VALUATION OF BANKS AND INSURERS IN TIMES OF COVID-19

MEASURING THE INITIAL IMPACT ON MARKET VALUATION

MAY 2020

BDO

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BDO: PROFILE AND POSITIONING

BDO is one of the world's leading auditing and consulting firms.

We are an entrepreneurial network and a professional partner for regional companies and global groups alike.

We aim to provide auditing and consulting services and support of the highest quality. We act with foresight, create added value and proactively approach our clients.

BDO FINANCIAL SERVICES

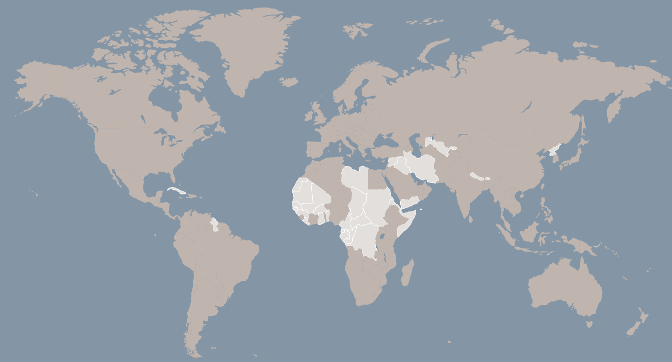
Our strategy is ambitious: To even further expand our strong market position in the industry worldwide.

Today, our industry experts work with leading banks, investment managers and insurance companies in the major global financial hubs as well as in most other countries in the BDO network on tailored solutions for their audit, transactional, tax and legal issues.

BDO INTERNATIONAL

US $ 9.6 billion
2019 REVENUE

167 Countries
1,800 offices
88,000 Staff



COVID-19 – MILESTONES OF AN UNPRECEDENTED CRISIS

VALUATION OF BANKS AND INSURERS IN TIMES OF COVID-19 - INTRODUCTION

The spread of Covid-19, the coronavirus, is resulting in countries across the globe entering 'lockdown' measures with economic activity and daily life on hold. This is having an extremely disruptive impact also on the financial sector. Authorities have taken steps to mitigate the worst effects. However, risks continue to be clearly elevated.

In terms of an outlook, much depends on (a) how long the period of Covid-19 disruption lasts, and (b) the degree of further government response. The first point is of course unknown at this stage. However, we have seen myriad government responses announced or implemented to mitigate the effects of the crisis, including tax payment deferrals, debt moratoria, credit guarantees. In addition, central banks have cut interest rates – for example the Fed's emergency rate cuts in March 2020 - thereby reducing the cost of short-term borrowing.

Not all financial institutions will experience the Covid-19 impact in the same way. Some are better positioned than others. A few banking segments even benefited from Covid-19. For example, debt and equity underwriting performed well and trading income was strong during the market turmoil in March 2020. On the other hand HSBC, to name just one example, reported financial results for Q1 2020 with profits almost halved on increased loan loss provisions due to Covid-19.

We think this is not about 'weathering the crisis'. Quite to the opposite, banks and insurers have to find strategic answers to a once-in-a-generation structural change. To assess the initial impact (as at the end of April 2020), we have designed a study that explores how Covid-19 has affected market valuations. Our computation is based on a group of international banks and insurers domiciled in the US and in Europe. We start by defining milestones on which we measure the market valuation:

THE EMERGENCE OF COVID-19 – TIMELINE AND MILESTONES

31 December 2019
The first confirmed case of Covid-19 appears in Wuhan on 1 December. Genetic testing of patient samples on 27 December indicates the presence of a SARS-like coronavirus. A public notice is released by Wuhan Municipal Health Commission on 31 December and the World Health Organisation (WHO) is informed on the same day.

30 January 2020
WHO declares the outbreak to be a Public Health Emergency of International Concern (defined as 'an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response').

11 February 2020
WHO in a press conference establishes Covid-19 as the name of the disease. The United Nations (UN) agree to leverage the power of the entire UN system in the response and a UN Crisis Management Team is activated.

