such as UniCredit and Intesa Sanpaolo, which have group NPL ratios of 13% and 11% respectively, would be less affected. Consolidation of banks could be an alternative solution to the bad loans problem by generating stronger balance sheets but would require a significant number of mergers and acquisitions.

Leading Banks

UniCredit SpA (ITL: UCG)

Italy's biggest bank, Milan-based UniCredit SpA, operates in 18 countries, with 147,000 employees in 8,400 branches serving 25 million customers worldwide. Its revenues totaled €4.6 billion (US\$5.7 billion) in the third quarter of 2017, up 3.9% from a year earlier due, to seasonal effects on fees and reduced trading due to an unfavorable sector-wide environment.

Net interest income totaled €2.5 billion (US\$3.1 billion), 3.5% down from a year earlier because of a smaller contribution from the investment portfolio and markets/treasury activities due to shortening the duration of the bonds offered by the government of Italy (BTP) portfolio and weaker reinvestments.

Intesa Sanpaolo SpA (ITL: ISP)

Intesa Sanpaolo SpA, established through the merger of Banca Intesa and Sanpaolo IMI in 2007, is among the Eurozone's leading banking groups, with market capitalization of \leq 46.4 billion (US\$57.8 billion) as at December 29, 2017. It serves 12.6 million customers in Italy through 4,800 branches and has 1,100 overseas branches serving 7.6 million customers.

Its net income totaled €650 million (US\$809 million) in the third quarter of 2017, up from €628 million (US\$781.6 million) a year earlier, but its net interest income fell 5.9%, from €1.859 billion (US\$2.314 billion) to €1.749 billion (US\$2.177 billion).

Its net fee and commission income was €1.889 billion (US\$2.351 billion), 7.6% up from €1.756 billion (US\$2.186 billion), due to a 10.6% increase in management, dealing and consultancy activities, including 13.4% growth in distribution of insurance products, a 12.7% increase in portfolio management and 3.6% rise in dealing and placement of securities.

Market Outlook

Moody's Investors Services retained its negative outlook for Italy's banking system because of the continued vulnerability in balance sheets mainly due to the bad loans problem. Limited capital-raising opportunities, continuous poor profitability and outstanding credit exposure to the Government also contributed to the negative outlook.

Nevertheless, Italian banks are looking healthier than they have for the past few years and should continue to recover in 2018, according to Standard & Poor's (S&P) Global Ratings. Moody's also forecasts that the number of new problem loans will decline in 2018, which could reduce loan loss charges and help profitability.

The Italian Banking Association (ABI) forecasts that net bad loans could fall to €42.5 billion (US\$52.9

billion) by the end of 2019, €40 billion (US\$49.8 billion) lower than at the end of 2016. ABI also expects that the ratio of gross bad loans as a percentage of overall loans will fall below 10% from the middle of 2019. However, smaller banks are still likely to face difficulties in unloading exposure on investors as they will be unable to handle losses from the discounts they will need to offer to attract buyers.



Spain

Sector Overview

Spain's low interest rate environment means that bank profitability remained low during the six-month review period, while the high proportion of non-performing loans (NPLs) affected some banks' ability to provision them. Nevertheless, the banking sector improved gradually, with the NPL ratio declining to 8.3% at September 30, 2017, down from 13.6% at year-end 2013.

Bank recovery planning is proceeding in alignment with Banking Union requirements, with all 14 significant institutions (SI) having submitted their full recovery plans, according to the IMF.

Many players are concerned about the effects on Spain's banking sector of Catalonia's declaration of independence in October 2017. Banks based in Catalonia make up about 14% of Spanish banks' assets, most have significant exposure to the Catalan market and all could be badly affected. Many are considering moving their headquarters from Catalonia, with Banco de Sabadell SA (BM: SAB), one of Catalonia's biggest banks, planning to relocate to Alicante.

The bank believes the relocation would protect their customers, shareholders and employees from the impact of the independence declaration, the full economic effect of which has not been fully realized. CaixaBank (BM: CABK) is also considering moving its legal base from Catalonia to Valencia.

