Names of the studied banks
Attijariwafa Bank
Nordea Bank
JP Morgan
MUFG

GROUP 20
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Attijariwafa Bank

Attijariwafa Bank Group is a well established bank with the head office and main customers in Morocco. It was founded 2004 when Banque Commerciale du Maroc and Wafabank merged into Attijariwafa Bank and has been the leading bank in Morocco since then.

Financial statement analysis

Liquidity and Solvency

The CET1 ratio of 10.8% gives them a good stand and strong capitalization above the regulatory minimum at 4.5% from Basel III. This gives them potential to handle economic downturns and absorb temporary losses. They are also able to meet the criteria of 100% of LCR as they are at 137%. This gives them a good ability to meet any short-term risks and pressures. However a Moody's credit rating at Ba1 indicates that they have speculative elements and are at substantial credit risk. This implicates a difficulty to fulfill and meet the long-term obligations. They are also able to fulfill other Basel III criterias such as the Capital Adequacy ratio, CAR, of 10.5% with their 12.8%. Even though they upheld some of the Basel III criterias, they do not follow all requirements, but instead only follow Basel II requirements.

Capital adequacy and stress testing

One indicator to keep in mind for this bank is the risk weighted assets over total assets, RWA/TA, which is at 72.6%. This indicates that over a majority of their assets are risk weighted assets and that the bank has a large capital of the risk weighted assets. However, this also tells that the bank takes more risks than other banks which will show in the comparison. Also the total loans over total assets are at 90.3%, which indicates that the bank has a lot of loans and debts. This indicates a strong reliance on loans to generate income. However the CET1 ratio gives them some assurance of handling economic downturns.

Profitability

Attijariwafa bank has a strong hold for 2023 as it has a return on assets, ROA, of 1.4% and return on equity, ROE, of 15.7%. This indicates a strong efficiency in generating profit relative to assets and equity. The return on equity keeps the shareholders happy as it demonstrates an efficient use of the equity to give back profits. The parent company had a great increase in net income during 2023 as it rose with 21.5% (5.1 billion MAD) and shows a high profitable financial institution.

Ukraine Crisis

Attijariwafa bank has mentioned in their annual report that the Ukraine war has had a great impact on the African economy. The total assets of the top 100 banks decreased by 2.3% due to the Ukraine War, covid-19 pandemic and other global factors. However the Attijariwafa bank group had an increase of 5.4% in total assets. Although they write that the Ukraine war had a great negative impact on the African economy, they don't go into any more specifics of how it was affected. They mention it as a reason why the results may not look as promising as they hoped.

Risk Management Assessment

Organization and structure

Attijariwafa bank’s approach is based on regulatory standards. The risk management is managed independent from the bank's operations by a committee from GRM (Global Risk Management) which reports directly to the chairman of the bank. GRM’s role is to supervise, control and measure all risks within the bank’s operations and give recommendations based on their risk management operations. They work within five categories of risk, credit and counterparty risk, market risk, operational risk, country risk and asset-liability management risk. GRM is organised and structured along the Basel II accords.

Within the bank there are also committees to make the decision-making more effective. Even though GRM has a huge role to supervise the actions of the bank, there are other internal committees and entities to make the risk management better and governed. The first entity is the board of directors, whose role is to assess main risks, validate overall risk and ensure the GRM verifies the actions. The second entity is a group of committees (major risk, audit and accounts, group credit risk, market risk). The first committee is the major risk committee, whose role is to analyse major commitments (large loans, investments etc) into the bank and short-term risk indicators. The second is the audit and accounts committee, whose objective is to assess the current quality of the risk management and internal control. The third is the group credit risk committee, which is involved within all commitments up to MAD 600 million. The last committee is the market risk committee, whose objective is to assess and monitor all types of market risks.

Policies and implementations

As mentioned, Attijariwafa bank implements multiple different risk management aspects. This gives them a broad and effective risk management, where each section has their unique stress testing. For example, the market risk committee does a Value at Risk over 1 and 10 days in four categories (Foreign Exchange, Equities, MAD rate and currency rate). After the VaR, they do backtesting, stress testing, credit risk equivalent and find sensitive indicators. This shows a well implemented risk management within the Attijariwafa Bank. The internal risk as well as the global risks are appropriately reported, as the implementation and follow-up is well written in their annual report. However, for the internal and operational risks, they use the Basel II framework, which indicates that they may miss some valuable indicators and key figures.