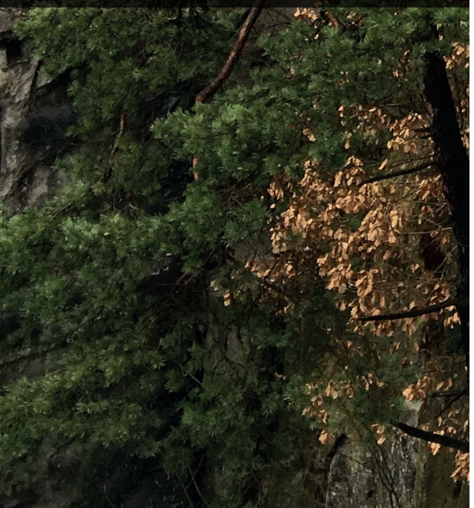
25 February 2020
WHO declares that 'the world should do more to prepare for a possible coronavirus pandemic', stating that while it was still too early to call it a pandemic, countries should nonetheless be 'in a phase of preparedness'.

11 March 2020
WHO declares the coronavirus outbreak a pandemic, i.e. a 'simultaneous worldwide transmission of influenza'. The WHO states it is 'deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction'.

Milestones used to measure market valuation

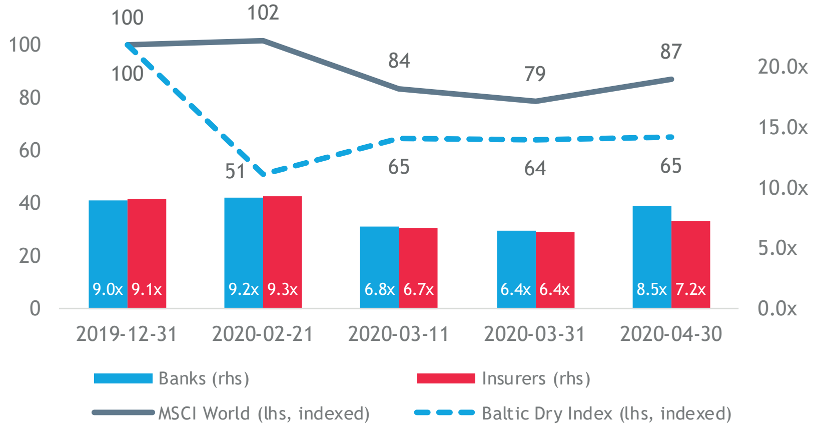
1. **31 December 2019** – Our first milestone is 31 December 2019, the last trading day of the year 2019 and also the date on which China (and also Taiwan) notified the WHO.
2. **21 February 2020** – The second milestone is Friday, 21 February 2020, shortly before the WHO declared the world should prepare for a possible pandemic.
3. **11 March 2020** – The third milestone chosen is 11 March 2020, the day when the WHO officially declared the Covid-19 outbreak a pandemic.
4. **31 March 2020** – The forth milestone marks the end of the quarter. By the first week of April, 3.9 billion people worldwide were under some form of 'lockdown'.
5. **30 April 2020** – Our fifths milestone. By the end of April 2020, the Covid-19 pandemic lockdowns had ended in many countries and many Q1 2020 profits had been reported.

Source: WHO, BDO analysis



HOW WERE VALUATION MEASURES IMPACTED DURING THE CRISIS?

BANKING AND INSURANCE - VALUATION MEASURES



As at the date of the five milestones introduced on the previous slide, we calculate the 2021 price-earnings (P/E) forward multiples. While the price (P) is based on the market capitalisation at the respective date, the FY 2021 forward earnings (E) are based on analysts' consensus view.

To provide for a more comprehensive picture, we include the MSCI World Index as well as the Baltic Dry Index, the economic indicator issued daily by the London-based Baltic Exchange that provides an assessment of the price of moving the major raw materials by sea globally. For the purpose of illustration, both indices (as well as other stock market indices presented in this paper) are indexed to 31 December 2019 = 100.

- The graph demonstrates that the Baltic Dry Index served as a strong early indicator before the WHO declared that the world should prepare for a pandemic on 25 February 2020 and prior to market values of banks and insurers being adversely affected by the crisis. It is also shown that, at the end of April, this indicator had only partially recovered.
- The MSCI World decreased substantially between 21 February and 11 March, when the WHO declared Covid-19 a pandemic. Actually, some critics argue that the public health emergency declaration and the pandemic classification by the WHO came too late (and that the pandemic was handled inadequately). In an unprecedented time of stock market turbulence, the MSCI World further declined between 11 and 31 March.
- The graph illustrates the stark decline of the Forward P/E ratios of both the bank and insurer groups between 21 February and 11 March. Note that this decrease was prior to the WHO declaring Covid-19 a pandemic.
  - Until the end of April, the FY 2021 P/E ratio of the banking group revived to 95% of the 31 December 2019 level (8.5x versus 9.0x), stronger than the MSCI World (87%).
  - In contrast, the market values of the insurers group measured by P/E ratios recovered to only 78% of the December 2019 level (7.2x versus 9.1x). Is the value of insurers hit more substantially by Covid-19? We will elaborate on this question in more detail on the next slide.