Listed companies, especially banks based in Catalonia, saw their share prices drop following the declaration, with those of CaixaBank and Sabadell falling by 3%. Investors are also reducing their exposure to Spain's sovereign debt, lifting bond yields.

With about one branch per one thousand people, Spain has one of the world's largest branch networks. As of June 30, 2017, the Bank of Spain's register showed 256 credit entities, including savings banks, private banks, electronic money institutions and others. The banking sector dominates Spain's financial system, with its assets accounting for three quarters of the financial industry total. Leading banks in Spain are Banco Santander (BM: SAN), Banco Bilbao Vizcaya Argentaria SA (BM: BBVA), Caixabank and Bankia (BM: BKIA).

Leading Banks

Banco Santander SA (BM: SAN)

Banco Santander, with 188,492 employees serving 16.5 million customers and 24.2 million digital customers, and numbers growing every year, is Spain's biggest bank, with market capitalization of €72.314 billion (US\$90.0 billion). Net interest income totaled $\in 8.681$ billion (US\$10.804 billion) in third-quarter 2017, a 0.9% rise from $\in 8.606$ billion (US\$10.711 billion) the previous quarter. This was due to higher gains on financial translations and other operating income. Its attributable profit was down 16.4% to $\in 1.461$ billion (US\$1.818 billion), from $\in 1.749$ billion (US\$2.177 billion), due to integration costs of $\in 300$ million (US\$373.4 million).

The fully loaded Common Equity Tier 1 (CET1) ratio rose by eight basis points in the third quarter to 10.8%, nearly reaching the 2018 target of 11%. The increase was driven by growth in organic generation due to underlying profit and management of risk assets. Total assets were €1,468.0 billion (US\$181.7 billion) on September 30, 2017, 10.4% up from a year earlier.

Banco Bilbao Vizcaya Argentaria SA

(BM: BBVA)

Spain's second biggest lender Banco Bilbao Vizcaya Argentaria's (BBVA) net interest income totaled €13.202 billion (US\$16.43 billion) in the first nine months of 2017, up by 9.5% from a year earlier, due to increased activity in emerging economies and good management of customer spreads.

The group's fully-loaded CET1 ratio was 11.2% at the end of September 2017, 30 basis points up over the year, exceeding the target of 11%, mainly due to organic earning generation and decline in risk weighted assets.

Market Outlook

Moody's Investors Services retained its stable outlook for Spain's banking system in 2018, expecting that the number of problem loans will continue to decline and profitability remain stable, supported by lower NPL provision. However, prolonged low interest rates continue to pressure banks' earnings due to weakening of their net interest margins.

Bank funding and liquidity are expected to remain

steady in 2018, due to stable deposits, declining loans and improving credit demand. Market issuance is expected to increase due to rules and requirements such as the EU's Bank Recovery and Resolution Directive (BRRD) and the Minimum Requirement for Own Funds and Eligible Liabilities (MREL).



United Kingdom

Sector Overview

The UK banking sector's resilience has improved gradually since the global crisis and the 2017 stress test by the Bank of England showed that the system is resilient to deep simultaneous slumps in the UK and global economies. The sector has survived the large falls in asset prices and cost pressures due to banks' misconduct in 2017. The test also found that no UK banks needed to strengthen their capital positions. They continued to boost their capital strength through 2017 and the CET 1 ratio increased by 40 basis points from year-end 2016.

The number of loans in the UK has declined and there has been a rise in the number of credit card applications rejected as banks are shifting their efforts to prime customers following a warning from Bank of England Governor Mark Carney that 10% annual growth in lending could lead to borrowers being overextended and banks exposed. As customer applications for loans decreased, credit scoring tightened in the past year.

The UK is a center of the European financial system, with EU banks' asset exposure to the UK totaling €1.585 trillion (US\$1.9727 trillion) and liability exposure €1.335 trillion (US\$1.6615 trillion) in June 2017. However, after the Brexit referendum in June 2016, both exposures have been declining gradually, with derivatives exposure falling by 35%. The sector's tax contribution to public finance was £35.4 billion (US\$50.01 billion) in the year to March 31, 2017, with more than half coming from UK banks and the rest from foreign banks.