They also have an internal risk section in their annual report and does not only focus on global or country risks. This indicates that they also evaluate their internal and operational risks. All different committees and sections of risk management have their own section in their annual report. They start with a short background and methodology and after that some results, implementing policies and actions to minimize the risks.

Nordea Bank

Nordea is the biggest bank in Scandinavia in relation to total assets, roughly 585 BEUR. The bank was founded in Finland and has its headquarter in Helsinki. Their biggest department in terms of earnings and employees is personal banking but have both corporate and private customers throughout the world. Nordeas largest customer segment is represented in Finland, Sweden, Norway and Denmark.

Financial statement analysis

Liquidity and Solvency

Nordea Bank has an approach to liquidity and solvency that is focused on keeping a stable position in the market. Their liquidity buffer is sufficient to survive at least 90 days under institution specific and market wide financial distress. The liquidity stress coverage ratio is ruled to be at least 105% based on internal tests under stress scenarios, thereby a 5% buffer over its projected coverage needs. Nordea banks required LCR is at least 115% which means that the bank holds 15% more high quality liquid assets than what is required by the Basel III framework. Lastly it is stated by the bank's policy that the buffer must be composed of assets denominated in currencies that can meet regulatory LCR net cash outflows. Through these ruled frameworks Nordea bank manages to prepare for different stress scenarios while complying with regulatory standards.

The bank's approach to solvency is to maintain a strong capital position, the company's CET1 increased to 17% in the first quarter of 2024. As you can see on the appendix Nordea bank has the highest CET1 among the 4 banks which demonstrates the strong capital position of the bank and their capacity to support their customers.

Capital adequacy and stress testing

Nordea bank prioritizes capital adequacy in order to maintain a strong capital position and be able to absorb potential losses. The bank consistently maintains a buffer of 150 basis points above the regulatory CET1 requirement. In 2023 they reached a CET1 of 17% which is above the required 4.5% from the Basel III framework. In terms of stress testing Nordea bank conducts both internal and external tests. These stress tests consider both institution and market liquidity stress scenarios and have given results used in the framework for liquidity buffer.

Profitability

In 2023 Nordea bank reported a ROE of 16.9% which is one of the highest numbers among European banks. With an operating profit of 6.3 BEUR the bank reported an increase of 18% from 2022. In addition to that there was a 19% increase in the net interest income.

Nordea bank showcased a strong profitability in 2023 where a ROE of 16.9% not only reflects their strength against other European banks, but also their effective risk management practices. The bank maintained a stable credit portfolio throughout 2023 whilst increasing net interest income which indicates a stable approach to risk and return.

The bank's dividend policy states that 30-50% of the profits generated is distributed as dividend to shareholders. The bank reported a stock return (excluding dividend) of 11.96% in 2023 which is not an impressive figure when compared to S&P 500's annual return 2023 of 26.3%. However with their strong dividend policy it could be seen as a healthy return.

Ukraine Crisis

The Ukraine crisis has had a big impact on industries and markets all over the world. Nordea bank has taken steps to manage risks related to this crisis. They have reduced its exposure to Russia and Ukraine. Nordea bank has contributed to support Ukraine with financial expertise to support the country's recovery and expose their commitment to global stability and managing geopolitical risks.

Risk management

Organization and structure

Nordea bank has structured their organization after the "three lines of defence" model. This model consists of three groups, so called lines of defence. The first line is responsible for identifying and managing daily risk operations and developments. The second line is responsible for making sure the bank conducts business in accordance with the rules and regulations. By monitoring the first line of defence and providing guidance this line makes sure that the organization is both working with integrity and in an effective manner. Lastly there is the third line of defence, which is an internal audit function that evaluates the effectiveness of the risk management framework of the bank.

The board of directors at Nordea bank is responsible for approving policies, risk appetite and making sure that the organization is working within acceptable risk parameters. The organization has a CRO (chief risk officer) and a GRM (group risk management) that provides a functioning and effective risk framework.