OUR PEER GROUP

Our peer group consists of 20 international banks and insurers domiciled in Europe and in the US and assembled into four groups by means of calculating the median of FY 2021 forward P/E ratios:

	Banks	Insurers
Europe	Barclays BNP Paribas Credit Suisse Deutsche Bank HSBC UBS	Allianz AXA Generali Mapfre Prudential Zurich
US	Citigroup Goldman Sachs JP Morgan Morgan Stanley	AIG Berkshire Hathaway MetLife Prudential Financial

Snapshot: Q1 2020 results of US banks

US banks' results for Q1 2020 provided a first glimpse of the heavy impact of the Covid-19-induced recession on the banking sector.

According to DB Research, the seven largest US institutions reported a drop in net income of 58% year-over-year. Whereas all banks remained profitable, credit loss provisions rose to $26 billion, 4½ times the level at the end of Q1 2019.

In many segments, business deteriorated, including lower M&A advisory and asset management fees as well as pressure on net interest income. The latter had already been visible for some time since the Fed started cutting rates in summer 2019. In addition, some banks took write-downs on securities and short-term bridge loans.

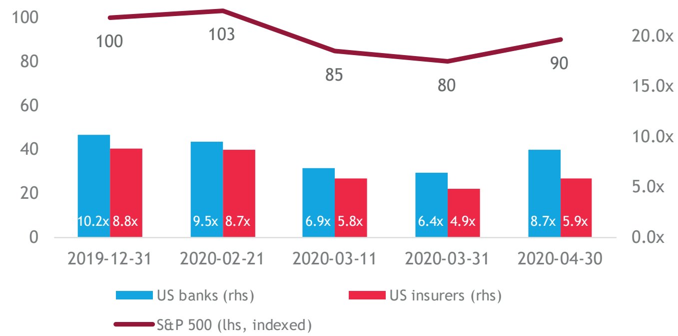
However, debt and equity underwriting performed well and trading income during the market turmoil in March 2020 was strong.

Source: S&P Capital IQ, DB Research, BDO analysis

INITIAL VALUE IMPACT IN THE US AND IN EUROPE COMPARED

US - VALUATION MEASURES

Forward P/E ratio of US financial institutions



- As at 21 February 2020, the P/E ratios of US banks and insurers had slightly decreased to 9.5x and 8.7x, which was 93% and 99% of their 31 December 2019 level. In contrast, the S&P 500 increased to 103% of its year-end 2019 level.
- The valuation of US banks and insurers experienced a strong decrease between 21 February and 11 March. Consequently, during the month of April, US banks recovered substantially, back to 8.7x or 91% of their year-end 2019 value.
- Different from banks, the P/E ratio of US insurers only increased to 5.9x during the month of April (67% of the 31 December 2019 level).

Outlook for US banks

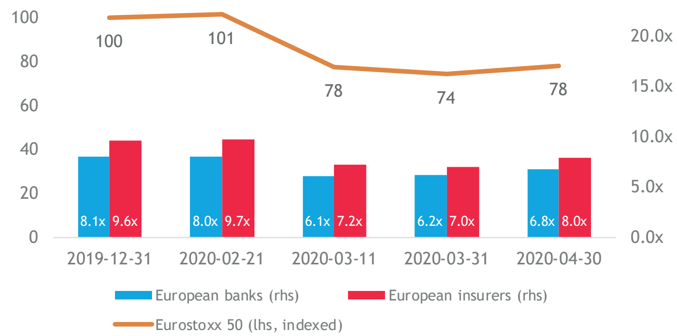
In the coming months, the negative effects of a recession are expected to materialise in the real economy, while mitigating factors, including debt moratoria and credit guarantees, might partly disappear. Volatility and trading volumes will most likely return to a normal level and investment banking business will lack the trading profit that helped the large US banks in March. The Fed's March emergency rate cuts will most likely affect the banks' interest margins. Even more important, US banks will need to watch rating migration and the impact credit losses will have on their RWA and capital ratios. Overall, our analysis shows some pronounced differences between the US and Europe regarding the Covid-19 valuation impact, especially a stronger and faster recovery of US banks.