Leading Banks

HSBC Holdings Plc (LSE: HSBA)

Based in London, HSBC Holdings Plc is the parent company of HSBC and Europe's largest bank by market value. It serves customers worldwide from 3,900 offices in 67 countries and territories in Europe, Asia, North America, Latin America and the Middle East and North Africa. Its assets totaled US\$2,526 billion as at September 30, 2017.

Revenue increased to US\$13 billion in the third quarter of 2017, up 36% from US\$9.5 million a year earlier. Profit before tax (PBT) jumped by 448% to US\$4.62 billion, from US\$843 million, due to revenue increasing by US\$3.5 billion, and to lower loan impairment charges and other credit risk provisions (LICs), and a reduction in operating expenses.

Royal Bank of Scotland Group Plc (LSE: RBS)

The Royal Bank of Scotland (RBS), headquartered in Edinburgh, is the UK's biggest state-controlled bank after the Government bailed it out during the 2008 crisis. It serves around 18.9 million customers around the world.

Its income totaled £3,157 million (US\$4,459.6 million) in the third quarter of 2017, 4.6% down from a year earlier. Adjusted operating profit totaled £1,245 million (US\$1,758.7 million), down by 6.6% from £1,333 million (US\$1,883.0 million), mainly due to capital resolution losses increasing to £366 million (US\$517.0 million) from £248 million (US\$347.5 million).

CET 1 ratio rose by 70 basis points to 15.5%, showing a continuous reduction in risk weighted assets, attributable profit and a decrease in prudential valuation capital deduction. Net interest margin (NIM) decreased by five basis points to 2.12%, due to increasing liquidity requirements and asset margin pressure.

Market Outlook

Moody's Investors Service has raised its UK banking industry outlook to stable from negative because of banks' ability to manage a more demanding environment amid Brexit uncertainty and continuously low interest rates.

Although low interest rates might reduce banks' profits and revenues, their profitability will remain stable but at different levels in different banks. UK banks have solid and healthy credit profiles thanks to upgraded capital positions, strong liquidity and funding, and good loan quality.

Banks are expected to increase investment in technology amid higher expectations of open banking implementation in 2018.



Currency Conversion Table

Currency exchange rates as of February 2, 2018

Currency Unit	US\$ per Unit	Units per US\$
US Dollar (US\$)	1	1
British Pound (£)	1.4126	0.7079
Euro (€)	1.2446	0.8035

Source: Federal Reserve Bank of New York



The Scope of this Report

This report looks at the banking industry in Europe, with a focus on France, Germany, Italy, Spain and the United Kingdom. The report aims to paint a general picture of the current environment, profile the industry and discuss market trends using available data and examining the performance of leading companies in each country. Key financial results for leading banks in each country sector, as reported by the banks, are presented in the comparative data tables on the proceeding pages.

Research analysts draw on a range of credible industry and company data sources as well as news and information services to research and analyze the current trading environment, industry landscape and market trends and outlook for a particular sector. Primary sources are used, unless otherwise indicated, and include company data, e.g. annual reports and company financial results; macroeconomics and trade data; data and information from global and country regulatory, industry and trade bodies; government data; and reports from industry organizations and private research organizations.

Industries covered by the Industry Reports are defined by the Industry Classification Benchmark (ICB) coding system and companies for each industry are identified using the standard industry classification system and leading companies are identified on this basis. This report involves the following ICB codes: 8355 Banks.

The following are the relevant SIC codes to the industry: 6021 (National Commercial Banks), 6022 (State Commercial Banks) and 6029 (Commercial Banks), 6082 (Foreign Trade and International Banking Institutions), 6081 (Branches and Agencies of Foreign Banks), 609 (Functions Related to Depository Banking).