Policies and implementations

Nordea bank has set up strong policies to maintain an operation that builds on a balance between effectiveness and sustainability. The bank's policies address multiple risk categories. By focusing on responsible lending backed by stress testing and limits they have managed to sustain a healthy credit risk. Their liquidity risk is managed by holding HQLA (High Quality Liquid assets) that exceeds regulatory requirements. Operational risks are controlled by fraud detection and cybersecurity measures. With a beta of 0.75 they have managed to limit their market risk by using hedging tools and other risk models. The bank has integrated ESG policies to ensure long term sustainability. Nordea bank has set up policies to secure a future that brings profitability with stability as a cornerstone.

JP Morgan

JPMorgan is one of the largest banks in the world with 3,9 trillion dollars in assets. The bank's history can be traced all the way back to 1799 and has its headquarters in New York, U.S.A. It is a global leader in investment banking, financial services, and asset management, serving clients in over 100 markets worldwide.

Financial statement analysis

With a CET1 ratio of 15% it is well above the regulatory minimum at 4.5% in accordance with Basel III and shows its strong capitalization. This positions the bank to absorb potential losses and maintain financial stability.

The liquidity coverage ratio LCR assesses a bank's ability to meet short-term obligations using high-quality liquid assets. A 100% ratio indicates full compliance with Basel III. JPMorgan´s LCR of 113% shows good liquidity, exceeding regulatory requirements. This reflects JPMorgan's ability to handle short-term funding pressures. Moody's long term rating for JPMorgan is Aa2 which highly reflects the bank's strong creditworthiness and financial stability. This rating places JPMorgan among the most reliable institutions highlighting its standing in the financial sector.

The Risk weighted assets to total assets is 43,14%. This indicates a balanced risk profile with less than half of JPMorgan's assets being risk weighted. This reflects a good risk management and strategic allocation to low-risk assets, which contributes to the high CET1 ratio. Furthermore the loans to total assets at 34.15% suggests a moderate reliance on loans to generate income, it highlights a diversified balance sheet.

Profitability

2023 was a strong year for JPMorgan, for the sixth consecutive year it generated record revenue. JPMorgan's Return on Assets (ROA) of 1.28% indicates strong efficiency in generating profits relative to its total assets. Its Return on Equity (ROE) of 17% shows good shareholder value creation, demonstrating efficient use of equity to generate returns. The firm’s net income of $49.55 billion underscores its position as a highly profitable financial institution.

Ukraine

JPMorgan has responded to the ongoing war in Ukraine in many ways. The firm has supported companies, financial institutions and governments helping them financially and with expertise. The war has led to economic sanctions on Russia which JPMorgan has helped implement and manage. Also much of the aid to Ukraine as weapons and equipment benefits American manufacturers reflecting JPMorgan's values. JPMorgan’s efforts show its commitment to global stability and support for allied nations in times of crisis.

Risk management

JPMorgan believes that for efficient risk management all employees in the firm are responsible for identifying and highlighting risks. Each line of business (LOB) and the corporate organization is responsible for identifying, assessing and managing its own risks. The firm also has a firmwide risk governance and oversight structure that spans all business activities such as strategic risk, credit and investment risk, market risk and operational risk.

The firm's risk governance framework is managed firmwide through IRM (Independent Risk Management Function), which includes Risk Management as well as compliance. The Chief Risk Officer (CRO), who is appointed by the CEO with approval of the Board Risk Committee, leads the IRM function that oversees the risk governance framework.

The CRO further delegates authority to Firmwide Risk Executives, Line of Business Chief risk officers and the Chief Compliance Officer. These are the leaders that establish risk governance policies and their implementation across lines of business, regions and different corporate functions. Each area is responsible for managing their own risks within the parameters set by the IRM. These functions are implemented in a model called “Three lines of defense”.

Risk Management uses multiple metrics to measure risk. A key metric is Value-at-Risk (VaR), stress testing, profit and loss drawdowns, Earnings-at-Risk and Economic Value Sensitivity. These tools are used to oversee and limit risk, including market risk, credit risk and operational risk. Stress testing assesses the potential impact of alternative economic and business scenarios. JPMorgan performs stress tests on both form and LOB level to assess impact stress on all parts of the firm.

Market risk arises from changes in factors such as interest rates, credit spreads and other things impacting the value of assets and liabilities on both the long and short term. Market Risk Management is responsible for maintaining a market risk policy framework, independently measuring and monitoring market risk across all lines of business firmwise, defining and improving risk limits as well as performing stress testing and qualitative risk assessments.