Outlook for US insurers

US insurers will need to closely monitor solvency ratios in order to meet economic, regulatory and rating agency capital requirements. The volatility and falling interest rates within the financial markets will likely impact life insurance the most, while many insurers have introduced exclusion clauses for epidemics/pandemics into their non-life policies. The latter may apply to business interruption. Lines of business potentially affected include trade credit and workers' comp. Also, event cancellations may cause greater losses to insurers as a few large events have policies that may cover them even for pandemics. Finally, health insurance will be affected by Covid-19, as healthcare is privately provided in the US (except for Medicare for the elderly and for people with disability status). After Covid-19, many carriers are expected to increase rates and deductibles while limiting coverage.

EUROPE - VALUATION MEASURES

Forward P/E ratio of European financial institutions



- At the end of April 2020, European banks and insurers were back to 84% and 82% of their respective year-end 2019 P/E market valuation, at 6.8x and 8.0x. In comparison, the Eurostoxx 50 was at 78% of its 31 December 2019 level.
- European banks continued to be traded at lower P/E multiples compared to their US peers, consistent with the market valuation in previous years. Also, the opposite continued to apply with regard to the valuation of insurers, with European P/E ratios being higher than in the US.
- In contrast to US insurers, the P/E ratio of European insurers partly recovered until the end of April.

Outlook for European banks

Unlike their US peers, the large European banks are not focused on investment banking/trading income. They are more active in traditional commercial banking which is intensely exposed to Covid-19 with its focus on the real economy. The lending business of European banks typically has a lower risk intensity than US banks, due to a business model with low-risk mortgages, resulting in lower RWA relative to total assets. An increase in risk during a recession might therefore lead to a higher vulnerability of European banks compared to US banks. Furthermore, major European banks use internal risk models and calculate capital ratios under the Basel III advanced approach, also typically leading to lower RWA. As a consequence for major European banks, a larger CET1 reduction has to be expected in times of a crisis of the real economy.

Outlook for European insurers

For European non-life and life insurance, we refer to the outlook for US insurers. Furthermore, in contrast to the US, healthcare insurance will most likely not be much affected due to public provision in most European countries.

EIOPA, the European Insurance and Occupational Pensions Authority, strongly encourages insurers to consider practical implications of Covid-19 for the day-to-day activities of consumers, in particular with regard to the social distancing and self-isolation. Specifically, EIOPA asked European insurers on 1 April 2020 to consider the interests of consumers and exercise flexibility in how they are treated, where reasonable and practicable.

Source: S&P Capital IQ, EIOPA, BDO analysis

BUSINESS VALUATION: HOW BDO CAN ASSIST THE FINANCIAL SERVICES INDUSTRY

- BDO's FS Corporate Finance practices combine their extensive M&A transaction and market experience with the high seniority of teams, to be well-placed to assist financial services clients and financial investors in developing and executing their M&A strategy.
- Our specialised network for financial services M&A brings together valuation and transaction experts from nearly two dozen BDO member firms, covering the major European, US and global markets.
- We have independently advised on hundreds of deals and executed even more company/portfolio valuations.
- Our Valuation services for Financial Services encompass:
  - Business valuations, fairness opinions;
  - Purchase price allocations (PPAs), impairment tests;
  - Valuation of credit and insurance portfolios, funds;
  - Valuation of other financial instruments.
- The services related to Transaction Services and M&A include:
  - Due diligence (financial, regulatory, actuarial, real estate, tax, legal);
  - Transaction advisory services, negotiation support;
  - Post-deal integration and separation advisory services;
  - Buy-side and sell-side lead advisory services, IPO advisory services;
  - Financial fact books, information memoranda;
  - Strategic business reviews.
- BDO also has a track record assisting regulators. For instance, we have performed valuations under the new Single Resolution Mechanism (SRM) for European banks.

"We have to build up capacities to manufacture it, zillions of doses, and then we have to make sure that we can deploy to every corner in the world at a fair and affordable price."

1 May 2020

European Commission President Ursula von der Leyen

"Beyond the health impacts from the Covid-19 pandemic, we are expecting a major global recession. Our estimates suggest a much deeper global downturn than the Great Recession, given the declines in production, investment, employment and trade."

17 April 2020

World Bank Group President David Malpass

"One of the lessons of this pandemic is that the world was not sufficiently prepared and did not coordinate enough. With global warming in particular, we have major disruptions before us that require great preparation and coordinated action at the global level."

4 April 2020

AXA CEO Thomas Buberl

Source: Deutsche Welle, World Bank Group, Le Journal du Dimanche

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