Key References

Global

Bank for International Settlements (BIS)

An international organization that fosters international monetary and financial cooperation and serves as a bank for central banks. http://www.bis.org/index.htm

Organisation for Economic Cooperation and Development (OECD)

The OECD is a group of 30 member nations pursuing democratic government and a market economy. It collects statistics, conducts research and develops agreed multilateral policy instruments. http://www.oecd.org

International Monetary Fund (IMF)

An international organization of 185 countries that provides financial assistance and advice to its member countries. http://www.imf.org

Europe

European Banking Federation (FBE)

The FBE represents the interests of banks in the EU and the European Free Trade Association countries. http://www.fbe.be

European Banking Authority

The EBA is a London-based EU regulatory agency that supervises and regulates aspects of the European banking industry and conducts stress tests on European banks to increase transparency in the European financial system by identifying weaknesses in banks' capital structures.

Europe Banking Association (ABE)

The ABE represents the European banking industry for the settlement of transactions in euros, and operates the ABE clearing system. http://www.abe.org

European Central Bank (ECB)

The ECB and the national European central banks together constitute the eurosystem, the central banking system of the euro area. http://www.ecb.int

European Commission

The body responsible for the general day-today running of the EU, proposing legislation, implementing decisions and upholding the union's treaties.

http://ec.europa.eu

France

Banque De France

The central bank of France. http://www.banque-france.fr

French Association of Banks (AFB)

The AFB serves as both an employers' federation and a professional banking association. Members include all French financial institutions authorized to operate as banks in France. http://www.afb.fr http://webreports.mergent.com

Germany

Deutsche Bundesbank

The central bank of Germany. http://www.bundesbank.de

Banking

Association of German Banks

The association represents the interests of Germany's private commercial banks. http://www.german-banks.com

Federal Office of Statistics

A German Government office that gathers, collects and process statistical information in Germany. http://www.destatis.de

Italy

Banca d'Italia

The central bank of Italy. http://www.bancaditalia.it

Instituto Nazionale di Statistica (ISTAT)

The Italian national statistical office. http://www.istat.it

Italian Bankers' Association (ABI)

The Italian Bankers' Association represents and promotes the financial interests of the country's banking system. http://www.abi.it

Netherlands

De Nederlandsche Bank

The central bank of the Netherlands. http://www.dnb.nl

Netherlands Bankers' Association (NVB)

Promotes the interests of the country's banking industry at home and abroad. http://www.nvb.nl

Spain

Banca De Espana Spain's central bank. http://www.bde.es

The Spanish Bankers' Association (AEB)

The AEB represents the collective interests of its banking members. http://www.aebanca.org

Spanish Mortgage Association (Asociación Hipotecaria Española)

An organization made up of banks, saving banks, cooperatives and credit financial institutions that have a major presence in the mortgage market. http://ahe.es

United Kingdom

Bank of England

The UK's central bank. http://www.bankofengland.co.uk

British Bankers' Association (BBA)

An association that represents the interests of UK's banking industry. http://www.bba.org.uk

British Chambers of Commerce (BCC)

A non-political, non-profit making organization owned and directed by its members, accountable to individual businesses of all sizes and sectors throughout the UK. http://www.chamberonline.co.uk

Citizens Advice

A non-profit organization that assists UK citizens in resolving legal monetary issues by providing free information and advice from over 3,000 locations. http://www.citizensadvice.org.uk

International Financial Services London (IFSL)

An independent cross-sector organization that promotes international activities and expertise of UK-based financial services. http://www.ifsl.org.uk

National Statistics

The UK's home of official statistics, collecting data on Britain's economy and social demographics. http://www.statistics.gov.uk