The London whale

The London Whale was a trading scandal at JPMorgan in 2012 involving a trader named Bruno Iksil in the Chief Investment Office (CIO). The trades presented as hedges were speculative and grew so large they impacted market prices. The scandal was a result of poor risk management. The trade did not receive a proper review by the risk management committee which it should have. The scandal exposed weakness in JPMorgan's risk governance which led to tighter regulatory inspection and it highlighted the need for robust policies and monitoring. The losses for JPMorgan following this trade exceeded $6 billion.

MUFG

MUFG, or Mitsubishi UFJ financial group, is one of the biggest banks in Japan with approximately $2.9 trillion in assets. With headquarters in Tokyo, a history of 360 years, covering 50 countries and surpassing 160 000 employed professionals, MUFG is one of the leading financial groups in the world with the aim to be “the world's most trusted financial group”.

Liquidity and Solvency

Mitsubishi UFJ financial group reported a CET1 ratio of 11.18% which is well above the required 4.5% from Basel III. This indicates that the bank has a strong position and can handle economic losses and that it can maintain financial stability upon facing some economic distress like losses from credit defaults or market downturns. Mitsubishi UFJ financial group shows a Liquidity coverage ratio LCR (consolidated) of approximately 162.5%, exceeding the Basel III requirement with 62.5%. This shows that MUFG are able to handle demands on a short-term basis due to their substantial liquidity reserves. Moody’s long term rating for MUFG resulted in A1, reflecting the bank’s low default risk and high credit worthiness and builds confidence for current and potential investors.

Capital adequacy and credit rating

MUFG has roughly €752.51 billion in risk weighted assets, giving it a RWA/TA of 31.88%, indicating that their assets are weighted towards low-risk and safer assets. This indicates that the bank has a relatively low risk exposure and makes the bank less affected by market instability, like for example market volatility.

With a debt percentage of only 13.8%, MUFG has, what can be considered, a low leverage ratio. This could be interpreted as an ineffective use of internal capital due to underutilization of financial leverage, meaning that they might not take full advantage of their capacity to borrow. However, this also implies stability since the remaining 86.3% of their assets are equity capital, retained earnings or other non-debt funding assets and can be the reason for their high credit rating. This low debt ratio reduces the possibility for default due to the bank's financial prudence. This financial stability and favourable liquidity position can be the cause of the high LCR. The low debt-to-asset ratio also gives the bank some flexibility to be able to add debt and introduce leverage on their capital, increasing their risk but also increasing the effectiveness of their capital. This is due to the low percentage of debt today giving margin.

Profitability

MUFG reported a return on assets of 1.47% which is moderate, but acceptable. They reported a return on equity of 6.77%, which indicates their effectiveness on generating profits using shareholders equity. Whilst return on assets might not be high, MUFG had a total stock return of approximately 29,86% in 2023. This is nothing else but a strong and significant return. This result shows that the market regards Mitsubishi UFJ financial group as a good investment, despite their return of equity and return on assets to be moderate.

Ukraine

Mitsubishi UFJ financial group has observed the geopolitical tensions and found trading frictions as a result, among other consequences. This has resulted in a shift towards protectionism and they have taken these factors into consideration when looking into their business model.

Risk management

Since the 2008 crisis, the risk management function of Mitsubishi UFJ financial group has grown greatly in importance. They have observed the severity of risk management in their operations and the potential impact miscalculations may have. MUFG has a clear and structured approach to manage risk. Due to their size and global connections, they have a general risk committee under board of directors that deliberates important matters associated with group wide risk management in general on a global scale, with focus on potential risks with significant impact on its business management. The risk committee focuses on risks that are developing or have recently emerged, and challenges the board of directors to enhance or change their effective risk management. This committee also actively uses stress testing and uses the assumed impact from these tests to find responses in their risk exposures. These stress tests include economical capital based on internal risk assessment that gets tested both on internal environment and external threats. Apart from stress testing, they also conclude liquidity stress testing, exposing their business strategy towards short-term fund outflows or long-term changes in balance sheet structure. This is done to ensure that there will not be a funding shortage.