Comprative Company Data Asia-Pacific

Company	Country	Ticker	Exchange	Primary SIC	Other SIC	s			
BNP Paribas	France	BNP	PAR	6029	6159	6282	6211	6081	
Banco Santander SA	Spain	SAN	BM	6029	6282	6211	6082		
HSBC Holdings Plc	United Kingdom	HSBA	LSE	6029	6021	6099	6289	6726	6712
Credit Agricole SA	France	ACA	PAR	6029	6311	6331	6036	6163	0/12
Societe Generale	France	GLE	PAR	6021	6036	6211	6311	6531	
Lloyds Banking Group Plc	United Kingdom	LLOY	LSE	6029	6211	6282	6111	6411	6159
ING Groep NV	Netherlands	INGA	AMS	6371	6211		0111	0411	0155
Deutsche Bank AG	Germany	DBK	FSE	6029	6799	6282	6712		
Barclays PLC	United Kingdom	BARC	LSE	6029	6021	6726	6163	6411	6712
Unicredit SpA	Italy	SAN	ITL	6021	6211	6512	6712	0411	0712
			Total Revenue - FYE - 3						
Company BNP Paribas	Total Revenue - FYE - 1 \$103.311.086.648	Total Revenue - FYE - 2 \$109,513,627,733	\$113,926,839,892	EBITDA - FYE - 1 \$15,740,136,854	EBITDA - I \$14,763,10			SITDA - FYE - 3	
Banco Santander SA	\$79,700,357,430	\$79,503,687,097	\$113,926,839,892	\$13,295,443,472	\$12,623.9			15.464.868.385	
HSBC Holdings Plc	\$77.683.000.000	\$91.617.000.000	\$95,343,480,525	\$12,324,000,000				20.931.000.000	
Credit Agricole SA	\$76,050,607,303	\$82,577,440,454	\$97,308,457,391	\$3,704,239,650	\$4,381,895,731 \$3,930,9				
Societe Generale	\$65,700,741,668	\$68,870,809,611	\$108,336,733,022	\$14,976,235,664				16,784,906,667	
Lloyds Banking Group Plc	\$59,432,413,874	\$45,775,808,082	\$62,198,955,980	\$8,282,624,606			5,961,546,314		
ING Groep NV	\$52,383,292,811	\$57,573,513,434	\$63,070,116,383	\$7,177,946,704	\$8,678,833,006			\$4,926,441,214	
Deutsche Bank AG	\$42,425,332,587	\$47,321,859,788	\$51,122,919,074	\$2,596,635,319	\$2,880,963,015			\$8,586,326,359	
Barclays PLC	\$34,046,962,904	\$39,062,595,915	\$41,988,392,971	\$5,438,509,340	\$3,438,113,074		\$3,735,527,711		
Unicredit SpA	\$27,247,642,872	\$30,108,711,376	N/A	-\$11,783,208,331	\$534,323,3	333	N/A		
Company	Net Income - FYE - 1	Net Income - FYE - 2	Net Income - FYE - 3	EPS - FYE - 1	EPS - FYE	- 2	E	PS - FYE - 3	
BNP Paribas	\$8,070,736,572	\$7,291,178,231	\$190,834,264	\$6.29	\$5.60		-\$	0.09	
Banco Santander SA	\$6,501,019,176	\$6,498,232,645	\$7,069,376,289	\$0.43	\$0.44		\$0).58	
HSBC Holdings Plc	\$2,479,000,000	\$13,522,000,000	\$13,688,000,000	\$0.07	\$0.65		\$0	0.69	
Credit Agricole SA	\$3,709,479,027	\$3,829,665,769	\$2,849,143,401	\$1.17	\$1.32		\$1	\$1.02	
Societe Generale	\$4,059,469,421	\$4,357,933,090	\$3,256,337,531	\$4.46	\$4.89		\$3	5.52	
Lloyds Banking Group Plc	\$2,537,807,005	\$1,274,472,950	\$2,204,164,283	\$0.02	\$0.01		\$0	0.03	
ING Groep NV	\$5,213,180,271	\$5,365,453,237	\$1,170,531,184	\$1.34	\$1.39		\$0	0.07	
Deutsche Bank AG	-\$1,468,073,479	-\$7,399,010,117	\$2,021,384,589	-\$1.27	-\$5.51		\$1	1.63	
Barclays PLC	\$2,558,719,617	-\$72,615,319	\$118,637,738	\$0.12	-\$0.03		-\$	0.02	
Unicredit SpA	-\$12,354,549,835	\$1,845,384,793	\$3,244,182,482	-\$2.07	\$0.29		N	/A	
Company	Total Current Assets - FYE - 1	Total Current Assets - FYE - 2	Total Current Assets - FYE - 3	Long-Term Debt - FYE - 1	Long-Tern	n Debt -	Lo	ong-Term Debt -	
					FYE - 2		F١	/E - 3	
BNP Paribas	\$168,079,219,182	\$146,550,068,334	\$142,789,002,887	\$180,020,807,597	\$191,691,3			244,328,632,710	
Banco Santander SA	\$80,114,268,225	\$84,687,242,102	\$84,390,071,697	\$236,901,581,760	\$242,662,0	. , .		255,488,182,867	
HSBC Holdings Plc	\$133,012,000,000	\$104,702,000,000	\$134,884,000,000	\$86,899,000,000	\$111,651,0			122,611,000,000	
Credit Agricole SA	\$32,107,951,091	\$42,495,565,981	\$69,800,366,815	\$197,636,641,473				\$241,712,866,243	
Societe Generale	\$100,790,946,236	\$85,573,859,831	\$69,362,785,064	\$121,873,152,039				42,812,097,480	
Lloyds Banking Group Plc	\$59,241,740,056	\$87,603,713,910	\$80,650,246,222	\$118,273,123,836				\$159,653,613,323	
ING Groep NV	\$19.012.651.826	\$23,372,288,987	\$14,869,271,001	\$126,223,930,829	\$149,984,	, .		175,652,607,895	
Deutsche Bank AG							8 \$241,084,450,228		
	\$190,046,879,724	\$105,588,111,399	\$90,533,233,280	\$205,366,818,530	\$212,446,3				
Barclays PLC	\$190,046,879,724 \$127,714,553,192	\$75,167,229,031	\$63,853,640,215	\$122,172,710,944	\$134,289,4	436,400	\$1	167,422,824,112	
Barclays PLC Unicredit SpA	\$190,046,879,724					436,400			
	\$190,046,879,724 \$127,714,553,192	\$75,167,229,031 \$10,468,536,245	\$63,853,640,215	\$122,172,710,944	\$134,289,4	436,400 175,356	\$1 N		
Unicredit SpA	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636	\$75,167,229,031 \$10,468,536,245	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351	\$134,289, \$145,733,	436,400 175,356 • 2	\$1 N	/A	
Unicredit SpA Company	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent	\$75,167,229,031 \$10,468,536,245 :Yr) Profit Margin	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1	\$134,289,4 \$145,733,3 Date FYE -	436,400 175,356 •2 015	\$1 N/ D/ 31	/A ate FYE - 3	
Unicredit SpA Company BNP Paribas	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65	\$75,167,229,031 \$10,468,536,245 \$Yr) Profit Margin (7.81	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1 31-Dec-2016	\$134,289, \$145,733, Date FYE - 31-Dec-20	436,400 175,356 - 2 015 015	\$1 N, 31 31	/A ate FYE - 3 1-Dec-2014	
Unicredit SpA Company BNP Paribas Banco Santander SA	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65 6.82	\$75,167,229,031 \$10,468,536,245 Yr) Proft Margin 7.81 8.16	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1 31-Dec-2016 31-Dec-2016	\$134,289,4 \$145,733,7 Date FYE - 31-Dec-20 31-Dec-20	436,400 175,356 -2 015 015 015	\$1 N, 31 31 31	/A ate FYE - 3 1-Dec-2014 1-Dec-2014	
Unicredit SpA Company BNP Paribas Banco Santander SA HSBC Holdings Pic	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65 6.82 1.41	\$75,167,229,031 \$10,468,536,245 \$YP Profit Margin 7.81 8.16 3.19	\$63,853,640,215 N/A	\$122,172,710.944 \$120,962,024,351 Date FYE - 1 31-Dec-2016 31-Dec-2016 31-Dec-2016	\$134,289,4 \$145,733,5 Date FYE - 31-Dec-20 31-Dec-20 31-Dec-20	436,400 175,356 • 2 • 2 • 15 • 15 • 15 • 15 • 15 • 15	\$1 N. 31 31 31 31 31	/A ate FYE - 3 I-Dec-2014 I-Dec-2014 I-Dec-2014	
Unicredit SpA Company BNP Paribas Banco Santander SA HSBC Holdings Plc Credit Agricole SA	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65 6.82 1.41 6.07	\$75,167,229,031 \$10,468,536,245 \$YY Pofft Margin 7.81 8.16 3.19 4.88	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016	\$134,289, \$145,733, Date FYE - 31-Dec-20 31-Dec-20 31-Dec-20	436,400 175,356 • 2 • 2 • 2 • 175 • 15 • 15	\$1 NJ 31 31 31 31 31 31	/A ate FYE - 3 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014	
Unicredit SpA Company BNP Paribas Banco Santander SA HSBC Holdings Plc Credit Agricole SA Societe Generale	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65 6.82 1.41 6.07 6.25	\$75,167,229,031 \$10,468,536,245 Yr) Poft Margin 7.81 8.16 3.19 4.88 6.18	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016	\$134,289, \$145,733, Date FYE - 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20	436,400 175,356 2 2 15 15 15 15 15 15 15 15 15 15	\$1 N. 31 31 31 31 31 31 31 31	/A ate FYE - 3 1-Dec-2014 1-Dec-2014 1-Dec-2014 1-Dec-2014 1-Dec-2014	
Unicredit SpA Company BNP Paribas Banco Santander SA HSBC Holdings Plc Credit Agricole SA Societe Generale Lloyds Banking Group Plc	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65 6.82 1.41 6.07 6.25 4.30	\$75,167,229,031 \$10,468,536,245 Yr) Poft Margin 7.81 8.16 3.19 4.88 6.18 4.27	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016	\$134,289, \$145,733; Date FYE - 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20	436,400 175,356 -2 015 015 015 015 015 015 015 015	\$1 N. D 31 31 31 31 31 31 31 31 31 31	A ate FYE - 3 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014	
Unicredit SpA Company BINP Paribas Banco Santander SA HSBC Holdings PIc Credit Agricole SA Societe Generale Lloyds Banking Group PIc ING Groep NV	\$190,046,879,724 \$127,714,553,192 \$14,521,280,636 Return on Equity (Most Recent 7.65 6.82 1.41 6.07 6.25 4.30 10.53	\$75,167,229,031 \$10,468,536,245 Yr) Pofit Margin 7.81 8.16 3.19 4.88 6.18 4.27 9.95	\$63,853,640,215 N/A	\$122,172,710,944 \$120,962,024,351 Date FYE - 1 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016 31-Dec-2016	\$134,289, \$145,733, Date FYE - 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20 31-Dec-20	436,400 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	\$1 \$1 N. D 31 31 31 31 31 31 31 31 31 31	A ate FYE - 3 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014 I-Dec-2014	