MUFG manages subcategories of operational risks by having other C-suites, reporting to the board of directors, respectively on terms of the risk that relate to their responsible part of the financial institution. MUFG has periodic crisis management training held by external professionals to improve inhouse risk management. MUFG also has a Risk Appetite Framework that aims to clarify the risk averseness of the bank, pinpointing the amount and types of risk that the bank is willing to accept. This framework includes a capital allocation plan and risk weighted asset plan, finding a capital strategy and distribution. This framework also focuses on liquidity risk, and tries to identify a risk appetite for risks that are difficult to quantify. MUFG has implemented the Three lines of defence framework within their risk management. They also calculate a 10-day Value-at-risk with 99% one-sided confidence interval, as well as a stressed Value-at-risk .

Comparison

Capital Adequacy
It is important and favourable for banks to have a proper capital adequacy in their risk management since it reflects the ability to handle potential losses and to sustain financial stability. A higher ratio indicates a better resilience to these kinds of financial stresses. The report focuses on the Common Equity Tier 1 ratio, or CET1 for short and Capital Adequacy ratio CAR. Apart from these ratios it is important to consider the total assets of these banks since it also paints a picture of the scale of operations and thus, also their risk exposures. As mentioned above, the CET1 for all banks are above the basel requirements of 4.5%, with Nordea having the highest ratio of 17%, Attijariwafa Bank having the lowest with 10.8%. Based on these ratios, Nordea has the highest CET1 ratio which indicates a healthy capital position and possesses the strongest resilience towards potential losses. However, all reported CET1 ratios were well above requirement.

Liquidity
The ability to meet short-term obligations and still maintain financial stability, is measured with liquidity coverage ratio, or LCR. The highest LCR is demonstrated by MUFG with a ratio of 162% (consolidated), closely followed by Nordea and Attijariwafa Bank with 141% and 137% respectively. Lastly, JP Morgan presented a LCR ratio of 113%. Since Basel III demands a LCR ratio of at least 100%, all banks are above the minimum presenting a robust liquidity position.

Profitability
The efficiency in generating profits for the banks are the ratios ROA and ROE. Presented in this report, all banks have a ROA of between 1.47% for MUFG and 0.8% for Nordea. All are positive, yet Nordea provided the lowest ratio indicating the lowest efficiency in generating return on their assets. MUFG provides the highest ROA of 1.47%, a 83% higher return on assets. This, together with total assets of roughly €2.36 trillion indicates large returns on operations for MUFG. The same logic can be applied to JP Morgan since they have a total asset of $3.691 trillion, and a ROA of 1.28%.

The banks all have positive ROE, with MUFG in the bottom presenting a ratio of 6.77% and JP Morgan presenting the highest ratio of 17%. indicating the highest return on equity. While MUFG presents a lower ROE, they still have reasonable profitability since the ROA are high, showing a strong trajectory for profitability.

Stock Returns and Market Risk
All banks have a positive return on their stock, with MUFG having the highest return of almost 30% and Nordea having the lowest, but still not low, 12% return. The beta of the bank's stock indicates their sensitivity to fluctuations on the market. The beta of the banks differ, having values in between JP Morgan's 1.09 and Attijariwafa Bank 0.30. This indicates that JP Morgan has the highest risk towards market fluctuation and having a more volatile stock price. The banks having a beta of less than 1 have less volatile stock prices and thus, suggest a lower risk towards the market.

Basel III
As presented in the report, all banks comply fully with the Basel III accords, except for Attijariwafa Bank that only comply with Basel II accords. This variability in Basel

requirement makes it difficult to find some specific ratios and perform sophisticated comparisons.

Disclosures
All banks were transparent with disclosing numbers in general, although not all information was found. It was a common theme that information was spread out and not gathered in an annual report. This might be caused by the size of some of the banks, creating complexity in summarizing values and ratios.

Risk Exposures
One bank stands out in regards to risk exposure, Attijariwafa has a Loans-to-Total Asset ratio at 90.3% meaning that a large proportion of the banks assets are tied up increasing its exposure to potential defaults. Attijariwafa also has a speculative rating of Ba1 in comparison to the other three banks that have a high quality rating or at least for MUFG an upper medium grade.

Risk Weighted Assets to Total Assets measures the portion of the bank's assets that are classified as riskier. Attijariwara has a RWA/TA of 72.6% which suggests it relies more on riskier lending strategies or holds a lot of risky investments making it potentially vulnerable to default or economic crisis. On the other hand Nordea and MUFG have a RWA/TA of 23.7% and 31.88% which indicates a more conservative approach to their asset allocation. Such banks are less exposed to credit risk and may have stronger resilience for economic crises or downturns. However it may result in lower profitability as a result of missed opportunities.

Risk Management and Measurements
All banks have somewhat similar risk management structures. Attijariwafa, a smaller bank, relies on a more centralized committee system whilst the larger banks MUFG, Nordea and JP Morgan have a broad risk management committee. What separates MUFG from the other large banks is the lack of a chief risk manager and instead relies on c-suites to be responsible for reporting key risks from their own part of the institution. However, all three of these big banks have a sophisticated committee managing the key risk factors for the bank. JPMorgan, Nordea and MUFG employ the “three lines of defence” with formwide oversight by independent risk management committees alongside risk management on the Line of Business level.

All banks quantify risk through precise measurement tools like stress testing and Value-at-risk (VaR), in accordance with the third pillar in Basel III, except Attijariwafa Bank that comply with Basel II.

General conclusion

Is the most profitable bank the one with higher capital?

Based on the information presented above in the report, profitability is not necessarily connected with higher capital. It is better connected to the bank that has a balance between capital adequacy and efficient capital utilization. This is proven by MUFG having the second highest capital of these banks, but with a conservative risk taking strategy that might hinder profitability through lack of leverage. JP Morgan and Nordea seem to strike a balance between these factors and thus present a high profitability, even though Nordea is the second smallest in capital. Thus, the profitability is driven by the bank's effectiveness of capital and not the absolute amount of it.

Is the bank with the highest tier 1 ratio the one offering the highest stock return? The lowest beta?

The bank with the highest Tier 1 ratio is Nordea, and they do not have the highest stock return. The bank with the highest stock return is MUFG that will manage almost 30% and does so with a Tier 1 ratio of 12.88%, the second lowest. MUFG also possesses the second lowest beta with 0.52, indicating that the stock is less exposed to market risk. This means that, based on our research, that the higher tier 1 ratio and lowest beta does not correlate with the highest stock return.

Does the risk-weighted assets to total assets matter for financial performance

Our data does not show a clear correlation between RWA/TA and financial performance when looking at stock return, ROE and ROA. It seems that other factors have a greater impact.

Recommendations

Attijariwafa bank

For risk tolerant investors we recommend a HOLD position in this bank to capture potential for emerging markets. But the high RWA/TA is a concern since it is a vulnerability to economic downturns.

MUFG Japan

This is a stable and liquid bank with high stock returns, however it does not have a high profitability which suggests low capital utilization. We recommend a HOLD position for this bank.

JP Morgan

JPMorgan has strong profitability with balanced risk exposure. We recommend a BUY position.

Nordea

Nordea has good financial stability and resilience to market downturns. This is good for risk conservative investors. We recommend a BUY position.

Appendix

Category	Key Figures (2023)	Attijariwafa Bank	Nordea Bank	JP Morgan	MUFG japan
Capital Adequacy, stress testing	CET1 (min CRR 4.5%)	10,8%	17%	15%	11.18%
	Tier 1 capital ratio	11,7%	19,4%	16,6%	12,88%
Capital Adequacy, stress testing	Capital Adequacy ratio/ Total capital ratio	12.8%	22%	18,5%	14,68%
	Tier 1 leverage ratio	8,5%		7,2%	4,7%
Asset Quality, Liquidity	Loans/TA	90,3%	349 100 000 000 / 584 702 000 000 = 59.7%	1,323,706 / 3,875,393 = 34.15%	13.8%
Asset Quality, stress testing	RWA/TA	72,6%	138 700 000 000/ 584 702 000 000 = 23.7%	1,671,995 / 3,875,393 = 43.14%	752.51 billion euro/TA = 31.88%
Liquidity	LCR	137%	141%	113%	162.5
Profitability	ROA	1,4%	0.8%	1.28%	1.47%
Profitability	ROE	15,7%	16.9%	17%	6.77%
Profitability	Stock Return (22-23)	17,3%	11.96%	24.5%	29.86%
Liquidity	TA	62 634 701 130 EUR	584 702 000 000 EUR	3 691 623 960 527.61 EUR	2 360 291 505 661.38 EUR
Stress testing	Credit Rating Long (Moody’s)	Ba1	Aa3	Aa2	A1
Market Risk	Beta (5Y Monthly)	0.30	0.75	1.09	0.52

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