Notes to Comparative Data All figures are in United States dollars. All figures are as reported by the company. N/A = Data Not Available. N/L = Not Listed Companies ranked by total revenue for the full year most recently reported.

Definitions
Total Revenue = All revenues, including net sales, operating revenues, interest income, royalties, excise taxes etc.
EBITDA = Earnings before interest, taxes, depreciation and amortization.
EPS Cont Operations = Earnings Per Share as reported by company excluding extraordinary items.
Total Current Assets = All assets expected to be realized within the next year, includes cash, accounts receivable and inventories.
Long Term Debt = Debt due to be paid at a date more than one year in the future.
Return on Equity = The company's earnings divided by its equity (book value).
Profit Margin = The company's net income as a percent of revenues.



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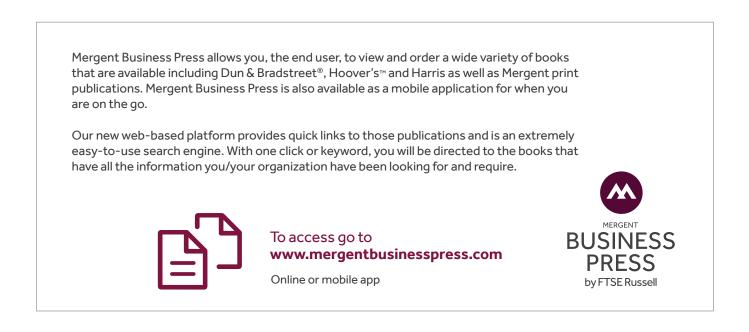


Administrative Offices

NEW YORK 60 Madison Ave, 6th floor New York, Ny 10010 (800) 342-5647 or (704) 559-7601

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